

alperia

**Protecting our most
precious resource
Sustainability Report 2022**

Consolidated non-financial statement
pursuant to Legislative Decree No. 254/2016

***energizing
south tyrol***

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LETTER TO THE STAKEHOLDERS

Dear Readers,

Never before have we experienced the value of sustainability in its threefold environmental, social and economic form as we have in recent months. 2022 was a year that – in the wake of its predecessors – raised the bar even higher, presenting challenges unimaginable until recently for businesses, families and communities. The energy crisis has led to a rise in prices that has put many organisations in serious difficulty, so we wanted to demonstrate even more what it means to be responsible and close to the communities in which we operate.

Ever since it was founded seven years ago, Alperia has been supporting the region and its customers. A commitment that we strengthened during the pandemic emergency and have decided to strengthen further over the past year. Programmes have been put in place that guarantee tangible benefits, such as **Alperia Eco**, which offers South Tyrolean households prices significantly lower than the current market price for electricity. With Alperia Eco, customers save around €300 per year, **30%-40%** less in costs than in the protected market. In addition, those who consume less are rewarded proportionally more. An offer that is not only socially fair, but also encourages a more conscious use of energy.

To this offer, already taken up by **40,000 households**, we have added another designed specifically for businesses: **Alperia Eco Business**. This tariff allows companies to purchase 1,000 kWh per month at a fixed, below-market price. We have therefore extended the existing agreement between Alperia and the South Tyrolean Economic Association – Economia Alto Adige and the Rete Economia – Economic Network, so that each company in the network can choose the most favourable product according to its consumption profile: an initiative that was welcomed by local business networks, recognising the significant savings. In line with Alperia's sustainable business strategy, all Alperia Eco Business customers receive **100%** green energy from South Tyrolean hydropower. The initiative was then extended to other companies in the area.

In addition: for our domestic customers with dependent children, we offered a **bonus on their electricity bill** worth €300. And we also responded to customer requests about **tax credits**: thousands of questions were received and resolved within the legal deadlines. Finally, we gave customers, both private and corporate, the possibility to **pay their bills in instalments**, an initiative that Alperia put in place even before it became mandatory at national level. With the launch of all these offers, we can say that a total of almost 120,000 **Alperia customers benefit from discounted rates** – a tangible example of how the region can be supported, distributing economic value with multiple initiatives.

Alongside the development of preferential tariffs compared to the market price, donations for local organisations continued, to which we gave more than €250,000 again this year. In addition, we also lent our support to the communities affected by the floods in the Marche region, donating old furniture – still in good working order but no longer in use – to the value of about €4,000. As we have always supported **humanitarian initiatives**, we also signed an agreement with the Autonomous Province of Bolzano to house five families of **Ukrainian refugees** (26 people in total) in the Alperia Greenpower apartments in Barbiano. And thanks to an agreement with the Burggraviato district community, some Ukrainian families were also hosted in Naturno. We also temporarily changed the lighting on the Alperia Tower at the Bolzano district heating plant to the colours of the peace flag to show our solidarity with the people affected by the war.

Our way of working is set out in three strategic documents approved in 2022: Vision 2031, the 2023-2027 Business Plan and the 2022-2027 Sustainability Plan, developed with the involvement of more than **900 stakeholders** in our territory, with the aim of strengthening the Group's sustainable growth in line with stakeholders' expectations. These are the pillars with which we define the missions and impacts of Alperia's activities in the long term. There are two particular cornerstones of our Vision 2031: sustainability and integrated positioning along the energy value chain. We set ourselves the ambitious goals of **cutting emissions by 70% in 2031 (compared to 2021)** and reaching **net zero by 2040**, cutting 90% of emissions and developing offsetting projects in line with the **Science Based Target initiative**. In this way, we want to contribute to the South Tyrol Climate Plan by minimising the impact of our activities, actively protecting the biological diversity of watercourses and promoting the efficient and responsible use of all resources. We know how much climate change can impact our business: in 2022, energy production fell by about **25-30%** due to drought and low snow levels. And the drought has created situations of water emergency in many Italian areas where Alperia had to intervene with its own reserves. For this reason, we have launched a project dedicated to climate risk management, to check primary vulnerabilities and take action to prevent them, and we continue to innovate to make water resource management more efficient. One example is the Smart Land project to improve the irrigation of vineyards and orchards **with water savings of up to 73%**.

These are just some of the goals we intend to achieve in the coming years and to which all our companies will contribute, including Alperia Green Future, a company founded in 2022, with which we have further strengthened our activities oriented towards sustainability and ecological transition. With its activities, Alperia Green Future supports the promotion of a series of high-tech initiatives: from the energy requalification of buildings to strategic consultancy for companies, from energy performance contracts to artificial intelligence applied to optimise complex energy and production processes.

At the same time, we will continue to invest in **innovation**, developing services and business opportunities consistent with the energy transition (with hydrogen, Renewable Energy Communities, photovoltaics, biomethane, etc.) and transforming the organisation with a view to **customer centricity**.

Furthermore, as envisaged in the Business Plan, in the area of governance, we intend to further anchor ecological, social and economic sustainability to the governance of the Group and to the management processes along the value chain, promoting sustainable finance with the definition of an **ESG Investment Framework**. We will increase the weight of the part of variable remuneration linked to ESG performance for top management, and we will insert new specific objectives linked to ESG for middle management so as to make it fundamental and integrated at every level of the Group.

All these efforts intend to create long-term economic value and make our business model resilient to face new evolutionary and competitive scenarios. All of this involves a strong commitment to **ensuring a safe, efficient and sustainable energy supply** as well as the **highest levels of plant safety** to protect personnel, communities and the territory. We have also set goals that promote an **inclusive, equal and healthy environment**, such as increasing the proportion of women in the company and in first- and second-level management, reducing the gender pay gap between white-collar workers and middle managers with the same classification, or promoting voluntary equal parental leave. We want to **increase the social and environmental added value** for the area, also through strategic initiatives and projects for the community and for Alperia. We believe that, without a doubt, the ultimate goal of our company is people and territories, and that there is no greater work than committing ourselves to a **shared well-being**.

Maurizio Peluso



Flora Kröss



Luis Amort



HIGHLIGHTS 2022

BUSINESS

In the course of 2022, we concluded several corporate transactions that enabled Alperia to be increasingly oriented towards sustainability and ecological transition. Specifically: Alperia S.p.A. completed the acquisition of 90% of the share capital of Fintel Gas e Luce S.r.l. and Fintel Reti S.r.l. from Fintel Energia Group S.p.A., while the Alperia Group reorganised the Smart Region Business Unit. As part of this reorganisation, the activities of Alperia Fiber S.r.l. and Alperia Bartucci S.r.l. in the IoT and energy efficiency fields merged into Gruppo Green Power S.r.l., which took on the new company name Alperia Green Future S.r.l., promoter of a series of initiatives on **high-tech content** for cities and citizens, strengthening the positioning on apartment blocks, public administration, healthcare and smart services for citizens and cities.

CLIMATE RISKS AND WATER RESOURCES

Every year, Alperia produces around **4,000 GWh** of energy from a clean and sustainable resource: water. In 2022, however, we experienced less water availability as a result of the winter's low snowfall and **prolonged drought**. For this reason, energy production has fallen by about **25-30%** compared to the long-term average. Not only that, the drought has also led to water emergency situations in many Italian territories, such as in the Po Valley. For this reason, Alperia was called upon to manage the production of its large plants and its reserves accumulated in the largest reservoirs in order to ensure the water withdrawal in the Veneto region so that crops could be irrigated. It was an extraordinary situation which demonstrates the support given to the territories located downstream of our province and region. Aware of how important it is to better manage water resources, especially in the light of new climate challenges, we are working on the Smart Land project, which uses IoT technologies to enable more efficient irrigation processes. In particular, in 2022, the project, with the collaboration of the Laimburg Research Centre, was extended to vineyards as well as orchards, and the amount of **water saved** on a farm near Merano **was 73%** higher than the previous year. The project also involves raising the awareness of the local population, also through specific initiatives that directly involve the farmers. Our activities are closely linked to the natural environment, which is why climate risk is the focus of our attention, to the extent that we have implemented strategic measures and operational initiatives to streamline consumption, reduce emissions and expand the supply of energy from renewable sources, increasingly orienting our business towards sustainable services and products.

STRATEGY

In 2022, Alperia adopted three strategic documents to define the missions and impacts of its activities in the long term: **Vision 2031**, the **2023-2027 Business Plan** and the **2022-2027 Sustainability Plan**. Alperia drafted the documents starting from an assessment of the main current trends, a stakeholder involvement process and an analysis of market evolution. Next, we assessed the main risks for Alperia and our prospective positioning. The goal is to take Alperia on a journey of sustainable growth based on customer centricity. The business plan envisages **€1 bn in total investments** to 2027 with a strong focus on territorial economic and social impacts and an EBITDA growth to over €300 m in 2027.

Alperia intends to make ecological, social and economic sustainability even more central to Group governance and management processes. We want to make **our business model resilient** and **create long-term value**. For this reason, "Governance and Resilience" is a new area of strategic action. At the same time, it is essential for Alperia to make 100% of its business green, increasing the share of sustainable products and services sold. In addition: through the "Green Mission" scope of action, we will make our energy consumption more efficient, with ambitious goals of eliminating **70%** of emissions by 2031 and reaching net zero by 2040, cutting emissions by **90%** and developing offset projects in line with the Science Based Target initiative. We will safeguard the "Territory" by creating added value in various areas such as jobs, local taxes and social commitment, and we will increasingly develop the strategic area "People" by guaranteeing well-being and safety at work. We will invest in Diversity, Equity and Inclusion, increasing the number of **women in the company** from 26% to **30%** and from 24% to **50%** in management by 2031.

INTEGRATED SUSTAINABILITY

In 2022, we updated the **Sustainability Policy** and approved the **new CSR Management procedure** in which we document the relevant processes for CSR management according to DIN ISO 26000 and their integration into Alperia's governance system. In 2022, we also set up the **Control, Risk and Sustainability Committee**. In 2022, we **achieved 85% of the targets for the current year** set out in the 2022-2027 Sustainability Plan. Finally, we evaluated the integration of sustainability in Governance with the Integrated Governance Index performance (IGI), and we placed 53rd out of 86, climbing 9 places in three years. Not only that: Alperia was also evaluated by **EcoVadis**, the international eco-sustainability rating and obtained a score of 65 out of 100. The areas on which we will work to make significant improvements are "Ethics" and "Sustainable Purchasing". To this end, we have already planned the revision of the procurement process from an ESG perspective by 2027, the introduction of minimum criteria in individual tendering procedures (2025), initiatives to raise awareness and train employees on the Code of Ethics, the introduction of new requirements for certifying as Group suppliers, the awarding of specific scores linked to sustainability criteria (e.g. ESG rating) by 2027, and a monitoring system for increased expenditure. Aware of how climate change may impact its business, Alperia has initiated a climate risk analysis on its activities. Finally, to make

sustainability issues cross-cutting throughout the Group, we started the roll-out of an ESG training programme for management and our people to increase the culture of sustainability and corporate social responsibility.

EMPLOYEES

During 2022, **smart working** became structural: most employees work remotely two to three days a week. The level of satisfaction with this organisational type, as revealed by the second assessment survey carried out on the subject, remains high. To promote the involvement of employees and boost team spirit, we have relaunched the **Team Alperia 2022** project. **Leadership** programmes have also been strengthened, not only from a gender perspective, as we have **training** courses. We held three **workshops** on innovation and entrepreneurship and increased average training hours by 14%. Of the Talented People chosen in the two Talent Management editions, 68% succeeded in having a growth or development plan. We have launched the 2nd edition of the **mentorship** programme, which promotes the exchange of skills between generations. And, also in 2022, we launched the “**language tandem**” project with which we support cultural exchange and language training between native speakers of Italian and German. **Diversity** is another key theme for Alperia: 320 women are employed by the Alperia Group, 26% of the total workforce and 9% more than in 2021. In management, the percentage of women also increased from **21% to 23%**, and we dedicated a specific workshop to D&I in the company. In Governance, women account for **33%**. To encourage a better work-life balance, we strengthened policies on flexible working hours, parental leave and parenting support tools, renewing the “**Audit Family and Work**” certification. In particular, voluntary parental leave taken by men increased: from an average of three weeks in 2021 to around six in 2022. Finally and just as significant, partly due to a greater safety culture, is the reduction in the accident rate to -49% of working days lost due to accidents.

SECURITY OF SUPPLY

Alperia carries out constant monitoring and maintenance to ensure plant safety, avoid breakdowns and inefficiencies for users and eliminate inefficiencies, waste of resources and energy. In 2022, we continued to install **Smart Meters** and will complete 46% of the installations, amounting to 118,000 metres (the project is due to be completed at the end of 2024). Edyna – the company that manages electricity – controls a total network of over 9,000 km, with 75% of the lines underground. We have launched additional supervision for the **networking of small energy producers** through photovoltaic systems that generate micro-contributions to the distribution system: a need that will be increasingly widespread in the future and that requires attention. Unscheduled interruptions of the distribution network decreased compared to 2021 (-17% SAIFI index, equal to 1.40 and -30% SAIDI index, equal to 17.28 minutes). In 2022, the **plan for the remote monitoring of the secondary substations** also continued, which is important for achieving the technical quality objectives, as did the plan for **FNC on primary substations with new start-ups in Prati di Vizze and Brennero**.

For the maintenance of hydroelectric plants, Alperia Greenpower and Alperia Vipower have invested approximately €68 m in performance improvement activities, reaching an availability of the production groups that in 2022 was equal to **84.15%**. Furthermore, flood management exercises were carried out at the Monguelfo dam during the year, also with the aim of testing the new TETRA communication system set up with the Civil Protection Agency to enable radio communication in the event of emergencies and breakdowns. In 2022, two particular events took place in San Valentino, where work to improve the waterproofing of the tunnel worth €10 m was started, and in Val d’Ultimo, where Alperia immediately intervened with activities to resolve the incident and meet with local stakeholders to explain what had happened.

With Edyna, in 2022, Alperia is participating in the European eFORT project, which began in 2022, to make electricity grids more resilient and reliable with respect to breakdowns or attacks. This will involve developing intelligent solutions for the detection, prevention and mitigation of risks. And Edyna also unveiled the SUSTAINGrid project with Eurac Research for the analysis of the impact of photovoltaic production on the grid and possible solutions. The objective of the project is to build a modelling and analysis framework capable of identifying the areas of the distribution network with the greatest PV installation potential by developing a comparison methodology in techno-economic terms and also considering circular economy aspects.

ADDED VALUE FOR THE LOCAL AREA

In 2022, we created an added value for our territory of over **€289 m** (€269 m in 2021) through payments to public bodies, remuneration and benefits for staff, appointments to local companies reaching a share of 60% (59% in 2021), sponsorships, donations and dividends to local partners. Furthermore, we have supported the local area with support initiatives aimed at mitigating energy price increases. We have strengthened offers such as **Alperia Eco** which offers South Tyrolean families 125 kWh per month for two years at a fixed price, regardless of the time of day, and we have launched Alperia Eco Business for businesses. Furthermore, we have offered domestic customers with dependent children a **bonus on their** electricity bill worth €300 a year.

SUSTAINABLE PRODUCTS AND SERVICES

In 2022, the revenues generated by Alperia with sustainable products and services stood at 45%. The goal, according to the Business Plan and Vision 2031, is to increase this share from the percentage of green energy sold, currently 35%, to **65%** in 2026 and **100%** in 2031. The same will be put in place with green gas, which currently stands at 5% and will have to be 43% within the next 9 years. In addition, 18% biomethane must be added. We have also signed an agreement with Südtiroler Wirtschaftsring, the association that brings together the six most representative business associations in South Tyrol – Unione Commercio Turismo Servizi Alto Adige, Unione Albergatori e Pubblici Esercenti dell'Alto Adige, Confartigianato Imprese, Unione Agricoltori e Coltivatori Diretti Sudtirolesi, Assoimprenditori, Associazione Liberi Professionisti Altoatesini – so that all member SMEs can use green gas. To support a more conscious consumption of energy, we have also developed two products: **MyHome** and **Smart Land**, and we are working on the Energy Communities. In 2022, in particular, Alperia, Raiffeisenverband Südtirol and Regalgrid signed a memorandum of understanding to create **cooperative Energy Communities**. Alperia will manage the communities under concession for the next 20 years. In South Tyrol, the first pilot project will start in **Postal**, while in Veneto, a pilot project is planned with six furniture companies in **Pieve di Soligo**. Finally, since 2022, with the new company **Alperia Green Future** – which incorporates Alperia Bartucci S.r.l., Gruppo Green Power and Solar Total – the Group has further strengthened its activities focused on sustainability and ecological transition with services for decarbonisation and climate strategy and **energy efficiency** of both large industrial and commercial groups as well as apartment blocks and homes. Alperia Green Future has begun to work much more intensely with the **public administration**, also presenting a public-private partnership project for the energy efficiency of social housing in the municipality of Verona. And again with the aim of providing valuable support to the population, with Care4u, an Alperia subsidiary dedicated to smart health, we are developing an IT platform with teleassistance services that allow patients to be monitored, to assist them wherever they are. Another very important area of action for Alperia is mobility: according to the Smart Mobility Report of the Milan Polytechnic, South Tyrol is the territory with the best e-mobility infrastructure in Italy and among the best in Europe. With Neogy, a joint venture of Alperia and Dolomiti Energia, in 2022 we installed another 33 hypercharger stations in the province of Bolzano, which now has a total of 74 such stations in the area, set to rise to 150 by 2023. At the same time, we have expanded the offers available with small utilities by developing a consulting network. In 2023, we plan to create two charging parks on the Brenner axis with 10-15 charging stations each in 2023.

CUSTOMER SATISFACTION

Alperia supplies electricity, natural gas and district heating to **380,914** households, large and small companies and public institutions. Eighty percent of customers signed contracts for electricity, 19% for gas and 1% for heat. In 2022, we were recognised as **Top Utility Performance Operative** at the tenth edition of the Top Utility awards, reserved for local utility companies active in the energy, waste and water sectors. 2022 was a year which saw significant increases in energy costs, leading to a significant rise in requests for information: over 5,000 emails, 5,000 phone calls and 1,500 visits to the Energy Points per week. To manage this flow, Alperia has strengthened its internal call centre and started working with a second external call centre in addition to the existing one. Alperia Corners have also been involved in the management of customer care activities. Thanks to this system, Alperia managed to comply with ARERA standards by managing on average **85%** of requests received every month (except October), down compared to 94% in 2021. This drop in service levels is explained by the sharp increase in calls (+64%) recorded during the year. As monitored by Alperia, there were 426 complaints in 2022, with a rate per 100 customers of 0.11. In 2022, Alperia also responded to tax credit enquiries, answering all questions received by August 2022. Similarly, we have responded to requests for payment by instalments. These are complex activities that have created a significant workload for the company.

EMISSIONS

In 2022, emissions management reached a new breakthrough. Thanks also to the activities carried out for the **ISO 50001 certification**, a more structured energy efficiency and CO₂ reduction process was implemented. The Alperia Group achieved **carbon neutrality in 2020** and set itself the goal of reducing CO₂e emissions (Scope 1, 2, 3) by **46% by 2027** to reach **net zero by 2040**, thus contributing to the South Tyrol Climate Plan. We have signed up to the Science Based Targets initiative (SBTi), an initiative that promotes the reduction of greenhouse gases on the basis of scientifically calculated targets. We are developing innovation projects and feasibility studies on biomethane, hydrogen, heat pumps, electric boilers and capture & storage. In 2022, we certified two **ISO 50001** production sites, and we want to achieve the same goal for the whole Group, starting from 2023 at the Dodiciville di Bolzano site. We have also launched a trial project to replace the SF₆-gas-insulated compartments with dry-air-insulated compartments, and we also support customers with decarbonisation activities. Finally, in cases where zeroing of emissions is not possible, Alperia intervenes with offsetting operations through the international VCS and Gold Standards. In particular, the main offsetting projects purchased by Alperia in 2022 were: **Benban – Solar – Egypt, Guanaré – Afforestation – Uruguay.**

INNOVATION, DIGITALISATION & RESEARCH & DEVELOPMENT

Innovation is key to supporting the energy transition. For this reason, Alperia has integrated innovation into the Group's strategy by providing it with dedicated governance, organisational structure and processes. In 2022, we invested **€1,449,636** in R&D projects, involving **43** employees in these activities. There is also a focus on innovation in **training**. Alperia employees were given the opportunity to participate in the Alperia Startup Factory – whose activities continued into 2022 – and to receive 20 hours of training on Open Innovation topics realised with the Luiss Business School. Alperia's commitment to innovation has been recognised nationally with the **Premio dei Premi 2022** in the Industry and Services – Large Enterprises category. In addition, with Hydrodata, a company that Alperia acquired in 2020, we carried out research into the production of **green hydrogen** at the Group's hydroelectric plants. Not only that, also with Alperia Greenpower we are carrying out innovation projects to improve the safety of the plants: with the startup Fieldbox we are applying artificial intelligence to penstocks, as we did with the Santa Valburga penstock, while with Hydrosim 4.0 we are working to protect the territory from flooding through a flood simulator. We carried out tests on the Monguelfo plant and in the Rio Pusteria, Fortezza and Gioveretto reservoirs. Correct flood prediction can limit the flood wave by 30-40% with benefits also for the fish fauna.

CYBER SECURITY & DATA PROTECTION

In 2022, the migration to the **cloud** continued, work relating to **security** was consolidated in collaboration with the DPO, and the **data platform** was implemented to integrate trading, production and sales data. The digital transformation team, also in 2022, was involved in professional development activities and collaborated in **training** for Alperia employees. We implemented the safety plan to reduce residual risk with the use of advanced technologies and defined a scale of priorities to work on. We have completed projects to track potential threats and intervene quickly, we have developed a system to protect information assets also from internal theft, and we are developing a programme to manage oblivion portability in order to respond to potential data deletion requests. For training, in particular, Alperia provided eight activities a year for over 1,000 users. No significant IT incidents emerged, but threats were blocked by protection systems (approximately **9,400** malicious emails and **2,000** malicious connection attempts every day, **+33%** compared to 2021, due to new cloud platforms used by many users). At the same time, activated spam blocking increased by **5%**. Finally, we renewed the **ISO 27001 certification**.

SUSTAINABILITY FIGURES

	2022	2021
GOVERNANCE AND RESILIENCE		
Net energy produced from renewable sources	91%	93%
Underground lines	75%	74%
Average number of power-supply interruptions per customer	1.40	1.68
Average duration of interruption per customer (min)	17.28	24.56
Energy availability index (hydro plants)	84.15%	84.49%
Investment in research and innovation	1,449,636 €	2,206,119 €
Percentage of employees involved in research and innovation projects	3.55%	4%
CUSTOMERS		
Percentage of calls to the freephone number answered	85%	94%
Number of complaints per 100 clients	0.11	0.12
Renewable electricity sold to end customers	35%	37%
Percentage of revenues from sustainable products and services	45%	47%
GREEN MISSION		
Percentage of energy consumption from renewable sources within the company	65%	64%
Total market-based operational GHG emissions – Scope 1 & 2 (tCO _{2e})	79,011	83,583
Market-based operational GHG emission – Scope 1 and 2 – intensity (tCO _{2e} /MWh of produced energy (gross))	0.02	0.02
Total avoided emissions (tCO _{2e})	1,206,742	1,692,112
TERRITORY		
Added value for South Tyrol	277,145,569 €	260,098,138 €
Added value for the territory	289,370,867 €	269,275,570 €
Total investments	166,748,849 €	180,369,266 €
Percentage of contracts awarded locally (based on number of contracts)	60%	59%
PEOPLE		
Number of employees	1,211 people	1,176 people
New employee hires	9%	9%
Turnover rate	6%	5%
Average hours of training per employee	30.3 h	26.5 h
Percentage of female employees	26%	25%
Percentage of women in middle management	23%	21%
Average pay gap between men and women in the category white-collar workers	7%	7%
Percentage of fathers who took parental leave	89%	95%
Return-to-work rate (women)	100%	100%
Rate of absence from work (days of absence per 1,000 hours worked)	5.8	5.6
Accident rate (per 1,000,000 hours worked)	6.31	11.10
Accident severity rate (per 1,000 hours worked)	0.13	0.25

WHO WE ARE

We produce energy from nature

Who we are - Alperia is an energy service provider: we produce energy from renewable sources, manage the electricity grid, take care of district heating systems, are an active part of the energy transition and we deal with energy sales and e-mobility, support, as well as supporting smart energy and innovative environmental projects. We are the leading energy supplier for South Tyrol as well as the fourth-largest producer of renewable energies and third-largest producer of hydroelectricity in Italy¹. Sustainability is at the heart of our strategies and the fundamental driver for our development. We only produce and supply our customers with green energy, derived from 35 hydropower plants, 7 photovoltaic plants, 7 district heating plants and 1 biomass plant in Ottana, Sardinia. In total, we operate a network of 9,199 kilometres. In 2022, 380,914 customers chose our energy and gas services.

Our history - Alperia S.p.A. is a joint-stock parent company created on 1 January 2016 from the merger of the two largest energy companies in the province of Bolzano. The Autonomous Province of Bolzano currently holds 46.38% of the company; Selfin, which is owned by 100 municipalities in South Tyrol, holds 11.62%, and the municipalities of Bolzano and Merano each hold 21% of the shares. The headquarters is in Bolzano, and there are other operational offices in South Tyrol and elsewhere in Italy. We also operate in Veneto and Piedmont, regions where we are expanding with significant new acquisitions.

1.1 Alperia at a glance

Revenues	3,637,897,750€ (+75% compared to 2021: €2.01 billion)
Net energy produced	4.4 TWh (2021: 4.4 TWh)
Workforce	1,211 people (2021: 1,176 people)
Electricity sold to end customers	6,8 TWh (2021: 6.6 TWh)
Natural gas sold to end customers	503 MSmc (2021: 450 MSm3)
Electricity trading	978 GWh (2021: 1.8 TWh)
Heat distributed	234 GWh (2021: 246 GWh)
Hydroelectric production	2,841 GWh (2021: 3,813 GWh)
Availability index hydroelectric plants	84.15% (2021: 84.49%)

¹ Annual Report 2022; Arera

1.2 Our corporate structure and business model

Alperia S.p.A., as of 31 December 2022, was structured into five Business Units (“BUs”): Generation, Sales & Trading, Networks, Heat & Services and Smart Region. Within the BUs there are 29 companies controlled or invested in, directly or indirectly, by Alperia S.p.A.

The following corporate transactions were completed in 2022:

- Alperia S.p.A. finalised the acquisition of 90% of the share capital of **Fintel Gas e Luce S.r.l. and Fintel Reti S.r.l. from Fintel Energia Group S.p.A.** The acquisition of the two companies, thanks to their complementary nature with Alperia Smart Services S.r.l. both in terms of geographic coverage and sales channels, will make it possible to quickly seize growth opportunities in terms of volumes and customers for electricity and natural gas commodities and in terms of services related to the ongoing energy transition driven by tax incentives. The operation will allow for the expansion of the portfolio with around 30,000 customers, mainly concentrated on the residential market (domestic customers and customers with VAT numbers), and of the commercial network consisting of 12 directly managed customer branches, 3 branches managed by agencies and 25 corner outlets. The agreements also provide for the possibility for Alperia to acquire the remaining 10% of the share capital of the two companies over the next 3 years. With effect from 1 October 2022, Fintel Reti S.r.l. was merged by incorporation into Fintel Gas and Luce S.r.l.
- The Alperia Group also worked on the reorganisation of the Smart Region Business Unit. As part of this reorganisation, in particular, the activities of Alperia Fiber S.r.l. and Alperia Bartucci S.r.l. in the field of IoT and energy efficiency, respectively, with effect from 1 January 2022 were merged into Gruppo Green Power S.r.l., which took on the new company name **Alperia Green Future S.r.l.** At the same time, Alperia Fiber S.r.l. was merged into Alperia Greenpower S.r.l., while Alperia Bartucci S.r.l. was merged into Alperia S.p.A. In addition, also with effect from 1 January 2022, Alperia Green Future S.r.l. acquired 100% of the share capital of Solar Total Italia S.r.l. and Solart S.r.l., which are active in the installation, management and maintenance of photovoltaic systems. In a subsequent step, by deed dated 30 August 2022, Solart S.r.l. was merged by incorporation into Solar Total Italia S.r.l.
- In order to advance the concentration of the Alperia Group’s sales activities in a single company, with effect from 1 August 2022, Alperia Sum S.r.l. was merged by incorporation into Alperia Smart Services S.r.l.
- On 17 October 2022, Alperia Greenpower S.r.l., in execution of existing agreements, transferred shares representing a total of 0.9% of the share capital of Alperia Vipower S.p.A. to the three Venosta municipalities of Curon Venosta, Malles Venosta and Glorenza.

These operations have enabled Alperia to be increasingly focused on sustainability and the ecological transition.

1.3 A selection of our external initiatives

- **KlimaFactory:** Alperia business customers can request an energy audit, allowing them to take part in the KlimaFactory programme run by the CasaClima Agency to improve energy efficiency in companies. Once the audit has been carried out, the company obtains the KlimaFactory logo and certificate of participation.
- **MOTUS-E:** This association brings together and represents the world interested in the success of electric mobility, with the aim of setting standards, carrying out network activities, defining best practices to promote the topic in Italy and supporting government policy. The General Manager of Alperia is a member of its Board of Directors.
- **IEA DHC:** Alperia is a member of IEA DHC, an international research hub for environmentally friendly district heating and cooling systems. The programme is part of the International Energy Agency (IEA), an autonomous agency founded in 1974 with the collaboration of 28 countries.
- **Urban Play Agenda 2030:** Alperia took part in the Urban Play event organised as part of the Asvis National Festival of Sustainable Development in Bolzano, recognised by the United Nations as a unique international experience. Now in its sixth edition, the Asvis festival is the largest Italian initiative to raise awareness and mobilise citizens, younger generations, businesses, associations and institutions on issues of economic, social and environmental sustainability. Citizens were introduced to the 17 goals of the UN’s 2030 Agenda for Sustainable Development. The project was implemented by the social cooperative Studio Comune together with more than 30 local partners. Alperia participated by organising a waste collection to clean up the banks of the Talvera and Isarco rivers in connection with SDG 7 – “Affordable and clean energy”. 15 sacks of rubbish were collected and transformed into clean heat from Bolzano’s district heating the day after the event.
- **Campielo Award:** Alperia brought the Campielo Award to Bolzano by hosting one of the summer meetings with the finalist authors. Numerous literary enthusiasts took this opportunity to meet and listen to the authors up close.

1.3.1 Associations

- **Utilitalia:** Through its Deputy General Manager, Paolo Acuti, Alperia is an active member of the Executive Committee and Energy Management Board of Utilitalia, the Italian federation of energy, water and environmental companies. Alperia is also a member of the association's Communication Commission as well as its Corporate Social Responsibility and Sustainability working group and the working group on "Sustainable Finance". The association has a total of more than 500 stakeholders operating in the water, environment, electricity and gas sectors. Alperia and the other associated companies have signed the Pact for the Development of the Country, a three-year planning document that involves the Italian state, local institutions, local communities, businesses and citizens. It is based upon four points: management of the energy and environmental transition towards the Green Economy; development of an efficient infrastructure system; economic, social and environmental sustainability, and the enhancement of the territories and communities served.
- **AGAW (*Arbeitsgemeinschaft Alpine Wasserkraft*):** AGAW's activities aim to encourage the exploitation of hydroelectric resources according to the highest technical and ecological standards. In addition to concrete projects in the hydroelectric field, the goal is to raise the community's awareness regarding the essential contribution of hydroelectric energy, which, being a clean source, is essential to achieve the European climate objectives.
- **Italian National Committee for Large Dams (*ITCOLD*):** ITCOLD is the Italian national committee headed by ICOLD (International Commission on Large Dams), which works with international partners to ensure that new dams are safe, efficient, economically advantageous and without a negative environmental impact. In addition to Alperia, some of the major national concessionaires are members of the committee, including A2A, Edipower, Edison and Enel.
- **Euroheat & Power:** Alperia is part of Euroheat & Power, an international association representing Europe's district heating and cooling sectors. Euroheat promotes sustainable heating and cooling by bringing together industry players, policymakers and academia.
- **Assoesco:** Alperia Green Future is a member of Assoesco, collaborates with the Energy & Strategy Group of the Milan Polytechnic and is a member of CESEF – Centre for the Study of the Economics and Management of Energy Efficiency – of Bocconi University. Alperia Green Future is also a member of Assolombarda and has carried out projects in collaboration with Sparkasse and collaborated on thesis projects with Politecnico di Milano, Politecnico di Torino, Università degli Studi di Padova, Università Politecnica delle Marche and Università degli Studi di Verona.
- **Elettricità Futura:** Italy's main association of companies operating in the electricity sector, established to form a basis of an efficient electricity market capable of responding to future challenges. Alperia is a member and sits on the Strategic Committee. The association is made up of 600 operators that have more than 75,000 MW of installed conventional and renewable electrical power and about 1,150,000 km of lines.
- **Sustainability Makers:** This national association brings together professionals from a range of organisations (companies, business foundations, professional companies, P.A., non-profit organisations) who work in the management of socio-environmental and sustainability issues related to corporate activities.
- **Zero Carbon Policy Agenda 2022:** Alperia participated in the first edition of the project in collaboration with other national companies to analyse the emission gaps in our country and define a practical guide to foster decarbonisation.
- **UNIBZ:** Alperia collaborated with UNIBZ and other companies in the region to create a skills centre for economic, ecological and social sustainability with the aim of promoting and accelerating the transition of South Tyrol towards a more sustainable economy. The Group will contribute by funding a professorship and research post on the issue of hydrogen.
- **Business for Societal Impact (B4SI)²:** The B4SI Network is a forum for companies to learn best practices for measuring and managing their social impact activities and to encourage their colleagues to do the same. Alperia is part of the working group defining guidelines for measuring and reporting on individual "beneficiaries" of social impact activities.
- **CESEF – Centre for the Study of the Economics and Management of Energy Efficiency:** Alperia Bartucci collaborates with CESEF of Bocconi University to support the Ministry of Ecological Transition in the redefinition of the Minimum Environmental Criteria of energy services for the public administration.

² <https://b4si.net/framework/network/>

1.4 Value chain

Local, sustainable, tracked resources

Alperia's sources of supply are renewable, tracked and, whenever possible, local. As defined by the materiality analysis survey, Alperia wants to create a responsible and safe relationship with communities, involving its suppliers in this process as well. The aim is to create **shared value** in the medium and long term, which is why only materials that comply with a defined value chain are chosen. Specifically:

Water:



1. We only take water from South Tyrol, to which we return it in the form of sustainable energy products and services. The water withdrawn is used solely for the production of hydroelectric energy and subsequently returned to the watercourse. The energy produced is certified with the Guarantees of Origin, which certify that the energy was produced from a renewable source;

Biomass



2. predominantly local biomass or biomass from the Alps within 200 km and from border areas;

Natural gas:



3. purchased in Italy, it is a mix between domestically extracted gas and gas extracted abroad. Gas imports in Italy amount to over 90% (compared to an EU average of around 70%). Natural gas arrives in Italy through gas pipelines and, following the war in Ukraine, gas imports from Russia significantly decreased in 2022 (-59% in the period from January to November 2022). The country from which Italy imports the most gas is now Algeria (+11%). The other countries from which Italy imports gas are: Libya, Holland and Norway. Only a residual part is directly extracted in Italy. In recent years, LNG (Liquefied Natural Gas) has also been added as a source of natural gas, which is transported from producer countries (Qatar, USA) to Italy by ship;

Palm oil:



4. for our subsidiary Biopower Sardegna S.r.l., we use palm oil to power a biomass power plant that produces an average of 270 GWh per year. It is only sourced through ISCC EU certified suppliers. This certification guarantees the sustainability of the entire supply chain, from cultivation to the mill, from storage to transport. The quality of CPO (Crude Palm Oil) is chemically analysed by third-party companies, both when the ship embarks and before the product is unloaded, to verify its full compliance with the limits contained in the Environmental Impact Authorisation (AIA) issued by Arpas of Nuoro. Furthermore, it should be noted that there has been a particular focus on reducing the use of fossil fuels (which are indispensable in the frequent startup and shut-down phases of the plant), containing them in an increasing way, until reaching a use that is about 0.2% lower than the authorised limit of 5%;

Heat:



5. comes directly from the waste-to-energy plant in Bolzano.

Electricity:



6. Alperia Trading trades on the main European power exchanges as well as on the Italian power exchange to optimise with buying and selling activities its own needs to cover the portfolios for the Alperia Group's hydroelectric power plants and the portfolios for the needs of other Alperia Group companies, such as Alperia Smart Services and/or third-party wholesale companies.

1.5 Awards won by the Alperia Group

- **TOP Utility Award:** Alperia was rated Top Utility Performance Operative at the tenth edition of the Top Utility award. The award is reserved for local public utility companies active in the energy, waste and water sectors. The selection is based on the analysis of performance and parameters carried out by the Althesys research team. Alperia was proclaimed the winner “for the high quality standards achieved in operational management thanks to the production and distribution of energy operated with respect for the natural environment in a sensitive area and in synergy with local communities”. In the running for the Top Utility Performance Operative were Alperia, Contarina, Publiacqua, Savno and Silea.
- **Premio dei Premi:** Alperia won the 2022 edition of the “Premio dei Premi” in the Industry and Services – Large Enterprises category for “the commitment to developing a structured process that allows for the involvement of personnel and all stakeholders in innovation initiatives”. The award was presented by the Minister for Technological Innovation and Digital Transition Vittorio Colao, the Minister for Universities and Research Maria Cristina Messa and the Minister for Public Administration Renato Brunetta during a ceremony at the headquarters of the National Research Board in Rome. This Award, coordinated by the COTEC Foundation with the backing of the President of the Republic, is given annually to subjects operating in industry, design, the tertiary sector, the public administration sector and universities, which have distinguished themselves for the originality of the innovations they have developed in relation to products, processes and business models. In fact, Alperia has given form and substance to innovation, integrating it as a pillar of the Group’s strategy with its own governance, organisational structure, dedicated processes and increasingly strong identity. This has made it possible to put down roots for and spread an innovative culture within the Group, with a positive impact on all BUs and organisational units.

1.6 Certifications

- **ISO 9001** for quality management
- **ISO 14001** for environmental management
- **ISO 45001** for occupational health and safety management
- **ISO 27001** for data security and protection
- **ISO 50001** for energy management systems (for two locations)
- **UNI CEI 11352** for Energy Services Companies (ESCOs), companies that work to improve their customers’ energy efficiency by directly assuming risk and guaranteeing successful projects
- **Family and Work Audit**

2. THE SUSTAINABILITY CONTEXT

2.1 Climate change

Limiting global warming to 1.5°C is one of the objectives reaffirmed by the **UN COP27** held in 2022 in Sharm el-Sheikh, Egypt. A resolution that once again commits states to reducing greenhouse gas emissions and dependence on fossil fuels. A change of pace is increasingly urgent: for about 15 years, data produced by thousands of scientists worldwide, analysed and systematised by the Intergovernmental Panel on Climate Change (IPCC), have argued that global warming is mainly the result of human activities. Compared to pre-industrial levels, the average temperature of the planet has increased by 0.98°C and, in the absence of action, could reach +1.5°C between 2030 and 2050.

The impact of global warming is evident: arctic sea ice has decreased by 12.85% per decade, while coastal tidal records show an average sea level rise of 3.3 millimetres per year since 1870. The decade 2009-2019 was the warmest on record, and 2021 was the fifth warmest year on record (European Union Copernicus Climate Change Service¹), just below the maximum set in 2016. Tropical storms have become increasingly frequent, alternating with dangerous droughts with incalculable damage on the ecosystem. In Italy, according to Legambiente's CittàClima Observatory, in 2022 there was a 55% increase in extreme weather events compared to 2021. A total of 310 extreme weather phenomena this year caused impact and damage from North to South and resulted in 29 deaths. In addition, compared to last year, 2022 saw an increase in drought damage (+367%), hailstorm damage (+107%), tornado and windstorm damage (+76%), and flooding (+19%). Data that once again indicate the urgency of a decisive change of pace in the **fight against the climate crisis** through tangible interventions that can no longer be postponed.

Main climatic risks for companies

The **World Economic Forum's 17th Global Risk Report** also points out that the next decade will be characterised by environmental and social crises. The "cost of living crisis" is ranked as the most serious global risk in the next two years, peaking in the short term. Alperia has in fact taken early action to try to lower the cost of energy for end users and has always supported its communities with donations, taxes and investments in the area. At the same time, says the latest WEF report, "biodiversity loss and ecosystem collapse" is considered to be one of the most rapidly deteriorating global risks over the next decade, and all six environmental risks are among the top 10 risks over the next 10 years. Climate and environmental risks, in particular, are the risks for which we are considered the least prepared. The lack of profound progress for the climate is worrying and risks being exacerbated by economic crises. Without significant policy changes or determined investments, the interaction between climate change impacts, biodiversity loss, food security and natural resource consumption will accelerate ecosystem collapse, threaten food supply and livelihoods in the most vulnerable economies, amplify the impacts of natural disasters and limit further progress on climate mitigation. Alperia's activities are closely linked to the natural environment, which is why climate change is of particular concern to the Group, which is implementing strategic measures and operational initiatives to make its consumption more efficient, reduce emissions and expand the supply of energy from renewable sources, increasingly focussing its business on sustainable services and products.

At the same time, another important risk is that linked to the development of new technologies. If not accompanied by protocols governing their use, they could expose countries to direct threats. As cybercrime rises, attempts to disrupt critical technology assets and services will become more common, with attacks expected against agriculture and water, financial systems, public safety, transportation, energy and security infrastructure, domestic, space and submarine communications. Technological risks are not limited solely to rogue actors. In this field, Alperia has also worked to increase protective measures and to spread greater awareness of the use of technological and IT tools among the population.

The water crisis

The growing demand for water resources and the consequences of climate change make water an increasingly scarce commodity with geopolitical, social and economic effects of great importance. According to the World Economic Forum, the water crisis is the fourth most feared global risk in terms of its impact on society, and the number of people living in river basins experiencing severe water stress is expected to affect 40% of the world's population, bringing along significant economic impacts that in some regions could reach 6% of GDP³. The reduced availability of water resources is combined with the increased need for water, in particular for agriculture which requires ever greater quantities. Furthermore, there are considerable repercussions in the energy sector: water in particular is a fundamental resource for Alperia for the production of energy in its plants, which, due to reduced rainfall in recent years have seen a reduction in the energy produced.

For more information on how Alperia manages water as a shared resource, please refer to chapter 7.3 *Water and biodiversity*.

³ <https://globalwaterforum.org/2012/05/21/water-outlook-to-2050-the-oecd-calls-for-early-and-strategic-action/>

South Tyrol Climate Plan

Already since 2011, South Tyrol has had a Climate Energy Plan, which was revised for the first time in 2016 and revised again in 2021, this time with a new approach. The “South Tyrol Climate and Energy Plan 2050” was transformed into the “South Tyrol Climate Plan 2040”, and, for the first time, the draft of the revision was discussed together with all departments of the provincial administration.

The ambitious objectives that South Tyrol sets itself following the revision of the Plan are:

- cutting CO₂ emissions by 55% by 2030, by 70% by 2037 (compared to 2019 levels) and achieving climate neutrality by 2040;
- increasing the share of renewable energies from the current 67% to 75% in 2030 and 85% in 2037 up to 100% in 2040;
- reduction of greenhouse gas emissions other than CO₂, in particular N₂O and methane, by 20% by 2030 and by 40% by 2037 (compared to 2019 levels);
- reduction of the share of the population at risk of poverty by 10% by 2030 compared to 2019 levels (around 18% in 2019).
- South Tyrol therefore wants to position itself as a front runner towards climate neutrality. A challenge to which Alperia can contribute by making its own important contribution through direct and indirect actions as foreseen by our Vision 2031.

Mission 2 of the NRRP

In relation to achieving the new target set by the EU Council in December 2020 as part of the Next Generation EU, the Italian government finalised the **National Recovery and Resilience Plan (NRRP)**, the investment programme designed to make Italy a fairer, greener and more inclusive country with a more competitive, dynamic and innovative economy. The largest allocation of resources is foreseen for the mission “**Green Revolution and Ecological Transition**”, to which more than 31% of the total amount of the Plan is allocated, amounting to approximately €70 billion to intensify Italy’s commitment in line with the objectives of the Green Deal.

There are four components of the mission:

1. Circular economy and sustainable agriculture
2. Renewable energy, hydrogen, networks and sustainable mobility
3. Energy efficiency and building renovation
4. Protection of land and water resources

The mission is to improve waste management, strengthen waste separation infrastructure and modernise or develop new waste treatment facilities in order to reach ambitious targets such as 65% recycling of plastic waste and 100% recovery in the textile sector. Tax incentives to increase the energy efficiency of buildings are also envisaged, with investment in new programmes to upgrade public buildings. These measures provide for the renovation of around 50,000 buildings per year. In order to achieve progressive decarbonisation, measures are envisaged to increase the use of renewable energy sources, including through the simplification of authorisation procedures for renewables, with the promotion of agri-voltaics and biomethane. The hydrogen supply chain will also be supported, particularly frontier research, with local use in industry and transport and the creation of some 40 refuelling stations. Funds have also been earmarked for the renewal of local public transport with the purchase of low-emission buses, and for the renewal of part of the regional train transport fleet with alternative propulsion vehicles. The Mission also allocates funds to increasing the capacity of electricity grids, their reliability, security and flexibility (Smart Grid) and in water infrastructure, with the aim of reducing losses in drinking water networks by at least 15%. Finally, prevention and land restoration measures are envisaged in the face of significant hydrogeological risks, as well as measures to safeguard biodiversity and the availability of water resources. Through its work, Alperia actively contributes to each of these missions.

2.2 European regulatory context

Since 1990, the European Union has played an important role in combating climate change. Joining the [Kyoto Protocol](#) (KP) was the first step towards reducing greenhouse gas emissions. In 1998, emission reduction targets were set for the 15 member states which were then part of the European Union to achieve the common reduction target of 8% compared to 1990 levels. The emission reduction target assigned to Italy was 6.5% in the period 2008-2012.

For the period 2013-2020, the EU has adopted the Integrated Energy and Climate Change Package (IECCP). The IECCP has committed the Member States of the European Union to achieving the following objectives by 2020:

- production of energy from renewable sources equal to 20% of energy consumption and use of biofuels equal to 10% in transport;
- reduction of greenhouse gas emissions by 20% compared to 1990;
- reduction of energy consumption by 20% compared to the baseline scenario to be achieved by improving energy efficiency.

The main European regulatory instruments are:

- [Directive 2009/28/EC](#) commits Italy to meet, by 2020, 17% of final energy consumption from renewable sources, including the use of at least 10% biofuels from renewable sources in road and rail transport;
- [Directive 2009/29/EC](#) amends Directive 2003/87/EC, perfects and extends the Community trading system for greenhouse gas emission quotas (EU-ETS), placing a single European ceiling on emissions quotas from 2013. The quotas available for emissions will be reduced annually by 1.74%, with a reduction by 2020 of 21% compared to the base year 2005;
- [Decision 406/2009/EC](#) (Effort Sharing Decision, ESD) concerns the efforts of the Member States to meet the Community commitments to reduce greenhouse gas emissions by 2020. The decision assigns Italy the goal of reducing emissions by 13% by 2020 compared to 2005 emissions for all sectors not covered by the ETS system, i.e. small-medium industry, transport, civil, agriculture and waste.
- [Directive 2012/27/EC](#) on energy efficiency which, however, does not provide binding targets for individual Member States.

At the national level, the Interministerial Committee for Economic Planning (CIPE) approved Resolution 17/2013 (update of the national action plan for the reduction of greenhouse gas emission levels) to achieve the objectives set by the IECCP. The Resolution contains the list of measures implemented and to be implemented to achieve the objectives. The main policies and measures (P&M) are aimed at promoting renewable sources and energy efficiency. Furthermore, the Ministry of Economic Development and the Ministry of the Environment and the Protection of Land and Sea have approved the new [National Energy Strategy](#) (SEN). The actions proposed in the SEN are part of the context of a decarbonisation path to 2050 for Italy according to the [Roadmap 2050](#) scenario of the European Commission⁴.

In December of 2015, the **Paris Agreement** on Climate Change was signed at the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC), which provides long-term goals to address climate change. Signatory governments pledged to limit temperature rise to below 2°C above pre-industrial levels with efforts to stay within 1.5°C, to peak emissions as soon as possible and achieve carbon neutrality in the second half of the century. Despite the success of COP21, many questions are left open by the agreement. In 2018, the COP24 in Katowice then approved the rules for implementing the Paris Agreement, the so-called "Paris Rulebook". In 2021, the Cop26 in Glasgow reaffirmed its commitment to achieve carbon neutrality globally by 2050. The Paris Agreement, which entered into force in 2016, and applied from 2021 and is integrated into the broader framework defined by the **2030 Agenda for Sustainable Development** (the action programme unanimously adopted by the 193 member countries of the United Nations in September 2015), starting with goal 13 "Fight against climate change". In particular, the Paris Agreement defines in detail the contents of sub-goal 13.2 of the 2030 Agenda, which requires "climate change measures to be integrated into national policies, strategies and planning".

After the presentation of the Communication on the "Climate-Energy Framework 2030", the European Council approved the new objectives for the period 2021-2030. The central element of the new **Climate-Energy Framework 2030** is the objective of reducing greenhouse gases by 40% at European level with a series of binding targets for the final consumption of energy from renewable sources and an indicative energy efficiency target. In order to achieve these objectives, numerous legislative measures have been approved, including the revision of the ETS directive (Directive No. 2018/410/EU), the new regulation for non-ETS sectors (Regulation No. 2018/842/EU), as well as the so-called LULUCF regulation (Regulation No. 2018/841/EU) relating to the inclusion of greenhouse gas emissions and removals resulting from land use, land use change and forestry. We also recall the directive (EU) 2018/2002 on energy efficiency, which provides for an energy efficiency target of 32.5% for 2030, the directive (EU) 2018/2001 on renewable sources, which provides that the share of energy from renewable sources in the Union's gross final energy consumption in 2030 is at least 32%.

⁴ <https://www.isprambiente.gov.it/attivita/cambiamenti-climatici/politiche-sul-clima-e-scenari-emissivi>

On 14 July 2021, the European Commission presented a package of legislative proposals, called “**Fit for 55%**”⁵, aimed at reviewing EU legislation on the reduction of climate-changing emissions, energy and transport, to allow the achievement of the new, more ambitious 2030 goal: **reduce net greenhouse gas emissions by at least 55% by 2030**. In particular, legislative proposals for revision include:

- the EU Emissions Trading System (ETS)
- the Effort Sharing Regulation
- the Renewable Energy Directive and the Energy Efficiency Directive
- the regulation on land use and forestry
- the regulation on CO₂ emissions from cars and vans

The regulation provides for an intermediate climate target for 2040 to be established in the coming years. The strategy outlines a long-term vision for the EU to become a climate-resilient society by 2050. The measures envisaged by the strategy are:

- better **data collection and sharing**;
- **nature-based solutions** to build resilience to climate change and protect ecosystems;
- integration of adaptation into **macro-fiscal policies**.

Three quarters of the EU’s greenhouse gas emissions are due to energy production and consumption. The EU is therefore working towards the **decarbonisation of the energy sector**, a central element of the green transition. In December 2020, the Council adopted conclusions on strategies for offshore renewable energy and hydrogen, which had been proposed by the Commission. The Council also set out further policy actions in relation to the fight against climate change and under the European Green Deal strategy, including the Just Transition Mechanism, the Farm to Fork Strategy, the Biodiversity Strategy and the European industrial strategy.

Sustainable finance—technical criteria for the fight against greenwashing

The EU Taxonomy – In 2020, with EU Regulation 2020/852⁶, the Taxonomy of eco-compatible economic activities has been introduced into the European regulatory system: a classification of activities that can be considered sustainable based on alignment with the environmental objectives of the European Union and compliance with certain social clauses. The Taxonomy is a guide: for companies to assess their own activities, to define corporate policies aimed at greater environmental sustainability and to report to stakeholders in a more comprehensive and comparable way; for investors to integrate sustainability issues into their investment policies and to understand the environmental impact of the economic activities in which they invest or may invest; for public institutions, which can use the Taxonomy to define and improve their ecological transition policies. According to Art. 8 of EU Regulation 2020/852, organisations subject to the Non-Financial Reporting Directive (NFRD) and, subsequently, to the new Corporate Sustainability Reporting Directive (CSRD) will be required to disclose information on alignment with the Taxonomy using certain indicators: revenue, capital expenditure and operating expenditure. Among the envisaged requirements, the disclosure of the share of capital investments aligned with the Taxonomy assumes particular importance – with a view to the transition towards an economic system that is increasingly less dependent on fossil energies. It is a dynamic and prospective indicator that identifies the strategic plans defined by companies in order to achieve progressive decarbonisation in a given period of time. It is also important to understand – through the analysis of operating expenses (OpEx) – to what extent the company is pursuing the intermediate objectives of the strategic ecological transition plan. This data allows investors to make an analysis of companies’ alignment with environmental objectives, taking into account their decarbonisation projects. This should steer, in a more transparent and conscious manner, towards sustainable low-carbon or carbon-neutral investments (such as renewables). Furthermore, in the sectors with the greatest climate impact (e.g. energy, construction and transport), this information makes it possible to select companies that have embarked on ecological transition paths. Finally, thanks to the availability of data on the alignment of business plans with the Taxonomy, investors can make their engagement actions more effective, measuring their effects over time and strengthening the dialogue with the invested companies.

Regulatory compliance – increased disclosure requests

ESG and CSRD – Europe has confirmed its commitment to the creation of a framework that increases the responsibility of companies on sustainability reporting issues thanks to the definitive approval of the Corporate Sustainability Reporting Directive [21](#) by the European Council. Thanks to the Corporate Sustainability Reporting Directive, companies will be in a position to provide investors and stakeholders with the information necessary to correctly assess the corporate impact. The CSRD strengthens the already existing rules of the NFRD Non-Financial Reporting Directive by introducing more precise and detailed reporting requirements, with a widening of the audience of companies involved. The CSRD will require the disclosure of information related to the EU Taxonomy, equal opportunities, fundamental freedoms and roles of governing bodies, sustainability aspects, political affiliations and lobbying, transparency in business relationships, internal controls and risk management. Large companies and SMEs will be required to report on sustainability issues in terms of environmental impact, social rights, human rights and governance factors. The regulations envisaged by the CSRD will in fact be applied to all large companies and to all companies listed on regulated markets, with the exception of listed micro-enterprises. These companies

⁵ <https://www.consilium.europa.eu/it/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/>

⁶ <https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:32020R0852>

are responsible for the information to be provided by their subsidiaries. On 28 November 2022, the European Council approved the new directive⁷ which imposes detailed reporting obligations on companies on environmental, social and governance (ESG) performance. The directive is in line with the objectives of the European Green Deal, with the aim of favouring the transition towards a sustainable economy, discouraging greenwashing practices. The new obligations will apply from 2024. The European Financial Reporting Advisory Group (EFRAG) will be tasked with developing draft European standards. The European Commission will adopt the final version of the rules in the form of a delegated act, following consultations with EU Member States and a number of European bodies.

2.3 The Sustainable Development Goals

The 2030 Agenda, adopted by the United Nations General Assembly, is the global action plan for achieving a sustainable transformation of society, the economy and the environment. Its **17 Goals** (SDGs), and the **169 specific targets** into which they are divided, balance the three areas of sustainable development (social, economic and environmental), plus the institutional aspect. These are common goals on crucial development issues, such as fighting poverty, eradicating hunger and combating climate change. These goals concern all countries and individuals, with no one excluded or left behind on the journey needed to put the world on the path to sustainability.

2.3.1 Alperia and the SDGs

Alperia, given the particular nature of its activities, has the opportunity to contribute to the achievement of a number of the 17 UN Goals. In particular, we are working on:

SDG 3 – ENSURING GOOD HEALTH AND WELL-BEING

We promote a healthy and safe working environment and are committed to reducing pollution through our products and services

- **Target 3.6: Reducing road injuries and fatalities** → We have developed a plan to encourage green and smart mobility for our employees to use, by using public transport and/or bicycles and scooters. Together with the HSE department, we monitor accidents and injuries that may occur at our plants, including road accidents. Every three to four years, we hold off-road and on-road driving courses at Edyna S.r.l., the company with the largest car fleet in the Alperia Group.
- **Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all** → We provide our employees with supplementary health insurance and with Care4u, a company we partly own, we have developed a prototype for nursing care for patients in residential care and clinics. We also plan to develop an additional home care tool.
- **Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination** → We are working to reduce emissions, cut CO₂ and greenhouse gases, produce clean heat with district heating and reduce energy waste, with the ultimate goal of accelerating the achievement of net zero.

SDG 5 – ACHIEVING GENDER EQUALITY

We are striving for gender equality and female empowerment

- **Target 5.4: Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate** → We are a family-friendly company, certified with the “Family and Work Audit” awarded by the Family Agency of the Autonomous Province of Bolzano and its Chamber of Commerce. Some of the tools we use are reduced and flexible hours, work-life balance measures, promotion of parental leave, especially voluntary, and smart working.
- **Target 5.5: Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life** → We are working to attract more women into technical professions and to increase the percentage of female managers. The chairman of our Management Board has been a woman since 2019, and the body itself is made up of 33% women. We have also started to develop leadership plans specifically for women. Currently, 26% of Alperia workers are women and the gender pay gap is 7% for female employees.

SDG 6 – ENSURING THE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER FOR ALL

We optimise water network management, reduce the impact of our activities and work to protect the aquatic environment

⁷ <https://data.consilium.europa.eu/doc/document/PE-35-2022-INIT/it/pdf>

- **Target 6.5: By 2030, implement integrated water-resource management at all levels, including through transboundary cooperation as appropriate** → We are working on the modernisation of our water infrastructure in order to ensure that our systems are always reliable and safe. One example is the Smart Land project, which aims to use IoT technology in agriculture to achieve more efficient water consumption in the irrigation process – a project that we launched on the market in 2021 and will continue to develop with new applications in 2022. Awareness-raising activities with the local population are also very important, such as anti-freeze initiatives to optimise water use in agriculture. We actively involve farmers in taking responsibility for water management, both in and outside South Tyrol.
- **Target 6.6: Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes** → We want to minimise the impact of our hydroelectric power plants on nature and the environment, actively protecting the biological diversity of waterways. To this end, we operate in full compliance with the legal provisions on minimum vital water flow, build new fish ladders, implement compensation measures and engage in renaturalisation and sustainable sediment management.

SDG 7 – AFFORDABLE AND CLEAN ENERGY

We ensure access for all to affordable, reliable, sustainable and modern energy systems

- **Target 7.1: By 2030, ensure universal access to affordable, reliable, and modern energy services** → We want to ensure a secure and efficient energy supply, which is why we are investing in the development of sustainable energy solutions and the modernisation of our plants and networks to make our facilities more resilient and reliable, even in the event of emergencies or disruptions. In addition, in view of the global increase in energy prices, we have ensured that households receive an affordable package by locking in the price at the lower market value. The same approach, albeit through different measures, has been adopted for SMEs and large enterprises.
- **Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix** → We aim to produce our energy primarily from renewable sources (we are already at 91% today), while also involving our suppliers in sustainable procurement. We want to increase this percentage through: targeted investments (e.g. the construction of the biomass plant in Merano); adoption of new business models, services and products, such as green gas and Alperia MyHome; monitoring and reporting on the amount of energy produced, purchased and consumed by source. In addition, we are working on the energy transition with green hydrogen and want to be a transition partner for our stakeholders as well.
- **Target 7.3: By 2030, double the global rate of improvement in energy efficiency** → We want to make our energy consumption more efficient, so we are reducing the energy consumption of our buildings and plants through targeted initiatives (including the introduction of the Alperia Bartucci monitoring system at the Alperia Greenpower site in Ponte Gardena, the start of the ISO 50001 certification process for the same site, the efficiency improvement of heat production in Chiusa, the introduction of cogenerators for self-consumption in Chiusa and Merano). We are also developing new technology and services that will further improve energy efficiency and reduce energy needs. Furthermore, we are developing new products, services and business models to help our customers reduce their own energy needs and improve their efficiency, also thanks to the know-how of Alperia Bartucci and Gruppo Green Power. Finally, with Edyna, our distribution subsidiary, we have replaced the meters of more than 200,000 customers with new-generation Smart Meters, which allow more efficient management of energy resources.

SDG 8 – DECENT WORK AND ECONOMIC GROWTH

Promoting inclusive and sustainable economic growth and decent and secure employment

- **Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including young people and persons with disabilities; equal pay for work of equal value** → We have harmonised Alperia's union agreements and HR policies to provide uniform and fair framework conditions for all our employees.
- **Target 8.6: Substantially reduce the proportion of youth that is neither employed nor undergoing education or training** → We want to support our employees in their development. To this end, we promote internal training and career development activities, with programmes dedicated to the "Talent" and "Pillars" of Alperia. To support the generational transition we are developing policies to attract and train new staff and have developed ad hoc leadership programmes. We hired 52 under 30s (46% of hires) and 34 between 31 and 40 (30% of hires) in 2022. We support their development and training with special programmes.
- **Target 8.8: Protect labour rights and promote safe and secure working environments for all workers: this includes all migrant workers, women in particular, and those in precarious employment** → We actively promote the health of our employees, guaranteeing the highest level of work safety to protect our staff, the general population and the surrounding area. We have adopted plant monitoring and maintenance measures, promoting wellness initiatives in all of our workplaces. We have

installed 30 Red Cross and White Cross semi-automatic defibrillators, which will be used inside and outside of Alperia workplaces and at some customer sites.

SDG 9 – BUSINESS, INNOVATION AND INFRASTRUCTURE

We build and maintain safe and resilient infrastructures, foster innovation and support equitable, responsible and sustainable development

- **Target 9.1: Develop high-quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all // Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities** → We want to ensure a safe and efficient energy supply. We do this by developing increasingly modern distribution networks, maintaining and upgrading our infrastructure (plants, networks, buildings) to make it more resilient and sustainable. We are continuing to decommission unreliable MV and LV lines, and are using fibre optics for more reliable plant control. Furthermore, the 2023-2027 Business Plan envisages investments to ensure the maintenance and modernisation of the hydroelectric plants, to protect the existing capacity and the resilience of the grid to increase the quality and continuity of the electricity service.
- **Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending** → We want to actively contribute to the energy future and develop new technology with innovative research projects. Our Innovation Board works to develop innovative sustainability-oriented projects and we support innovation-related projects such as the Alperia Startup Factory. With Alperia Innoveering we are carrying out research and innovation in the field of hydroelectricity. We are also collaborating with many leading international institutes to promote research and innovation in the energy sector.

SDG 11 – SUSTAINABLE CITIES AND COMMUNITIES

We want to make cities more inclusive, safer and more energy-efficient

- **Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management** → With Smart Region, Alperia is dedicated to creating a sustainable, integrated and efficient community. All of its investments (approximately €160 m provided for in the 2023-2027 Business Plan) are in fact geared towards encouraging the implementation of high-tech initiatives for cities and citizens, such as the efficiency of buildings, the development of domestic photovoltaics (with the launch of Alperia MyHome in 2021), facility management for the PA and the development of sustainable mobility with the consequent infrastructure of the territory. The following activities are also being continued: the sustainable expansion of district heating networks; the Smart Land project; investments in Green Mobility developed with Neogy, the Regalgrid project dedicated to energy communities and virtual aggregation units with which consumers become prosumers, i.e. “co-producer consumers”, the initiatives for sustainable mobility for Alperia employees, for which we won the 2021 Sustainable Mobility Award in South Tyrol.

SDG 12 – SUSTAINABLE CONSUMPTION AND PRODUCTION

We promote sustainable patterns of production and consumption

- **Target 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle** → We have anchored environmental, social and economic sustainability to our governance and management processes. We have set up a sustainability plan and implemented a Sustainability Policy and a CSR procedure⁸, we have integrated at least one sustainability objective into the Management by Objectives (MBO) scheme for Group executives and put sustainability at the heart of the new 2023-2027 Business Plan and Vision 2031. We also prepare the Non-Financial Statement, reporting on everything we do from a social and environmental perspective. In this area, we submit EMAS declarations every year and develop Environmental Plans agreed with the Autonomous Province of Bolzano and the riparian municipalities. In addition, with Alperia Green Future, we promote more efficient and sustainable consumption with ad-hoc advice and activities. Through targeted marketing measures and information

⁸ <https://sostenibilita.alperia.eu/alperia-si-presenta/corporate-governance/sustainability-policy>

campaigns, we also aim to raise our customers' awareness of more sustainable consumption patterns and develop our green product and service portfolio.

- **Target 12.7: Promote public procurement practices that are sustainable in accordance with national policies and priorities** → We want to make our procurement as local, environmentally sound and socially sustainable as possible. Our supplier selection process ensures that all our suppliers maintain sustainability standards and that purchased products also meet these standards.

SDG 13 – CLIMATE ACTION

We take specific action to combat climate change and its consequences

- **Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries // Target 13.2: Integrate climate change measures into national policies, strategies, and planning // Target 13.3: Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning** → The Alperia Group achieved carbon neutrality in 2020 with respect to operational emissions and is accelerating its path towards net zero. We have signed up to the Science Based Targets initiative (SBTi), an initiative that promotes the reduction of greenhouse gases on the basis of scientifically calculated targets. Furthermore, in the 2023-2027 Business Plan and in Vision 2031, we have set ourselves the objective of reducing our CO₂e emissions (Scope 1, 2 and 3) by 46% in 2027, compared to 2021, with the final objective of achieving net zero by 2040. We assess and update our risks according to climate change (water scarcity, storms, extreme events, regulation, etc.). We are also investing in the production and use of products with lower greenhouse gas emissions and encouraging the development of internal and external e-mobility. The Alperia Smart Region has the fight against climate change at its core. In addition, we are constantly developing slope monitoring initiatives, certifying penstocks and SF₆ gas management personnel, and carrying out exercises with the Civil Protection Agency. We have equipped ourselves with a video surveillance system for the hydraulic works and technology that provide for early warnings and immediate emergency management. We are working hard to ensure that citizens and our stakeholders are more aware of environmental issues.

SDG 15 – LIFE ON LAND

We ensure the conservation of ecosystems and the protection of biodiversity including through the use of innovative technologies

- **Target 15.1: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements // Target 15.4: By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits essential for sustainable development // Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, protect and prevent the extinction of threatened species // Target 15.6: Ensure fair and equitable sharing of the benefits arising from the utilisation of genetic resources and promote appropriate access to genetic resources** → We strive to protect the environment and its biodiversity in compliance with the compensation measures laid down by the Autonomous Province of Bolzano. For this reason, we carry out various activities to consolidate fish stocks, build ladders for fish in intake works, improve water courses and oversee the monitoring and management of Minimum Vital Flow. In addition, we have begun to implement measures to promote sustainable water use in collaboration with local farmers and municipalities.

3. STAKEHOLDER ENGAGEMENT

Creating long-term shared value for all stakeholders has always been a priority for Alperia. This is why we speak of “stakeholder capitalism” rather than “shareholder capitalism”, which means an approach that is exclusively profit-driven. Being able to involve stakeholders is essential, which is why we manage relations with our stakeholders on an ongoing and proactive basis and with a variety of tools. This approach allows us to highlight and resolve any conflicts in the bud at a strategic level, avoiding complaints, to improve our reputation and create long-term partnerships, strengthening our ties with the local area. In addition, at the operational level, stakeholder engagement is required as compliance with laws and standards (GRI, ISO, Legislative Decree 254/16), allowing knowledge to be imparted and awareness to be created with respect to corporate strategy, projects to be communicated proactively and new issues to be identified at an early stage.

The stakeholder management process begins with the identification of stakeholders and their needs (based on the criteria defined in the AA1000 SES reference standard, with a rating scale of 1 to 5) following internal workshops, continues with the

definition of an engagement plan in which Alperia defines the topics and methods of dialogue and with the implementation of the plan and ends with monitoring and follow-up.



Stakeholder category

- 1 Employees
- 2 Owners and investors
- 3 Business community
- 4 Interest groups
- 5 Suppliers
- 6 Community
- 7 Institutions
- 8 Customers
- 9 Research and education institutions

The reputational risk framework processes, materiality analysis, sustainability planning and reporting are also linked to stakeholder management. The initiatives developed to establish relationships with stakeholders include: information events with the riparian municipalities and the local population, guided visits to the power stations for schools, collaborations with universities and research institutes, workshops, sponsorships and support for the main events and local associations. In particular, in 2022, Alperia developed the following initiatives:

- **Employees:** three training workshops on innovation and entrepreneurship and training for executives on the topic of sustainability; developed leadership courses and launched the second edition of the mentoring programme, whose aim is to strengthen the relationship between the Group's people by creating networks between mentees and mentors from different companies. The Team Alperia project, dedicated to boosting team spirit through activities outside the work space, also continued. Furthermore, to encourage more effective communication, a special HR section was included in the "insight" newsletter created by the Communication department, and the organisation of the HR department was reviewed to designate a person responsible for managing internal communication.
- **Customers:** we opened a new Energy Point in Varna, South Tyrol, and strengthened our network of agents, which currently consists of 98 professionals whose work is highly appreciated by customers. Despite the numerous requests received from customers for clarifications regarding energy increases, for bills to be paid in instalments and for tax credits, Alperia managed to comply with the standards of ARERA (Italian Regulatory Authority for Energy, Networks and Environment), managing on average 85% of requests received each month, except for the month of October which, however, did not lead to sanctions. Furthermore, we have organised Energy Days in the area to explain the

reasons for the increases and explain possible alternative solutions. Furthermore, Alperia Green Future took part in the 15th edition of Key Energy in Rimini, the largest exhibition dedicated to energy in Italy.

- **Suppliers:** again in 2022, Alperia involved its suppliers in the search for eco-sustainable solutions, in particular in the construction of its new offices, which will have to meet certain sustainability and well-being criteria. We would like to remind you that in our tenders, sustainability and human rights criteria are always taken into account, which suppliers must comply with.
- **Owners and investors:** Alperia's sustainability report is presented at the Shareholders' Meeting. Meetings are held with the Management Board and the Supervisory Board to outline and discuss key aspects of sustainability, including an induction session on the main developments in recent years. In 2022, we presented our strategy to cope with energy increases to the Provincial Council.
- **Interest groups:** Alperia is involved in organisations and associations dealing with energy issues and innovation, and with Edyna, the distribution company, it acts as an intermediary between the Autonomous Province of Bolzano and the national grid operator TERNA, promoting the territory's needs.
- **Research institutes:** Alperia invests in research and innovation by collaborating with some of the most important research institutes in the Alps, including the Free University of Bolzano with which we share several projects (Fusion Grant, Project IDEE, the Competence Centre for Economic, Environmental and Social Sustainability, and the final stages of the Alperia Startup Factory with the realisation of the proof of content) and Eurac Research with which we are developing the LIFE4HeatRecovery project, dedicated to the development of a new generation of intelligent district heating networks in which a large number of low-temperature (10-40°C) heat sources available within the urban circle can be integrated. Finally, during 2022, the Alperia Innovation team took part in various public events on the subject of innovation, including the "R&D Management Conference" of the University of Trento to which Alperia brought its experience as keynote speaker, and the Observers of the Milan Polytechnic in the Energy & Strategy Group.
- **Community:** the Alperia Group has always shown great concern for the community by stepping in to help in the most difficult situations. The care demonstrated during the pandemic, with many initiatives to support the region, was renewed in 2022 in light of the energy crisis. In order to mitigate the increases in electricity tariffs, Alperia has developed new offers for South Tyrolean households and businesses, which are described in more detail in Section 8.1.1. Value added for the territory. In addition, meetings were organised with communities to explain the workings of Renewable Energy Communities and district heating, which in light of rising energy prices have attracted considerable interest. Alperia involved the public in an awareness-raising event organised on the occasion of the Urban Play Agenda 2030, as part of the Asvis National Sustainable Development Festival in Bolzano. Alperia, in connection with SDG 7 - "Affordable and clean energy", organised a "Clean up" waste collection to clean up the banks of the Talvera and Isarco rivers, emphasising the importance of waste for the generation of new energy through district heating. We have also resumed the open days for schools in South Tyrol at the hydroelectric plants of Marleno and Tel and in the district heating plants of Silandro, Bolzano, Chiusa and Sesto. We have also planned guided tours of the Remote Monitoring Centre, the nerve centre of electricity distribution in South Tyrol, and we have provided the innovative "Virtual Reality" box for a virtual visit to an Alperia hydroelectric plant. For primary schools, educational support material is available in the form of a book. Finally, on the occasion of the "Bolzanoinbici 2022" day, we gave South Tyrolean citizens the opportunity to visit the district heating plant in Bolzano. These initiatives are complemented by donations to local sports and cultural associations. We have also donated used furniture to the flood-affected communities in the Marche region, to the Association for Palliative Care for Children in South Tyrol MOMO and to Frauen helfen Frauen. The public was also involved by organising and supporting various open events during the year, described in more detail in Chapter 7 *Customers*. Finally, in the event of accidents such as the landslide in Val d'Ultimo, we met with local stakeholders to explain what had happened and resolve the situation as quickly as possible.

4. Materiality analysis

Updating the core topics

Alperia adopts a reporting system based on the “Sustainability Reporting Standards” defined by the Global Reporting Initiative (GRI). The aim is to track and monitor sustainability performance within the company. The core element of the standards is the Materiality Analysis, which identifies the issues and sustainability indicators that are essential for Alperia.

Consistent with the revision of the GRI 3 Material Topic, together with the recent evolutions of the standards proposed by the European Reporting Lab (EFRAG), in the materiality analysis, Alperia adopted an approach aimed at carrying out a first dual materiality assessment, i.e. identifying two ways to consider ESG issues: how they affect company performance and value in the long term (impacts experienced) and what effects the company has on society and the surrounding environment (impacts generated).

In 2021, the matrix was updated with the involvement of the Group’s main internal and external stakeholders, who were involved in five roundtables (two in Veneto and three in South Tyrol). At each roundtable, the material topics were considered and for each, the measures taken were assessed and possible improvements were proposed. Following the roundtables, an email survey was sent out based on the results, to which over 790 people responded. The results of the survey helped to define the new matrix. In particular, the process of defining the core topics was as follows:

- **IDENTIFICATION OF TOPICS:** we prepared a “long list” of sustainability topics based on competitor analysis, megatrends, the media, stakeholders’ feedback (roundtables) and Alperia’s activities. We have thus identified twenty-eight topics;
- **DEFINITION OF THE IMPACTS GENERATED ON STAKEHOLDERS:** we have prepared a short list of 21 selected topics. To understand Alperia’s ability to generate impact with stakeholders on these topics, we sent out an anonymous online survey to which more than 790 people responded. The results were aggregated and weighted according to the relevance of the stakeholder categories with the intention of forming an overall ranking of the impacts generated on a scale of 1 to 4;
- **DEFINITION OF IMPACTS EXPERIENCED BY THE GROUP:** we have internally assessed the impacts experienced by Alperia through the following factors: 1) assessment of the original, ESG and reputational risks associated with the topics with the involvement of Enterprise Risk Management, 2) assessment of the impact of the topics on Alperia’s business model through a workshop with Senior Management, 3) assessment of the topics in Alperia’s pillars and strategies through a desk analysis. The three components were aggregated to form an overall ranking of the impacts experienced on a scale of 1 to 4;
- **PREPARATION OF THE MATERIALITY MATRIX:** we have prepared the materiality matrix by selecting and classifying topics according to the impacts generated and experienced.

A topic is considered core if it:

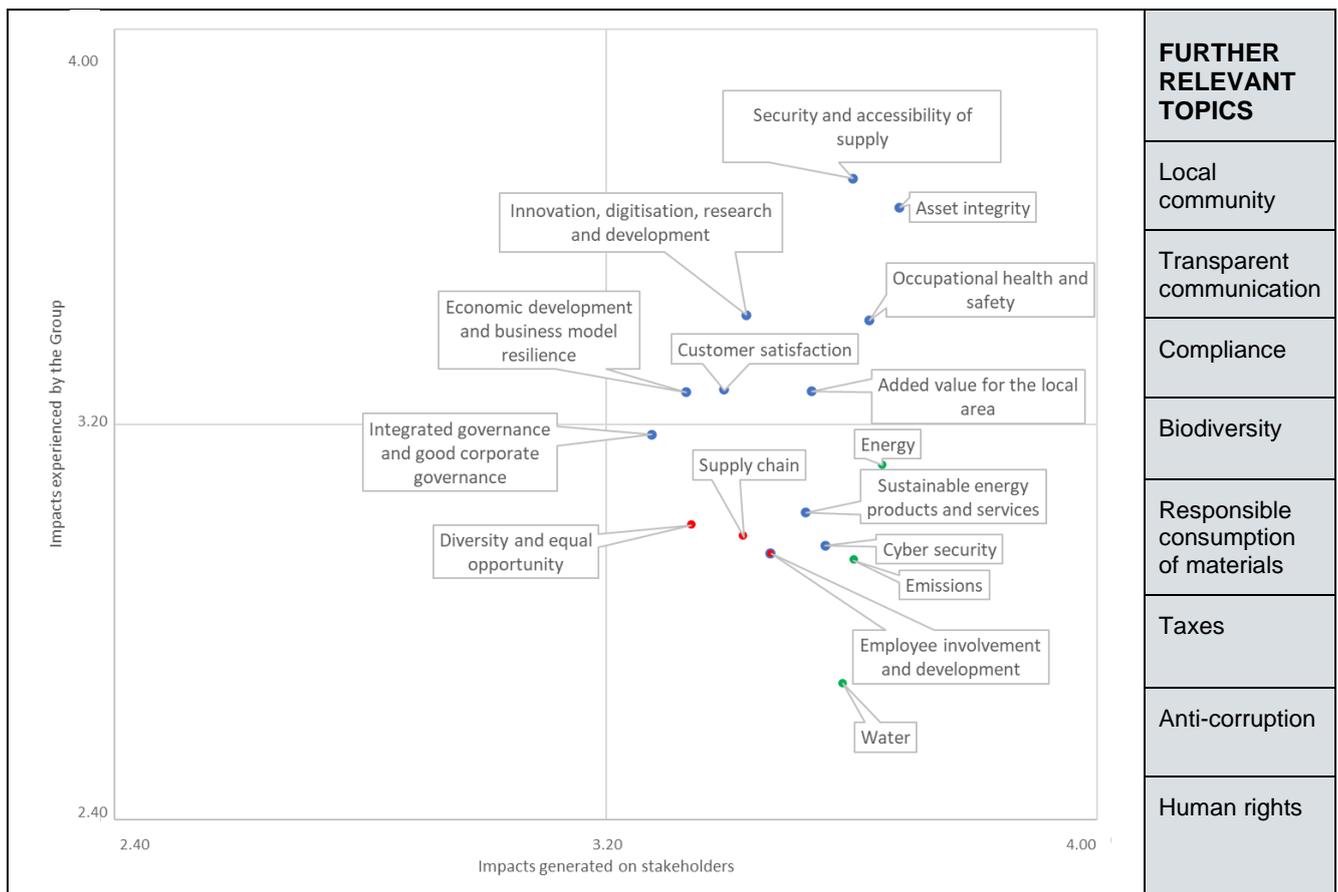
- is among the top ten impacts generated;
- is among the top ten significant impacts and/or;
- scored more than 2.8 points in both the assessment of the impact generated and the assessment of the impact experienced.

The 16 topics relevant to Alperia thereby emerged.

LIST OF MATERIAL TOPICS		
1	Asset integrity	Business & Governance
2	Security and accessibility of supply	Business & Governance
3	Occupational health and safety	Social
4	Innovation, digitisation, research and development	Business & Governance
5	Added value for the local area	Business & Governance
6	Energy	Environmental
7	Customer satisfaction	Business & Governance
8	Economic development and business model resilience	Business & Governance

9	Sustainable energy products and services	Business & Governance
10	Emissions	Environmental
11	Cyber security	Business & Governance
12	Integrated governance and good corporate governance	Business & Governance
13	Employee involvement and development	Social
14	Supply chain	Social
15	Diversity and equal opportunity	Social
16	Water	Environmental

- Business & Governance
- Environmental
- Social



Alperia Group Materiality matrix (source: Alperia)

5. Integrated strategy

How we handle the issue

As one of the largest companies in the region, the Group's strategic choices have direct and indirect impacts, both internally and externally. The economic development brought by economic activities contributes to the increase of income and employment in the province and improves access to essential services such as education and health. Furthermore, the ability of our business model to be resilient even in the presence of shocks or challenges allows us to protect the interests of stakeholders, such as employees, customers and shareholders, contributing to the well-being of the community and the environment in which it operates. Through the investments included in the Group's strategy, in fact, various environmental and social impacts are expected in the area where Alperia operates.

The impacts described derive from the externalities generated by the Group's corporate strategy, which not only sets out the economic objectives, but also defines how Alperia interacts with natural and social capital, determining the company's impact in the local socio-economic context.

Alperia pursues the objective of creating long-term economic value (for example through dividends, taxes, investments) for all stakeholders and of improving the resilience of the business model to cope with new evolutionary and competitive scenarios.

The management board and the supervisory board are entrusted with the responsibility of defining and approving the Group's strategic direction. The Group's strategy is periodically reassessed by these bodies, based on any significant events that could cause changes in the energy market.

The main findings of the materiality analysis and the sustainability objectives that have **emerged from discussions with the various stakeholders** have been taken into account in defining the corporate strategy.

What has been done

Sustainability is central to every aspect of Alperia's business. Therefore, we have integrated the principles of sustainable development into our corporate strategy by defining to which Sustainable Development Goal set by the United Nations we want and can contribute to within our business with appropriate solutions and measures, within a certain time frame and according to certain indicators. In 2022, in particular, to anchor this strategy, we **adopted a long-term vision that will guide the Group until 2031**. Achieving the goals set out in Vision will be driven by the **2027 Business Plan**, in which we have integrated sustainability at a strategic level.

5.1 Vision 2031

Alperia has adopted two strategic documents to define the missions and impacts of its long-term activities: **Vision 2031** and the **2023-2027 Business Plan**. In the Vision we set out what we want to achieve within the next nine years, while in the Business Plan 2023-2027 we explain how we will achieve these goals (with a horizon looking ahead to 2027). Alperia drafted both documents starting from an assessment of the current main trends and an analysis of market evolution. Next, we assessed the main risks for Alperia and our prospective positioning.

The **main trends** identified concern: the ever-increasing scarcity of natural resources, the advance of digitalisation and the acceleration of innovation, the development of 4.0 mobility, the increase in geopolitical tensions, the progressive ageing of the population, the greater sensitivity towards social responsibility, with the widespread adoption of the Benefit Society model (already adopted in Italy by more than 2,146 companies) and, of course, the impact of climate change, the devastating effects of which have led states to identify targets for reducing CO₂ emissions. In particular, Europe intends to achieve net zero by 2050 and has therefore set new emission reduction targets for 2030 with the Fit-for-55, a package that mandates emission reductions of at least 55% by 2030. It is a responsibility that is increasingly involving companies, moving sustainability from being relegated to the CSR sphere to becoming a shared value, fully integrated into corporate strategies.

There are two cornerstones of our Vision 2031: **sustainability and integrated positioning along the energy value chain**. We identified these pillars starting from a preliminary analysis of risks and opportunities. The **risks** we may face are: the imbalance of EBITDA on hydropower generation, regulatory developments and the expiry or withdrawal of hydro concessions and grids, the impact of climate change, ESG positioning for access to capital, the difficulty in finding and retaining talent, the acceleration of technological obsolescence and innovation, and the increase in cyber risk. On the other hand, there are numerous **opportunities**, such as: the growth of the renewables market, the possibility of becoming an energy transition partner for businesses and the public, maximising the value of the customer base through a customer centric approach based on sustainability and simplification, and investing in services that will support the energy transition (for example, the development

of white hydrogen). In fact, utilities could be **the engine of the energy transition**, a mission of which we are fully aware and which we have made central to our Vision.

By 2031, **we will work to achieve the sustainability goals we have set ourselves**, cutting emissions, creating value in the area, including through the adoption of D&I policies and building an integrated governance model. We intend to obtain an ESG rating. At the same time, we will strengthen existing businesses and improve our financial exposure by formalising a sustainable finance framework. Finally, we will continue to invest in innovation, developing services and business opportunities consistent with the energy transition (e.g. hydrogen, CER, photovoltaic, biomethane) and transforming the organisation from a customer centricity perspective.

ESG factors are fully integrated into our strategy. In particular, we set ourselves the goal of reducing emissions more than foreseen in the Climate Plan, reaching 70% in 2031 compared to 2021. We will achieve this by: building district heating plants that use biomass as raw material or other green energy sources, selling or decommissioning Biopower Sardegna, continuing the electrification of the fleet, increasing green contracts for the supply of energy (currently 39%), increasing the share of the sale of green gas and biomethane and activating capture & storage projects.

In particular, our Vision includes:

- **ENVIRONMENT:** reducing emissions by 70% by 2031 (-56% Scope 1, -6% Scope 2, -71% Scope 3) with offsetting for unavoidable emissions; achieving net zero by 2040 with a 90% reduction in CO₂ emissions and offsetting for the remaining 10%; developing innovation projects and feasibility studies on biomethane, hydrogen, heat pumps, electric boilers, SF₆ substitution and capture & storage to enable the technology switch needed to achieve net zero (2031-2040) and securing offsetting projects in line with the Science Based Target initiative (exclusive projects, nationwide projects to generate offset certificates and offsetting CO₂ initiatives linked to the territory and Group strategy);
- **SOCIAL – PEOPLE:** promoting diversity and inclusion at Group level, increasing the percentage of women in management to 50% and in the total corporate population to 30% by 2031 and simultaneously reducing the gender pay gap. In addition, giving priority attention to the health of employees and attracting young talent and qualified professional profiles and increasing employee loyalty by increasing satisfaction levels, maintaining and developing company know-how and investing in the training of employees with new skills essential for the evolution of the business in accordance with the energy transition;
- **SOCIAL – TERRITORY:** ESG assessment of the supply chain, activation of 100% of significant contracts with specific sustainability criteria, creation of social and environmental added value for the local area (South Tyrol, Piedmont, Veneto, Marche) through strategic initiatives and projects for the community and for Alperia;
- **GOVERNANCE AND RESILIENCE:** completing an integrated governance model in terms of procedures, reporting, risk management, financing, investments, management remuneration, culture and training; increasing the resilience and safety of the plants and the electricity grid in view of climate change through the identification and assessment of the risks that can impact Alperia's assets and activities and identification of possible mitigations; continuing with economic activities, also generating a common benefit to the community, the territory and the environment;
- **INNOVATION:** investments equal to ~2% of total normalised turnover; expanding current know-how through targeted acquisitions and identifying areas of expertise;
- **DIGITAL:** supporting the development of the company from a customer-centric perspective, facilitating the introduction of new customised products/services; automating processes to streamline employee work and the customer experience; facilitating the development and transfer of skills within the company, including with new working methods; optimise and upgrade assets;
- **FACILITY:** redeveloping existing buildings with a view to achieving "zero emissions", maximising the flexibility and modularity of work spaces, promoting sustainable mobility and reducing the emissions generated by commuting to work, complying with sustainability criteria in the management of Facility, from planning to execution;

5.2 2023-2027 Business Plan

The Business Plan is the document with which Alperia identifies the objectives it intends to achieve by 2027. Objectives in which sustainability is fully integrated, with specific measures envisaged for each business area. At **Group** level, in the field of **sustainability**, we will pursue the objective of reducing emissions to reach net zero with the following actions:

- **Scope 1:** 39% reduction by 2027 and offsetting of unavoidable emissions with sustainable growth projects through biomass plants for district heating and use of other sustainable sources/technologies and with the transition from fossil fuels to renewables for heating and the car fleet;
- **Scope 2:** 4% reduction by 2027, offsetting of unavoidable emissions and full switch to renewable EE.
- **Scope 3:** 47% reduction by 2027 thanks to the following measures: offsetting emissions with the green gas product, gradual transition to the sale of green electricity and from natural gas to green gas (including biomethane/H₂). We also aim to offer 100% green commodities and services with solutions for the decarbonisation of customers. The monitoring of consumption and heat pumps, the extension of B2C and B2B photovoltaic systems, energy efficiency projects, district heating and Capture & Storage interventions planned from 2030 will also contribute to the reduction of Scope 3 emissions.

In the **social** sphere:

- We will invest in **diversity, equity and inclusion** with the publication of a corporate policy; we will launch awareness initiatives for HR and Management; we will promote the empowerment of women (with an increase in the proportion of women in the company and in first- and second-level management and a reduction in the gender pay gap between female employees and middle managers with the same classification); we will promote voluntary equal parental leave and push intergenerational initiatives aimed at lowering the average age with the Mentoring project, the language tandem in South Tyrol, collaborations with schools and universities and internships; we will develop Corporate Wellness measures (strengthening internal communication, launching stress management training and a programme on ergonomics and mental health), and we will promote working methods consistent with smart working;

In reference to the **territory**:

- We will review the current procurement process in terms of ESG (Environmental, Social, Governance) by 2027 with a progressive introduction of minimum standards to qualify as a Group supplier (2023-2027), attributing predefined scores to sustainability criteria in the award procedures (e.g. ESG rating) and introducing a monitoring system for increased spending. Minimum criteria will also be introduced in the individual tender procedures (by 2025), initiatives will be activated to raise awareness of suppliers, and we will increase the added value for the territory with extension to all the areas in which we are present, with a particular focus on South Tyrol and Veneto, and we will increase spending on projects aimed at the local area (Community Investments).

In terms of **governance**:

- We expect to obtain an ESG rating with the definition of an ESG Investment Framework; we will digitise the ESG reporting process; we will increase the weight of the part of variable remuneration linked to ESG performance for top management and we will add new specific objectives linked to ESG for middle management; we will carry out an in-depth analysis of the climate risk in alignment with the reporting and plant/building mapping requirements identifying the primary vulnerabilities; we will convert the Group sales company into a benefit company; we will aim to achieve the same legal compliance rating as Alperia S.p.A. for the pivot companies and to structure a stakeholder reporting management process.

In terms of **innovation**:

- We will define a clear Innovation Management process managed by the central Innovation function; we will collect potential innovation initiatives in certain subject areas, for each of which an internal manager will be identified; we will organise periodic meetings with each competence area to decide which initiatives to develop based on the return generated (e.g. revenue generation, process optimisation, cultural value); we will discuss with top management all the initiatives to be developed and those not developed, and we will assess the initiatives that require long timelines and/or high budgets; we will implement a process of monitoring expenditure on innovation; we will evaluate the acquisitions of companies that offer particular technological solutions and/or products and capabilities that can be integrated with the current ones of Alperia.

In the **IT & Digital** field:

- We will raise the level of corporate skills and governance capacity and contain/stabilise expenditure in the medium to long term; we will support business plans with a multi-channel strategy and expand the customer base nationwide; we will introduce new offers, integrate business data with decision support and support different types of users and expand the ways they interact.

For the **Facilities** area:

- We will carry out energy efficiency measures on residential buildings, we will push for the reduction of CO₂ emissions on residential buildings (ISO 50001 certification for all properties) and we will promote green mobility both internally and for commuting to work; we will increase the production of energy from photovoltaics; we will create new offices with attention to the requirements of sustainability and well-being (the offices in Merano and in Claudia Augusta will have LEED gold/platinum certifications). We will implement BIM – Building Information Modelling; we will adopt consumption monitoring systems and BMS systems; we will launch initiatives aimed at saving water and promote incentives for commuting to work.

In the **Personnel** area:

- We will launch initiatives to increase talent acquisition and reduce turnover (with new contractual arrangements such as part-time and flexible hours; we will continue the talent management project and development of career plans; development of job rotation systems and leadership training programmes); we will work to increase employee satisfaction (55% in 2027) and to reduce the absenteeism rate (<3.5%). Furthermore, we will transfer company know-how through the succession plan and improve HR tools and planning, also using specific KPIs.

The activities envisaged to achieve the objectives identified in the individual BUs are:

Generation BU: we want to be leaders in hydroelectric capacity and a key player in the growth of renewable capacity. In fact, we are working to:

- defend the 8 large hydroelectric derivation concessions expiring in 2024 and win the external tenders; modernise and maintain hydroelectric plants; develop electrochemical/hydrogen storage systems and launch projects on pumping systems and increase the capacities of photovoltaic plants;
- **build two hydrogen plants from renewable sources** including activities related to the production and distribution of hydrogen as well as the construction of new photovoltaic plants. We also intend to build and manage (through the Institute for Technological Innovations – IIT) 4 hydrogen distribution sites for buses and trucks and a temporary site for the 2026 Olympics. Finally, we will assess the possible development of services to support corporate customers (e.g. use of hydrogen in cogenerators).

Networks BU: we want to be the main operator for the management and modernisation of networks in South Tyrol. In detail:

- **Electricity Grid:** internationalise (ADMS – SCADA) and develop services for generation; unify voltages; maintain a high quality of service also by burying lines and increasingly automating the electrical substations; reduce network losses; unify the medium voltage network; replace SF₆ gas; overhaul and reuse transformers; improve the energy class of the new headquarters in Merano; refurbish the Alperia di Resia and Prati di Vizze offices and develop Smart Edyna. We also plan to upgrade the network for the 2026 Olympics, have more than 253 2G meters installed in 2024 and obtain €18.7 m of funds from the NRRP to invest in smart grid and grid resilience projects;
- **Gas network:** we want to maintain the know-how and the structure for possible participation in ATEM tenders;
- **Water network:** we want to acquire the necessary knowledge to seize any new market opportunities. In particular, we will create a work team coordinated by Edyna, and we will develop services/products based on intra-Group skills (e.g. metering, Smart Land, Sybil, Hydrodata consultancy and design).

Heat and Services BU: we want to be the leading operator in South Tyrol by reducing the carbon footprint of heat production. Therefore with:

- **Ecoplus:** we are working to increase the thermal energy sold by expanding the existing networks and building new plants (six, of which three with biomass) and new acquisitions. We are planning investments for the acquisition of two biomass plants and the construction of a cooling system in Bolzano. We will carry out a feasibility study for the use of deep geothermal energy.
- **BPS:** We intend to retire the BPS palm oil plant

Sales and Trading BU: we want to be the reference operator in South Tyrol and in central and northern Italy for customers aware of environmental sustainability. We are working towards:

- increasing customers by 273,000 compared to 2022 by promoting the retail and SME market, instead reducing the volumes currently sold to corporates, focusing only on the most attractive companies in terms of profitability, liquidity and propensity to go green. We intend to participate in auctions with gradual protection and develop 100% green “off-the-shelf” products (energy and gas), with the application of different prices for each sales channel and the launch of cheaper products in South Tyrol to promote territorial development. In fact, our growth strategy will be focused on South Tyrol and the neighbouring regions (Triveneto, Marche and Umbria), strengthening our presence in the central-northern regions. We will do this by maintaining a balanced multi-channel strategy across different channels (physical points, partners, KAM, digital);

Smart Region BU: we want to consolidate our role as a partner for individuals, businesses and public administrations in the energy transition and for energy management and efficiency. We want to develop increasingly more advanced remote assistance services for healthcare facilities. We want to be a point of reference in north-eastern Italy in the development of customised and standardised photovoltaic solutions and to be the reference operator in South Tyrol for the development of distributed self-consumption solutions (CER). We also want to be at the service of companies by supplying sustainable fuel with certain origin, and we want to further strengthen our commitment to electric mobility in Trentino – Alto Adige, maximising the value of assets. In detail, we are working to:

- **Alperia Green Future:** consolidate the industrial sector with new technologies (e.g. cogeneration, photovoltaic, biomethane); we want to grow the business linked to the public administration with the PPP model (hospitals, airports and trade fairs, municipalities, rest homes, residential building associations) with a wide range of services (e.g. redevelopment and plant management, mass use of AI) and develop new offers leveraging on the network of suppliers built up in recent years in the residential hospital business (e.g. rest homes and private hospitals); assess and develop an extraordinary operation (M&A) towards a player already operating in the reference sector; find a financial partner who wants to co-participate in the investment by recovering part of the future cash flows as they are multi-year contracts and absorb in the BU – PA the resources that will be freed from the BU Building Efficiency Solution of tax bonuses;
- **Care4u:** consolidate the launched start-up, complete the technological development of the platform to support the business by expanding the coverage and exploit Care4u to offer energy efficiency services to the structures served;
- **Photovoltaic:** make Alperia myHome a reference product on the Italian photovoltaic market capable of ranging from residential to industrial;
- **CER:** develop a technological platform of high differential value on the market, with the offer of consultancy services for the establishment of CERs, with bureaucratic-regulatory and technical support; partnerships will be formed with banks to finance any part not covered by incentives and, at the same time, attack their customer base;
- **Biomethane:** construct biomethane production plants and develop advisory services to support industrial customers;
- **E-mobility:** extend public charging points in Trentino Alto Adige with a focus on charging parks and city centres; we want to install 400 fast charging points outside the region and develop a B2C and B2B sales network for electric mobility products and sell private charging stations, creating new strategic partnerships with car-sharing experts.

5.3 2022-2027 Sustainability Plan

The 2022-2027 Sustainability Plan is the third document which, along with Vision 2031 and the 2023-2027 Business Plan, completes Alperia's strategy for the coming years. It also looks ahead to 2027, with the aim of reinforcing the Group's green growth with clear targets and KPIs for each material topic (Chapter 4, Materiality Analysis). The definition of these three documents is essential in outlining which path the Group wants to take in the future, especially in light of the many challenges: from geopolitical tensions to the energy crisis with the surge in prices that characterised 2022 and to climate change.

The first new element compared to the previous plan is the introduction of a **new strategic action area: "Governance and Resilience"**. In fact, we have set ourselves the objectives of:

- anchoring ecological, social and economic sustainability even further to the governance of the Group and to management processes, building integrated governance;
- creating long-term economic value (e.g. through dividends, taxes, investments);
- making our business model resilient so as to be able to cope with new evolutionary and competitive scenarios.

All of this entails a commitment to ensure a secure, efficient and sustainable energy supply; to guarantee maximum safety of plants, to protect employees, the population and the surrounding areas. Furthermore, aware of how innovation is accelerating, Alperia wants to contribute to the development of new technological solutions that can support the energy transition. All this also through investment in R&D projects and ensuring maximum security of IT systems and data protection. We will face these challenges by trying to increasingly spread a **culture of sustainability** that involves all of our personnel. We will do this by creating and implementing a plan to include ESG topics in Corporate Training Programmes to raise awareness among our management and our employees.

The second area of strategic action concerns the **"Customers"**: we want to make 100% of our business activity 'green', first by increasing the share of sales of sustainable products and services and developing actions that can support us in this process. We will also continue to provide rapid and solution-oriented customer service and raise awareness of green solutions.

Through the **"Green Mission"** action area, we will work to make our energy consumption more efficient, to reduce greenhouse gas emissions and reach net zero. We want to minimise the impact of our hydroelectric plants on nature and the environment, actively protecting the biological diversity of watercourses and promoting the efficient and responsible use of water resources.

The **"Territory"** will also be monitored with actions for the creation of added value in various areas such as jobs, local taxes and social commitment. We also want our purchases to be as "local" and sustainable as possible from an environmental and social point of view.

Achieving these objectives will only be possible if our people are fully involved and valued. For this reason, the **"People"** strategic area sees us engaged in promoting the health of our employees and in guaranteeing full safety at work. We want to be an increasingly attractive employer, distinguishing ourselves for a culture of open and transparent internal communication and for building an environment that respects diversity and equal opportunities in all work activities.

The objectives and the activities carried out to achieve them are detailed in the corresponding sections.



Governance and Resilience

We want to integrate sustainability aspects into corporate governance; for example, into policies, procedures, plans and compliance and risk management, in order to spread good practices throughout the Group and promote a corporate culture based on ethics and transparency.

Developing energy products and services with the lowest possible environmental impact and capable of ensuring a reliable energy supply that is energy efficient and sustainable supply, creating longterm economic value for the company itself and the territory, as well as increasing the resilience of the business model to cope with new evolutionary and competitive scenarios.



We optimise water management, reduce the impact of our activities and work to protect the aquatic environment



We ensure access to affordable, reliable, sustainable and modern energy systems



Promoting an inclusive and sustainable economic growth and decent and safe employment



We build and maintain safe and resilient infrastructure, promote innovation and support equitable, responsible and sustainable development



We want to make cities more inclusive, safe, energy efficient and sustainable



We ensure sustainable patterns of production and consumption

6. GOVERNANCE AND RESILIENCE

Duration of interruption per customer (min)	17.28	Total number of identified leaks, thefts, or losses of customer data	0
User participation rate in cyber security training	88%	Energy availability (hydro plants)	84.15%
Underground power lines	75%	Percentage of renewable energy produced	91%

6.1 Integrated governance and good corporate conduct

How we handle the issue

To spread good practice throughout the Group and promote a corporate culture based on ethics and transparency, we have formalised the management of impacts on various sustainability issues within corporate procedures.

The effects and impacts of the Group relating to Governance derive from the policies and procedures applied internally. They have effects on the Group's way of interacting with the various categories of Stakeholders.

During 2022, Alperia updated the sustainability policy it adopted in 2019, clarifying the integration of sustainability aspects in corporate governance with policies, procedures, plans, compliance and risk management. The goal is to disseminate good practice throughout the Group and promote a corporate culture based on ethics and transparency. The policy describes, for each of the 5 areas of action – Governance and Resilience, Customers, Green Mission, Territory and People – how the Group intends to pursue its ESG objectives and the key principles to be followed in carrying out its corporate work.

Alperia integrates the aspects of corporate responsibility into the daily management and decisions of the company, through the integration of sustainability in the following areas: risk management, strategies, programmes, policies and procedures, reporting and corporate culture:

- **Sustainability policy:** we have integrated the economic, social and environmental aspects of sustainability and envisaged that all corporate activities are assessed, constantly improved and implemented in relation to them in the five strategic fields of action Governance and Resilience; Customers; Green Mission; Territory and People.
- Integration of sustainable development into the **business strategy** (Vision 2031 and the 2023-2027 Business Plan) and definition of the indicators and objectives that must be achieved within the time frame of validity of the Strategic Plan.
- **Risk Management:** we have identified, assessed and managed non-financial risks in the Group's Enterprise Risk Management.
- **Company bonus:** we have integrated the non-financial components into the corporate compensation systems. The bonus paid to employees at the end of the year is linked to the percentage of achievement of the sustainability objectives envisaged by the Sustainability Plan, while an objective linked to the MBO is envisaged for each manager.
- **Complaint systems:** to manage conflicts or disagreements with individual stakeholders or groups of stakeholders, we provide written information to clarify misunderstandings, forums where stakeholders and the organisation can present their views and seek solutions (e.g. stakeholder roundtables), and systems that allow for reporting wrongdoing without fear of retaliation (for example, a whistleblowing platform).

The monitoring and assessment of the effectiveness of the actions undertaken during the year is carried out on an annual basis during the preparation of the Sustainability Report and the progress of the objectives declared in the 2022-2027 Sustainability Plan through specific KPIs. Furthermore, the results are presented with the consequent assessment of the same by the top corporate bodies.

We have involved the stakeholders in the definition of the projects and initiatives concerning governance during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and specific meetings with the management during which the opinions of the internal stakeholders on the initiatives were collected. The opinion of external stakeholders and the communication of Alperia's initiatives to them was gathered during the course of a number of roundtables when updating the materiality analysis.

Finally, a crucial aspect was the assessment of the integration of sustainability into governance with the Integrated Governance Index performance (IGI). The IGI measured the controls and processes that Alperia adopts to achieve its sustainability goals. The areas assessed were: 1) Codes of self-discipline and sustainability, 2) Diversity, professionalism, board independence, 3) ESG embedded in remuneration, 4) ESG integrated into business strategies, 5) Board committees and sustainability, 6) Purpose, materiality and stakeholders, 7) Succession plans, 8) Finance, 9) HR and human capital, 10) ESG Digital Governance, 11) Extraordinary – ESG identity. **It placed 53rd out of 86, climbing 9 places in three years.**

We have also set up a table to define a procedure for reporting undesirable events and have set up a model for collecting information, for assessing the causes and for implementing appropriate solutions. The project will be completed in 2023. Also in the area of Due Diligence, we have improved – and will continue to evolve also in 2023 – the process of tracking and communicating dispute solutions to Stakeholders for Alperia Greenpower.

Strategic objective: We want to anchor ecological, social and economic sustainability to our governance and management processes and build an integrated governance model.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Due Diligence: Formalise the management of disputes in a procedure and implement measures to make the process more usable by Stakeholders in AGP (e.g. electronic reporting of events).	A roundtable was launched to define a procedure for reporting unwanted events (environmental and plant reliability). A model has been prepared for the collection of information relating to the event up to the eventual analysis of the causes and the definition/execution of corrective actions.	2022				X (Completion during 2023)	SDG 12
Due Diligence: Improve the process of tracking and communicating dispute solutions to AGP Stakeholders.	A roundtable was launched to define a procedure for reporting unwanted events (environmental and plant reliability). A model has been prepared for the collection of information relating to the event up to the eventual analysis of the causes and the definition/execution of corrective actions.	2022				X (Completion during 2023)	SDG 12
ESG rating: Carrying out an ESG rating according to an international framework	Performance of the EcoVadis rating	2023	-	-		New	SDG 12
Culture: Training for all employees on the Code of Ethics		2024	% Employees trained on the Code of Ethics	100%		New	SDG 12
ESG rating: Assess registration for EcoVadis and the consequent compilation of the questionnaire	Conducting the EcoVadis assessment	2025	-	-		New	SDG 12
Reporting: Digitisation of the ESG reporting process		2026	-	-		New	SDG 12

Due Diligence: Structuring of a central stakeholder reporting management process	2027				New	SDG 12
ESG rating: Assessing the extension of the CDP rating to the entire Group	2027	-	-		New	SDG 12

6.1.1 Corporate Governance

Stable, effective and balanced management

In June 2022, the top management bodies of the parent company Alperia S.p.A. were renewed. Furthermore, with effect from 1 July 2022, Mr Luis Amort was appointed as new General Manager.

Alperia S.p.A. has adopted the **two-tier system**⁹ which provides for a Management Board composed of six members and a Supervisory Board also composed of six members, of whom three are appointed by the members of the Autonomous Province of Bolzano and Selfin S.r.l. and three by the members of the Municipality of Bolzano and the Municipality of Merano. The Management Board is chaired by the Chair Flora Emma Kröss, while the Deputy Chair is Mauro Marchi. The other members of the Management Board are Markus Mattivi, Daniela Vicidomini, General Manager Luis Amort and Deputy General Manager Paolo Acuti. The Management Board has sole responsibility for the broader administration and management of the company, as well as responsibility for the preparation and implementation, once approved by the Supervisory Board, of the general strategic and programmatic policies of the company and the Group.

The Supervisory Board is made up of Maurizio Peluso (Chair), Luitgard Spögler (Deputy Chair), Wolfram Sparber, Manfred Mayr, Silvia Paler, and Stefano Parolin. The Supervisory Board monitors compliance with the law and the company's bylaws and the principles of sound administration. It also approves the operations decided by the Management Board which are considered strategic by the bylaws.

Women make up 40% of the ten external members on the company's two senior bodies.

Operational control of the company, as on 31 December 2022, rested with Management, which is made up of General Manager Luis Amort, Deputy General Manager Paolo Acuti and Corporate Strategy Director Paolo Vanoni. The General Manager is the head of the management structure, guiding company business and overseeing all technical, administrative and financial activities. Therefore, just like the Deputy General Manager, the holder of this position has a dual role as a director and a member of the Management Board, contributing to the Board's decision-making process. The Deputy General Manager, Paolo Acuti, has also been appointed as a member of the Executive Committee and the Energy Management Board of Utilitalia, the Italian federation of energy, water and environmental companies.

The Supervisory Board is supported by three internal board committees in carrying out its duties:



Remuneration Committee:

- Luitgard Spögler, Chair
- Manfred Mayr, member
- Silvia Paler, member
- Stefano Parolin, member



Nomination Committee:

- Maurizio Peluso, Chair
- Silvia Paler, member
- Stefano Parolin, member
- Wolfram Sparber, member



Control, Risk and Sustainability Committee:

- Luitgard Spögler, Chair
- Maurizio Peluso, member
- Manfred Mayr, member
- Wolfram Sparber, member

Alperia's governance structure is completed by the **Internal Audit** function, which carries out independent and objective assurance. It evaluates the effectiveness of the internal control system and helps the organisation pursue its goals by assessing whether the risk management and corporate governance processes are adequate and function effectively. Internal Audit therefore assesses the work of corporate functions and departments, systems, processes, directives, procedures and practices adopted by them, the parent company and the companies belonging to the Group. Members of the Internal Audit team are also members of the Supervisory Bodies pursuant to Legislative Decree 231 ("SB") of some companies of the Alperia Group. In 2022, SAP Process Control, a software that enables the management of information flows to the Supervisory Bodies of all companies, came into operation, simplifying the department's activities. The checks are performed both remotely and in presence.

With regard to the evaluation of the highest governing bodies, there are currently no periodic performance evaluation systems in place. As a result, the remuneration of the governing bodies is defined periodically upon appointment. In addition to the reimbursement of the expenses incurred by reason of their office, the members of the Management Board are entitled to

⁹ pursuant to Art. 2409 octies of the Italian Civil Code

remuneration determined by the Supervisory Board, also on the proposal of the Remuneration Committee, which also determines the remuneration of the members of the Management Board vested with special offices provided for in the articles of association. In turn, the members of the Supervisory Board, in addition to the reimbursement of expenses incurred by reason of their office, are entitled to remuneration determined for their entire term of office by the shareholders' meeting at the time of their appointment.

Strategic objective: We want to anchor ecological, social and economic sustainability to our governance and management processes and build an integrated governance model.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
MB/SB: The creation of a Sustainability Committee	Inclusion of sustainability issues in the risk committee at the time of the renewal of the boards in the summer of 2022	2022				✓	SDG 12
MB/SB: Preparation of a succession plan for top management with definition of selection criteria	Succession procedure and plan prepared.	2022				✓	SDG 12
MB/SB: Assessment of the appropriateness of the benefits of identifying independent directors		2023	-	-		New	SDG 12
MB/SB: Definition and implementation of an ESG induction program		2023	Number of induction meetings to the BoD on ESG topics	6		New	SDG 12
MB/SB: Establishment of a process for disseminating information relating to remuneration on the Alperia website		2023	-	-		New	SDG 12
MB/SB: Implementation of the annual self-assessment of the MB/SB and of the committees (through a formalised process) also including considerations on ESG aspects ("ESG self-assessment")		2024	-	-		New	SDG 12

6.1.2 Sustainability governance

Sustainability is a central value for Alperia: in fact, its activities have an impact on the environment and on communities. Therefore, they must be planned keeping in mind the interests involved in order to contribute to sustainable development, the protection of natural resources, the strengthening of social cohesion and the promotion of the economy, also guaranteeing conditions of prosperity for future generations. For this reason, **Alperia adopts a structured CSR management.**

In 2022, Management also updated the **Sustainability Policy** and presented the new **2022-2027 Sustainability Plan** which will govern sustainability management for the next 5 years. The objectives and KPIs of the new plan derive from an activity that Alperia carried out in 2021 with five roundtables involving stakeholders from South Tyrol and Veneto, both internal and external to the Group (customers, interest groups, mayors, representatives of the Province, etc.). Alperia's strategic fields of action are indicated in the **Sustainability Policy** and are: Governance and Resilience, Customers, Green Mission, Territory, and People. On the basis of the Group Policy, individual companies can issue their own Policy which integrates that of Alperia with their own specificities, establishing specific strategic objectives for their core business processes. The topics are detailed in sections **6.2.1.1** and **5.3**.

In 2022, the **new CSR management procedure** was approved, in which we document the relevant processes for CSR management according to DIN ISO 26000. The procedure details the missions, the regulatory references, the functions involved and the phases of the CSR management process. Specifically: **all activities relating to corporate social responsibility are managed by the CSR Management function** within the Strategic Marketing & Communication Department. It must: promote integrated ESG governance at all levels of the organisation, monitor and implement the new requirements, support the competent governance and control bodies in defining the Sustainability Plan, oversee the drafting of the Sustainability Report to be submitted for approval by the bodies responsible, plan, implement and monitor CSR activities and coordinate them at Group level, prepare periodic reporting and communication to the competent bodies and coordinate stakeholder management at Group level. The other bodies involved in sustainability management are: the Supervisory Board, the Management Board, the Management Circle, the Control, Risk and Sustainability Committee, the CSR Steering Committee, the BUs and the individual competent functions. For further information on the updating of the procedure, please refer to section 6.2.1.2, "CSR Management Procedure".

In 2022, the **Control, Risk and Sustainability Committee** was set up, made up of members of the Supervisory Board. The Committee's responsibilities in matters of sustainability also include verifying the adequate integration of sustainability into corporate governance.

During the year, **Alperia participated in the IGI – Integrated governance index performance questionnaire**, assessing its positioning in relation to the key sustainability aspects. The IGI measured the controls and processes that Alperia adopts to achieve its sustainability goals. The areas assessed were: 1) Codes of self-discipline and sustainability, 2) Diversity, professionalism, board independence, 3) ESG embedded in remuneration, 4) ESG integrated into business strategies, 5) Board committees and sustainability, 6) Purpose, materiality and stakeholders, 7) Succession plans, 8) Finance, 9) HR and human capital, 10) ESG Digital Governance, 11) Extraordinary – ESG Identity. **It placed 53rd out of 86, climbing 9 places in 3 years.**

6.1.2.1 Sustainability policy

In 2022, Alperia updated its Sustainability Policy, first defined in 2019, based on the activities it intends to use to address sustainability issues. Sustainability is in fact an integral part of the Alperia Group's vision and strategy, both at an economic, social and ecological level. This ensures that all company activities are assessed, improved and implemented in relation to these aspects. To this end, Alperia is committed to the following 5 strategic areas of action:

1. **Governance and Resilience:** Alperia integrates sustainability aspects into corporate governance – for example, in compliance and risk policies, procedures, plans and management – in order to disseminate good practices throughout the Group and promote a corporate culture based on ethics and transparency. Alperia pursues an active management of innovation and research and works on the development of new technological solutions that can help create cutting-edge energy products and services that are increasingly competitive, with the lowest possible environmental impact so as to guarantee a reliable, energetically efficient and sustainable supply. In this way, Alperia creates long-term economic value for the company and for the local area and increases the resilience of the business model to cope with new evolutionary and competitive scenarios. The protection of all data and systems is guaranteed at all times, and maximum priority is given to the technical safety of the systems and the resilience of the infrastructures to protect the employees and the population.
2. **Customers:** Alperia involves customers throughout the life cycle of the products and services offered and plans initiatives to improve and expand customer services with the aim of building a lasting relationship with them. Furthermore, it is committed to developing and selling sustainable, innovative and green products and services with a better environmental and social impact. Alperia's marketing activities and corporate communication are transparent, timely and stakeholder-focussed and take into account the various social and ecological aspects.
3. **Green Mission:** Alperia is committed to achieving NET ZERO by reducing its greenhouse gas emissions and promoting low-emission energy production, as well as keeping its environmental impact as low as possible thanks to the implementation of programmes for the conservation of biodiversity, eco-sustainable waste management and the application of the principles of the circular economy in our business activities. Alperia also promotes rational and responsible energy consumption, supporting measures aimed at saving energy, improving company performance and using energy efficiently. We work for a rational and sustainable use of water resources in partnership with third parties (e.g. farmers and municipalities) by managing the risks associated with water scarcity and developing initiatives, projects and products that work towards this goal.
4. **Territory:** Alperia creates added value on a local level, also in terms of employment, duties and taxes, supply agreements and social engagement. The proactive management of stakeholders is a guarantee of transparency and makes it possible to prevent reputational and operational risks, thus generating added value. Alperia actively promotes the sustainability of the entire supply chain by defining minimum ecological and social requirements for tenders as well as for the process of selecting, evaluating and auditing suppliers. Primary energy sources are identified locally, where possible, and are predominantly renewable.

5. **People:** Alperia is an attractive employer and pursues a responsible management of human resources. This includes: a culture of open and transparent communication, recognition of work done, continuous staff training in line with individual skills, the creation of a family-friendly environment for both men and women, as well as the promotion of diversity and equal opportunity in all activities. The health of the employees is of central importance for Alperia: in fact, we guarantee the highest levels of safety at work for both personnel and contractors.

6.1.2.2 CSR Management Procedure

The update of the **new CSR management procedure** documents the relevant processes for CSR management according to DIN ISO 26000. The bodies responsible for managing sustainability, in addition to CSR Management, are:

1. **the Supervisory Board**, required to monitor the implementation of Decree 254/2016, to approve and monitor the implementation of the Sustainability Plan, to approve the Sustainability Report, to report to the shareholders' meeting on the approval of the Financial Statements and on the surveillance activity carried out, to evaluate the efficiency of the internal control system and to manage communication with shareholders;
2. **the Management Board**, called upon to prepare and implement the Sustainability Plan with programmatic and strategic objectives and to prepare and implement the draft Sustainability Report;
3. **the Management Circle**, made up of members of the Group's top operational management, called to carry out short-term planning in compliance with the programmatic and strategic objectives, to adopt decisions relating to the incentive and loyalty systems of managers and Group employees, to implement the provisions of the Sustainability Plan and to guarantee the quality of data relating to ESG indicators;
4. **the Control, Risk and Sustainability Committee**, made up of members of the Supervisory Board, has the task of providing the latter with non-binding opinions, suggestions and support in fulfilling its legal duties (including: ensuring that the main risks affecting the company and its subsidiaries, including relevant risks in terms of sustainability, are adequately identified and managed); to verify the adequate integration of sustainability in corporate governance, to examine and assess sustainability issues related to the conduct of the company's business and the dynamics of interaction with stakeholders, to assess the system of data collection and consolidation for the preparation of the Group Sustainability Report, to monitor the company's positioning in sustainability issues, and to issue opinions on other sustainability issues at the request of the Supervisory Board;
5. **the CSR Steering Committee**, a committee made up of CSR Management and the representatives of the competent functions and BUs. It acts as a liaison between Group employees and CSR Management and is responsible for providing information on ongoing activities, monitoring ESG performance, presenting improvement proposals, measuring the objectives to be achieved and the actions to be implemented, promoting the dissemination of greater awareness of sustainability issues;
6. **the competent functions and the BUs**, whose responsibility is linked to the operational implementation of the objectives and measures, to the identification of further developments for the CSR and to the collection of data for reporting and annual external reporting.

The CSR procedure indicates the way in which Alperia interacts with its stakeholders, how it understands their needs and responds to them, the criteria with which the Materiality Matrix is constructed, how the plan and the sustainability report are drafted and how sustainability applies to companies connected to the parent company. The document also emphasises the dissemination of a corporate culture increasingly focused on sustainability with direct involvement of Management in the pursuit of sustainability objectives.

Continuous improvement – Every year, the Management and key functions review the effectiveness and efficiency of the **IMS integrated management system**, assessing possible improvements, both at individual BU and Group level. The reviews are carried out both at the individual subsidiary and at Group level. To carry out the review of the subsidiaries, the Management makes use of the support of the HSE of the BU and of the managers of the key processes of the individual company (e.g. Budgeting & Controlling, Corporate HR & Organisation). The HSE of the BU coordinates the collection of data and reports by preparing a report containing the "input factors" (among these: the entry into force of new regulatory or other provisions, changes to the external factors considered in the risk assessment, complaints from interested parties and the results of any controls by the bodies in charge, etc.) and the "output factors" (among these: the need for resources, multi-scheme improvement programmes at the individual company level, guidance from the occupational physician, etc.). The same dynamics apply to the Group audit, with the assessment of "input factors" and "output factors". As part of management reviews, one of the main outputs are the improvement programmes, which identify the improvement activities for the various schemes with the related performance targets. These objectives refer in particular to improving the efficiency and effectiveness of the management system and may have a multi-year time frame.

Strategic objective: We want to anchor ecological, social and economic sustainability to our governance and management processes and build an integrated governance model.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
Procedures: integrate sustainability aspects into procedures and new companies	CSR involved in drafting the new PRO 101.	Annually	No. of procedures assessed		1	✓	SDG 12
Procedures: approval of a CSR Management Procedure to formalise ESG Governance and non-financial reporting	Procedure approved.	2022				✓	SDG 12
Culture: the creation and implementation of a plan for the inclusion of ESG topics in Corporate Training Programmes to raise awareness of ESG topics and create a culture of sustainability and corporate social responsibility among our Management and our employees		2027	ESG trained population (%)	90%		Ongoing	SDG 12

6.1.3 Risk Management

Risk monitoring, management and control

Alperia's risk management system is an essential part of the Group's decision-making processes. We have integrated non-financial risks into the company assessments in relation to the area of action envisaged by the Sustainability Report (Employees, Green Mission, Territory, Customers, Development and Innovation) and the identified objectives. We have therefore classified each risk by type, assessing it by impact and probability. This allowed significant risks to be identified and mitigated, including:

- **Stakeholder engagement on environmental and social sustainability issues:** Alperia is strengthening its efforts both through a stakeholder management project and through integrated reputational risk management. In particular, the project made it possible to assess the impact of reputational risks on the Group, in relation to material topics and stakeholder groups. The project has two phases: 1) Semi-qualitative assessment with risk experts and analysis of impact parameters (media coverage, employees, sanctions, customers), 2) estimate of the reputational impact (based on the estimated costs and/or investments needed to restore the situation prior to the reputational shock). From the analysis, 95 risks with a potential reputational factor and 9 new risks emerged. Where possible, mitigation actions have been defined. The project launched by Alperia, with the management of reputational risks integrated in the Risk Management process and R2C risk tool, can be considered a best practice at national and international level. In addition, the risk model was extended to improve the management of financial risks.
- **Security and Data Protection Awareness Training:** in order to increase the perception of cyber security and data protection risks, Alperia launched two training programmes, in which more than 1,000 colleagues participated.

RISK FACTORS



Risk factors (source: Alperia)

Focus remains high on cyber risks: Alperia monitors this risk through the work of the **Data Protection Officer (DPO)** and the security advisor, in collaboration with Enterprise Risk Management.

The main task of the Risk Management function is to implement and develop the management of risks, both financial and non-financial. In 2022, the ERM function has further refined **ERM Governance** with a methodology based on the COSO Framework and ISO 31000 standards (the certification of which is one of the objectives to be achieved within the next five years) and dedicated software that allows for comprehensive risk management: from identification through assessment to mitigation and reporting. The process is completed by a system of regular reporting to senior management. Enterprise Risk Management takes place both at Group level and at Business Unit level. In 2022, in addition to refining Risk Governance, the **Enterprise Risk Management Policy** was developed for the Group, formalising the governance and responsibility of Alperia's business areas as regards risk identification and assessment, mitigation and reporting. The Risk and Sustainability Control Committee (previously called the Control and Risk Committee) is now a sub-body of the Supervisory Board.

Climate Risk – Aware of how decisive climate change can be for its business, Alperia decided to begin a deeper analysis of the climate change risk, defining impacts and possible mitigations with the Climate Risk and Vulnerability Assessment. This analysis will begin in 2022 and continue in the years to come. As already mentioned, it is essential to work to contain the rise in temperatures to within 1.5°C, a target that according to the United Nations Emission Gap Report can only be achieved if CO₂ emissions are reduced by 7.6% per year until 2030. The management of this risk takes place in collaboration with the Group's

Energy Manager. For the assessment developed in 2022, we commissioned two external companies so as to map the main dangers and vulnerabilities to which the Group is subject. At the end of this operation, we want to estimate a risk profile for each area to make it more comparable.

Liquidity risk – In addition to the climate issue, another important issue that we dealt with in 2022 was the war in Ukraine and the consequent tension in energy prices. Being a multi-utility, the issue of prices has not only impacted Alperia’s end customers, but also its financial situation. For this reason, we have launched a project dedicated to the planning and management of liquidity risk.

Cyber security – Finally, Alperia decided to better monitor cyber risks, setting up the Cyber Risk area under the Risk Management function at the end of 2022. It has the task of identifying and protecting the organisation from the main IT risks, proposing and implementing measures to prevent, limit and mitigate their effects.

A description of ESG risks and how they are managed is given at the end of the report.

Strategic objective: We want to anchor ecological, social and economic sustainability to our governance and management processes and build an integrated governance model.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
Risks: identification of scenarios and risks associated with the supply chain of raw materials for the production of thermal energy and identification of response solutions		2023	-	-		New	SDG 12
Risks: conduct in-depth analysis of climate risk, aligning with legislative reporting requirements		2023				On-going	SDG 12
Risks: establishment of an integrated and periodic monitoring and reporting process for risk management at Group level		2024	-	-		On-going	SDG 12
Risks: ISO 31000 certification		2024	-	-		On-going	SDG 12
Risks: preparation of an action plan (gaps – mitigants) related to cyber risk		2024	-	-		On-going	SDG 12
Risks: assessment of ISO 37001 certification (anti-bribery/anti-corruption certification)		2025	-	-		On-going	SDG 12

6.1.4 Remuneration linked to Sustainability Targets

From 2020, we have linked the employee production bonus and the Management by Objectives (MBO) of the company's senior management to the achievement of sustainability goals. Starting this year, we have indicated in the 2022-2027 Sustainability Plan, the implementation of measures to integrate the company compensation systems upon the achievement of specific sustainability objectives. Specifically:

- **Production bonus:** the achievement of at least 60% of the targets defined in the Sustainability Plan each year affects the production bonus;
- **Management by Objectives (MBO):** the objectives are defined and proposed annually in consultation with Corporate HR & Organisation and CSR Management. By 2023, it is intended to increase the portion of variable remuneration linked to ESG performance by at least 20% by measuring it through explicit tangible objectives.

Strategic objective: We want to anchor ecological, social and economic sustainability to our governance and management processes and build an integrated governance model.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
Remuneration: increase in the weighting of the part of the variable remuneration linked to ESG performance (measured through explicit real objectives) by at least 20%.		2023	Percentage of variable remuneration linked to ESG performance	=>20%		New	SDG 8 SDG 12
Remuneration: inclusion of ESG targets for middle management		2027	Middle mgmt population with ESG objectives (%)	100%		On-going	SDG 8 SDG 12

6.1.5 Sustainable finance

The financial area of Alperia is also increasingly linked to sustainability. In particular, a €1.0004 billion financing round was closed in 2022, for which the definition of ESG criteria that could form the basis of a **Financial Sustainability Framework** (reference framework for sustainable investments) is being assessed. Companies are no longer evaluated only on their financial performance, but increasingly also on their ESG performance. The legislation imposes the mandatory integration of ESG aspects into corporate governance and the increase of transparency requirements on ESG performance. Governance bodies are increasingly required to be able to play their role in ESG contexts, actively guiding the company in this direction and managing impacts. Sustainability must therefore also be a point of reference on a financial level.

New credit lines – As anticipated, in 2022 Alperia obtained a loan of €1.0004 billion from a pool of banks made up, among others, of Mediobanca – Banca di Credito Finanziario, Intesa Sanpaolo S.p.A., BNP Paribas, Italian branch, UniCredit, Banco Bpm, Crédit Agricole Corporate & Investment Bank, Milan branch, Cassa Centrale Raiffeisen dell'Alto Adige, Cassa di Risparmio di Bolzano, Banca Nazionale del Lavoro and Barclays Bank Ireland. The financing operation envisaged the disbursement of various credit lines, aimed at refinancing existing debt and finding the financial resources necessary to meet the cash requirements of the Group and itself. This transaction will allow Alperia to increase the Group's liquidity profiles and lengthen the average maturity of its funding sources. In times of such high volatility, it is considered essential to acquire new credit lines.

Green bond – Alperia is also considering the issue of a **sustainable/green bond** for next year, which will follow those issued in the past. In particular, in 2016 Alperia approved the establishment of a Euro Medium Term Note programme (EMTN programme) up to a total amount of €600 m. In the period June 2016–October 2017, it issued four tranches under the EMTN programme for a total nominal amount of €475 m, placed privately with qualified Italian and foreign investors and listed on the regulated market of the Irish Stock Exchange. In October 2017, Alperia placed a Green Bond on the European market for a total amount of €100 m with a 10-year maturity at a yield of 2.20% (the same as government bonds with the same maturity), destined exclusively for a Norwegian institutional investor. This issue was the fourth tranche of Alperia's EMTN programme and the first in Italy in Norwegian currency, thus consolidating its presence as an issuer on the European capital market. No new Green Bonds were issued in 2018, 2019, 2020 or 2021. Alperia used the proceeds of the Green Bond for: the refinancing of the debt used for the acquisition/construction of a portfolio of hydroelectric plants in Northern Italy, photovoltaic plants in Central Italy and a biomass power plant (wood chips) in Northern Italy; the purchase, from another network operator, of a section of the electricity distribution network in the territory served by the company in northern Italy and the financing of the modernisation of hydroelectric power plants and the electricity distribution network, which also continued in 2019.

European Taxonomy

EU Regulation 2020/852 introduced the Taxonomy of Eco-Friendly Economic Activities into the European regulatory system. The Taxonomy is a classification of activities that can be considered sustainable on the basis of their alignment with EU environmental objectives.

In compliance with the provisions of the EU Taxonomy Regulation 2020/852, the Alperia Group has undertaken a process of mapping its activities based on the provisions of the Taxonomy itself to comply with the disclosure obligations of information relating to the Taxonomy which provide for the publication of the share of their revenues, capital expenditures (CapEx) and operating expenditures (OpEx) for the economic activities that qualify as eligible and aligned with the Taxonomy.

For more details on the process, please refer to the dedicated section in the attachments on page 180.

Rating – Again in 2022, Alperia was rated by **EcoVadis, the international eco-sustainability rating**. The score obtained was 65 out of 100, and the areas with the greatest room for improvement were "Ethics" and "Sustainable Purchasing". To improve them, we have included in the plan: the review of the current procurement process from an ESG point of view by 2027, the introduction of minimum criteria in the individual tender procedures (2025), initiatives to raise awareness, the training of employees on the Code of Ethics, the progressive introduction of requirements for certification as suppliers of the Group, the attribution in the awarding procedures of scores linked to sustainability criteria (e.g. ESG rating) by 2027 and the introduction of a system for monitoring the increased expenditure.

Furthermore, during 2022, **Alperia received confirmation from the Fitch rating agency of the BBB level with a "negative" outlook.**

Strategic objective: We want to create economic value in the long run (e.g. through dividends, taxes, investments) and make our business model resilient in order to cope with new evolutionary and competitive scenarios.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Finance: establish an investment, CapEx, OpEx and revenue reporting process aligned with the EU taxonomies to meet the legislative reporting requirements for the DNF 2022	<p>Draft of the document summarizing the process in cell E4 sent on 22/12/2022 to the counterparties involved in the process.</p> <p>On 17/01/2023, during the 2023 Taxonomy kick-off, the final version will be presented, integrated with the comments received by the deadline of 06/01/2023.</p>	2022				✓	SDG 12
Finance: issue a new Sustainable Financial Instrument (Green Bond/sustainability-linked bond)		2023				New	SDG 12
Finance: update of the ESG Investment Framework		2023				New	SDG 12

6.1.6 Good business conduct

6.1.6.1 Anti-corruption measures

Alperia is committed to preventing the commission of any offence under Italian Legislative Decree 231/2001 through the adoption and implementation of **Organisation, Management and Control Models** pursuant to Italian Legislative Decree 231/2001 (hereinafter referred to as 231 Model(s)) for all the major companies belonging to the corporate Group. The adoption by the corporate Group of ethical principles relevant to the transparency and fairness of the company's activities and useful for the prevention of offences pursuant to Italian Legislative Decree 231/2001 is an essential element of the preventive control system. These principles are included in the Group's Code of Ethics, which is an integral part of the individual 231 Models, containing the set of rights, duties and ethical principles adopted by the entity towards "stakeholders" (employees, PA, shareholders, third parties). It aims to recommend, promote or prohibit certain behaviours, beyond and independently from what is provided for by the law, by defining the principles of the "company ethics" that it recognises as its own and on which it calls for the observance of all addressees.

6.1.6.2 The 231 Organisation, Management and Control Model

In 2022 Alperia updated the **231 Model** of the companies Alperia Smart Services, Alperia Trading and Alperia Green Future. This activity is managed by the Compliance department under the Legal and Corporate Affairs department of the company. The compliance activity is carried out on a monthly basis with reports to those directly concerned and the publication of new legislation and regulations on the MyAlperia portal. The monthly reports are also shared with the Risk Management area and with the companies Ecoplus, Edyna and Alperia Smart Services. In addition, a new member of staff has joined the Compliance department as of 2022, who is specifically responsible for the compliance of Alperia Trading, reporting to the compliance department of Alperia S.p.A. In the course of 2022, a violation of the Organisational Model 231 and the company's procedures was found within the scope of the procurement process (for details see the 2022 Report of the Supervisory Board 231 of Alperia S.p.A.).

6.1.6.3 Our Code of Ethics

The **Code of Ethics** is the manifesto Alperia uses to state its values, principles and rules on which the activities and conduct of those working in the Group must be based. It is an integral part of the 231 Model and is addressed, without exception, to the directors and employees of Group companies and all those who collaborate with the Group in various ways. All the recipients, without prejudice to the respect of religious, cultural and social specificities, are required to conduct themselves in line with the general principles of the Code of Ethics, which integrates the rules of ordinary diligence to which employees are bound, governed by the regulations on labour relations.

The Code of Ethics is binding for the conduct of all Alperia personnel and for all those who, for whatever reason and regardless of the type of contractual relationship, contribute to the achievement of the company's aims and objectives. The Alperia Group undertakes to require that the principles of this Code are also observed by all those with whom it comes into contact in relation to the achievement of its objectives. Under no circumstances may the pursuit of Alperia's interests justify behaviour that is contrary to the present Code of Ethics or existing laws.

The Supervisory Board of Alperia S.p.A. duly coordinates with the Supervisory Bodies present in the companies of the Alperia Group and the competent company departments, to achieve proper implementation and control of the principles contained in the Code of Ethics. The Code of Ethics is available on the company's intranet and on the Alperia corporate website¹⁰.

During 2022, there were no cases of non-compliance with laws and regulations that resulted in sanctions.

¹⁰ https://www.alperiaigroup.eu/sites/default/files/documents/2021_01_28_alperia_-_codice_etico_def.pdf

6.1.6.4 Disciplinary Code and Golden Rules

Alperia's management has identified **ten rules** that have become a defining factor for the Group. They all aim to create an equal and proactive working environment in which every member of staff can contribute responsibly and according to their abilities. They are posted in every company office, are addressed to all staff and apply in addition to the Disciplinary Code. The latter sets out the duties of employees in the exercise of their work activities and the internal company rules and regulations. Both documents are available in German and Italian on the Group's intranet page.

Since 2022, in the newsletter sent by the Communication department to Alperia employees, case histories on HR projects are presented and a "Golden Rule" is linked to each project so as to further strengthen its value for employees.

6.1.6.5 Whistleblowing

Whistleblowing is a tool available to Alperia's employees through which they can report any risk situations (fraud, crimes, offences or irregular conduct committed by individuals within the organisation). Introduced by Italian Law 179/2017, it is an integral and mandatory part of the 231 Organisational Model. The Supervisory Board is the body responsible for receiving reports, which, at Alperia, can be received via the e-whistle platform. The tool is managed in such a way that communications are confidential and can only be handled by the appropriate bodies. During 2022 we received a report through the e-whistle platform, which was managed and subsequently filed, as the report did not concern relevant circumstances for the purposes of Legislative Decree 231/01.

6.1.6.6 Conflicts of Interest

The Group has defined a procedure to identify, monitor and manage conflicts of interest of the company's corporate bodies, employees, collaborators, professionals and suppliers of the company who, in various capacities, exercise decision-making, control or investigative functions within the management of processes, having a significant reputational and/or strategic impact for the company. In order to avoid situations of conflict of interest, the company requires that, at the time of acceptance of an office, assignment of a task or commencement of an employment, cooperation or supply relationship, the recipient signs a specific declaration highlighting any relationships that may give rise to situations of conflict.

In the event that there is a conflict of interest, the person involved must promptly inform the Corporate Affairs area which, together with the General Management of Alperia S.p.A. or, where appropriate, the Management Board, identifies the operational solutions aimed at safeguarding, in the specific case, the transparency and correctness of conduct in carrying out the activities.

Strategic objective : We want to create economic value in the long run (e.g. through dividends, taxes, investments), and make our business model resilient in order to cope with new evolutionary and competitive scenarios.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Conversion of the Group's sales company into a benefit company		2027				New	SDG 12
Carry out a gap analysis with the International Hydro Power Association's (IHA) ESG Hydropower Sustainability Standard on our plants and develop an action plan based on the results.		2025				New	SDG 6 SDG 12

6.2 Security and accessibility of supply

How we handle the issue

Alperia carries out constant monitoring and maintenance to ensure plant safety, avoid breakdowns and inefficiencies for users and eliminate operational inefficiencies, waste of resources and energy. The direct impact on customers is the result of Alperia's production and distribution of electricity. A reliable and safe energy supply is essential to ensure the functioning of industries, infrastructures and daily activities, ensuring the well-being of the local population, guaranteeing the services necessary for the functioning of society.

Alperia's impacts relating to the issue are limited to its core business, i.e. the production and distribution of electricity which, in the event of incorrect management, could cause negative impacts on stakeholders, which would result in reputational and economic damage to the Group. Furthermore, a multitude of essential services depend on the constant supply of energy: a lack of supply could have significant impacts on the well-being of stakeholders.

As the largest energy supplier in South Tyrol, Alperia aims to ensure a safe and efficient supply of electricity from renewable sources. This is in keeping with the South Tyrol Climate Plan, which provides for the promotion of renewable energy.

In view of the growing demand for electricity in South Tyrol, it is essential to supply and produce sufficient renewable energy now and in the future. The distribution system is becoming increasingly complex and decentralised; it needs to respond more flexibly to energy production and demand.

The Group defines responsibilities internally. The remote monitoring centre in Bolzano is responsible for reporting any malfunction or breakdown in the electricity supply. The service, provided by bilingual operators, is available 24/7, 365 days a year. Alperia budgets for investments to improve service quality and upgrade network infrastructure to increase stability. They are reported annually in the sustainability report under Investments.

The involvement of stakeholders in the definition of procurement-related projects and initiatives mainly took place during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and in specific meetings with the management during which the views and opinions of stakeholders were collected on the various initiatives. The opinion of external stakeholders and the communication of Alperia's initiatives to them was collected during the roundtables held for the update of the materiality analysis in addition to the contacts made with customers during the year through the Green and Energy Points.

Alperia carries out continuous monitoring and maintenance in order to guarantee safe installations and avoid breakdowns and malfunctions. These activities also make it possible to eliminate inefficiencies and the waste of resources and energy.

6.2.1 Green energy supply

In 2022, Alperia produced **3,090 GWh** of energy from renewable sources, with a hydroelectric capacity of around 1.4 GW. In particular, we produced **2,841.82 GWh of hydroelectric energy**, **0.11 GWh of solar energy**, **234 GWh from district heating** and **247.87 GWh from biofuels**. Given the upward trend in electricity consumption, evidenced by data collected by TERNA (2008–2019) and assuming that the average production volumes do not change significantly over time, it is considered that Alperia's hydroelectric production can cover electricity demand in South Tyrol up to 2050.

Net energy output broken down by primary energy source ^{*1} {GRI EU 2}

	Unit	2022	% ^{*3}	2021	2020	YtY variation	
Total net produced electric energy	Total net produced electric energy	3,147		4,135	5,108	-24%	
	Hydro	GWh	2,842	84	3,813.6 9	4,772.0 3	-25%
	Photovoltaic	GWh	0.11	0	8.58	19	-99%
thereof:	Cogeneration (gas/gasoline) ^{*4}	GWh	59	2	51.00	47	16%
	Biofuel	GWh	248	7	262.00	270	-5%
Total net produced energy for heating ^{*2}	Total net produced energy for heating ^{*2}	234	7	248.00	222	-6%	
Total net energy output	Total net energy output	3,381		4,383	5,330	-23%	

^{*1} Net energy output includes energy produced in our consolidated plants (35 hydroelectric plants, 5 heating plants, 3 photovoltaic parks and 7 plants, 1 biofuel plant) at 100%.

^{*2} Includes thermal energy produced by biomass, gas, gasoline and energy acquired from waste plant.

^{*3} Percentage of total energy output.

^{*4} Electricity generated from natural gas (EP Merano + EP BZ + EP Chiusa).

Quantity of products provided {GRI 2-6; GRI 302-1}

	Unit	2022	2021	2020	2019	2022	YtY variation
Electricity sold to end customers	GWh	6,854	6,636	5,372	5,423	6,854	3%
<i>thereof green-labelled electricity sold to end customers</i>	GWh	2,399	2,482	2,015	1,813	2,399	-3%
	%	35	37	38	33	35	
Trading	GWh	978	1,834	3,166	4,788	978	-47%
Thermal energy sold to end customers	GWh	234	246	222	217	234	-5%
Natural gas sold to end customers	MSmc	503	450	421	464	503	12%
<i>thereof green-labelled gas sold to end customers</i>	MSmc	25	12	3	1	25	108%
	%	5	3	1	0	5	

6.2.2 Our distribution network

The supply of electricity in South Tyrol is managed by Edyna, which also distributes natural gas in four municipalities. Edyna manages an electricity distribution network of 9,199 kilometres with **75% of the lines underground** and supplies 96 municipalities (out of a total of 116), distributing 2,591 GWh of electricity to more than 238,000 supply points. Edyna's lines are:

- Low voltage: 5,447 km – of which 4,416 km underground (81%)
- Medium voltage: 3,510 km – of which 2,462 km underground (70%)
- High voltage: 242 km – of which 21 km underground (9% underground)

with:

- 39 HV/MV primary substations
- 4,166 MV/LV secondary substations
- 44 MT switching substations

Distribution network¹ {GRI EU4}

Distribution network	Unit	2022				2021				2020			
		Surface	Under-ground	Total	% under-ground	Surface	Under-ground	Total	% under-ground	Surface	Under-ground	Total	% under-ground
Length of the distribution network													
High voltage	km	221	21	242	9%	220	21	241	9%	239	21	260	8%
Medium voltage	km	1,048	2,462	3,510	70%	1,086	2,405	3,491	69%	1,129	2,298	3,427	67%
Low voltage	km	1,031	4,416	5,447	81%	1,068	4,290	5,358	80%	1,097	4,167	5,264	79%
Total	km	2,300	6,899	9,199	75%	2,374	6,716	9,090	74%	2,465	6,486	8,951	72%

*1 The distribution network includes the network of Edyna S.r.l., Edyna Transmission S.r.l., the Municipality of Parcines and the Municipality of Laces.

Gas distribution network	Unit	2022	2021	2020	2019
	km	114	114	113	113

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities	Unit	2022	2021	2020	2019
	No. municipalities	96	96	96	96

Customers connected to the electricity network^{*2}	Unit	2022	2021	2020	2019	YtY variation
	No. PODs	238,676	237,423	235,585	233,335	1%

^{*2} Only end customers in the years 2017-2019 are included. From 2020 all PODs (including interconnected distributors) and only customers active on 31/12 are included.

Electricity distributed in South Tyrol^{*3}	Unit	2022	2021	2020	2019	YtY variation
	TWh ^{*3}	2.6	2.6	2.7	2.6	0.4

^{*3} Only the energy distributed to end customers is included in the years 2017-2019. From 2020 all PODs (including interconnected distributors) of customers active as at 31/12 are included.

Substations^{*4}	Unit	2022	2021	2020	2019	YtY variation
HV/MV primary substations	No.	39	38	37	37	2.6%
MV/ LV secondary substations	No.	4,166	4,156	4,131	4,121	0.2%
MV switching substations	No.	44	44	45	46	0.0%

^{*4} Includes the substations of Edyna S.r.l., Edyna Transmission S.r.l., the Municipality of Parcines and the Municipality of Laces.

During 2022, Edyna continued its distribution activity with a constant focus on improving the resilience of the network. This objective was pursued with activities of:

- underground burying of lines (currently equal to 75%)
- the decommissioning of 93,175 metres of MV lines
- line voltage change (progress at 81%)
- replacement of the transformers of the secondary substations (37% progress) and PTP pole cabins using vegetable oil transformers
- remote control of secondary substations (in 2022, 113 secondary substations and two pole disconnectors already in service or newly built were remote-controlled)
- infrastructure modernisation
- gradual transition of the grid operation from isolated neutral to compensated neutral via a Petersen coil
- plant cutting activities
- helicopter inspections carried out over the entire network, complemented by trials with drones

To these activities is added a further safeguard for the **networking of small energy producers** through photovoltaic systems that generate micro-contributions to the distribution system. A need that will be increasingly widespread in the future and that requires attention.

The monitoring of the electricity and gas networks takes place through the **Bolzano Remote Monitoring Centre**. In the event of breakdowns, it intervenes both with an emergency service, active 24 hours a day with bilingual staff who take telephone reports, and with experts who work directly in the field. With careful distribution network planning, expansion of remote monitoring systems, optimisation of service availability and future investments in software, Edyna is working to improve the continuity of the electricity service as much as possible. The unplanned interruptions of the distribution network in 2022, recorded at the remote monitoring centre, were

- 1.40, with a 17% **SAIFI** (System Average Interruption Frequency Index) reduction compared to 2021, lasting 17.28 minutes with the **SAIDI** (System Average Duration Frequency Index) index which fell by 30% compared to 2021. We have therefore achieved our objective of improving the quality of service and network stability.

The outages are analysed on a monthly basis in meetings attended by the four Zone Managers (East Zone, West Zone, Central Zone, South Zone) and the heads of the Technical Area and Network Operations. The aim of these meetings is to identify the lines with the highest incidence of problems and their causes, and to take improvement measures.

Average system outage/Index of duration and frequency (SAIFI/SAIDI) {GRI EU 28; GRI EU 29}

	Unit	2022	2021	2020	2019	YtY variation
SAIFI (Frequency of outages per customer)	No.	1.4	1.68	1.91	1.51	-17%
SAIDI (Duration of power outages per customer)	Minutes	17.28	24.56	29.82	28.07	-30%

To strengthen the available power, **6 new primary substations** will come into operation (primary substations in Vandoies, Sesto, Eggen, Barbiano, S. Antonio 220 kV and Appiano) as envisaged by Alperia's Vision 2031. The commissioning of the new primary substations will start from 2025 (the first will be in Vandoies).

In 2022, the **plan for the remote monitoring of the Secondary Substations** also continued, which is important for achieving the technical quality objectives, as did the plan for **FNC on Primary Substations** with the commissioning of the Primary Substations in Prati di Vizze (Sterzing, ZI Vipiteno lines, Fleres, Casateia, Montecavallo, Sasso Vizze) and Brennero (Brenner and Giggelberg lines). In October 2021, S. Floriano was put into operation. For 2023, again with the aim of reducing the duration of power outages, start-ups of Corvara, Resia 20kV, Sarentino, San Leonardo are planned, followed by Cardano, Sant'Antonio and Laives. Furthermore, a "black start" is planned for 2023 in Val d'Ultimo with Terna and Alperia Greenpower. A test had already been carried out in 2019 in Racines, to verify the possibility of using a similar solution in case of need.

The **TETRA project** launched with the **Civil Protection Agency** continues to provide a valid alternative method communication in the event of adverse events or in the event of lack of telephone coverage. In 2022, in particular, other antennas were installed, some of which were mounted near the secondary substations. It is a further step forward in the collaboration that links Alperia to the Civil Protection Agency with which, already in the past, blackout simulations have been carried out to verify the ability to respond promptly to emergency situations, guaranteeing energy security for the population and business continuity for companies.

And precisely with the aim of working in an increasingly efficient and synergistic way with all the stakeholders, Edyna also carried out periodic discussions with the **South Tyrolean municipalities** in 2022, with the definition of an emergency programme and specific priorities. Starting from 2023, in addition to the service contracts already in place, the network of the Municipality of Tires will also be acquired. It should also be remembered that Edyna works as a mediator between the Autonomous Province of Bolzano, the South Tyrolean Municipalities and **TERNA**, participating in working groups, where it puts forward the needs of the territory. An intensive investment programme is planned in many areas of South Tyrol, such as Bolzano, Val Gardena, Val Badia, Val Pusteria and Valle Isarco. The investments allocated to network resilience and sustainability in light of the NRRP will be equally important and will involve Edyna working with Utilitalia. Furthermore, in view of the 2026 Olympics, in agreement with TERNA, a new primary substation will be built in Anterselva.

Edyna's commitment in terms of innovation also continues in the development of smart grids to manage production, storage, network and consumption with a single system, through the European project **Flexigrid**. The aim is to make the operation of the distribution network more flexible and cost-efficient through the development of four hardware and four software solutions. A single open-source platform integrates the various solutions and makes them interoperable with the IT systems used by energy players. The project established eight case studies, one of which involves South Tyrol and Edyna, and has among its objectives the improvement of security of supply for MV/LV networks, the increase of resilience against major weather events (e.g. snowfall) that could cause extensive blackouts lasting up to several hours and consequently create safety problems, and the real-time measurement of the leading producers and DSOs (Distribution System Operators) already available on the EDYNA SCADA system.

Edyna also participates in the European project **eFort**, formed by a consortium of 24 companies (Universities, Research Institutes, DSO, TSO, industries, etc.) and financed by the European Commission under the Horizon2020 plan. The project started in September 2022 and has a duration of 48 months. The main objective is to make European electricity grids more resilient and reliable against failures, cyber-attacks, physical disturbances and data privacy issues. To this end, technological innovations will be developed for the detection, prevention and mitigation of risks and vulnerabilities with positive impacts on the functioning and stability of the electricity system. The eFORT solutions will be demonstrated at the Transmission System Operators (TSO), DSO, substation and consumer levels in four real demonstration grids that have been selected considering their complementarities and relevance to address the main threats of current European energy systems. There are 3 objectives: provide in-depth knowledge of the vulnerabilities and risks of the European electricity grid, both current and future, in its transition towards a more digitised and decentralised system; develop a robust power system defence system composed of secure technologies by design that can address a wide range of potential threats in compliance with real-time requirements, and develop a secure network structure that addresses privacy and data management issues.

Finally, Edyna also unveiled the **SUSTAINGrid** project with Eurac Research for the analysis of the impact of photovoltaic production on the grid and possible solutions. The central role of photovoltaic (PV) systems in the energy transition and the current global geopolitical situation are driving an increase of photovoltaic generation in the South Tyrolean grid. Given the limited capacity of the distribution network to accommodate large quantities of distributed generation, in order for the system to be reliable as well as sustainable, it is necessary to combine both the technical aspects of the existing infrastructure and future

energy targets. The objective of this project is therefore to create a modelling and analysis framework able to identify the areas of the distribution network with the greatest PV installation potential (also thanks to the future diffusion of energy communities), assess their impacts, and develop a methodology of comparison in techno-economic terms of the possible solutions to mitigate the effects (e.g. use of accumulations) also considering the circular economy aspects. The project will be financed by the Cassa di Risparmio di Bolzano Foundation.

The “**Smart Edyna**” project, on the other hand, designed to monitor consumption in four areas – Smart Water, Smart Vehicle, Smart Lighting and Smart Access – is now headed by the Alperia Group which is assessing the development of dedicated services with a shared working group, with a priority focus on the management of water resources.

With regards to occupational **health and safety**, Edyna continued to carry out the provisions of company regulations and measures. In addition, it participates with four other electricity distribution network managers (AcegasApsAmga Trieste, Deval Valle d’Aosta, E-Distribuzione at national level and SET Distribuzione Trento) in a project to prevent **accidents at work**. It is a process of best practice sharing, adopted to ensure the best safety conditions for its technicians and the many companies that collaborate in the development and management of the plants. Electricity grids are the enabler of the energy transition and are constantly being renovated and upgraded to meet the needs of an electricity system that is increasingly focusing on technology, digitalisation and service quality. For this reason, companies in the sector have decided to share some of their most significant experience, such as the new devices for working safely on roofs and supports by Edyna, the “BOSS” project on behavioural safety by SET Distribuzione, the assessment of the electrical risk from “Arc Flash” by AcegasApsAmga, the concrete management of a Near Miss by Deval and, finally, the new education and the Buddy project by E-Distribuzione.

During 2022 there were no serious **weather events** that led to damage to the lines or emergency interventions.

Finally, on the recommendations of the Province’s Nature Office, Edyna contributed to a project to **protect birdlife**. In particular, to minimise the sources of danger for the eagle owl, some electricity pylons in the San Maurizio area in Bolzano were insulated with special material. The costs amounted to €48,000 taken from the environmental funds of the Cardano power plant.

Strategic objective: We want to guarantee a safe, efficient and sustainable energy supply-

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Reduce the duration of outages		Annually	SAIDI (minutes)	objective level dictated by ARERA	17.28	✓	SDG 7 SDG 9
Reduce the number of outages		Annually	SAIFI (No. of outages per user)	objective level dictated by ARERA	1.40	✓	SDG 7 SDG 9
Determine which systems connected to our network can be used with the desired isolation.		2022	-	-		✓	SDG 7 SDG 9
Increase in secondary substations and remote-controlled disconnectors, to reduce switching times and ensure faster recovery of the electricity service.		Annually	No. of plants	Number defined in the annual remote monitoring plan	146	✓	SDG 7 SDG 9
Participation in tenders for the reassignment of expiring AGP concessions and simultaneous opportunity for the acquisition/assignment of new hydroelectric plants		2024	Installed hydroelectric power	1.52 GW	1.46 GW (2022)	New	SDG 7 SDG 9

6.2.3 District heating

Alperia Ecoplus, a subsidiary of Alperia, deals with the management of district heating, a remote system that transports heat generated by large cogeneration plants to individual homes, replacing small, unstable, unsafe and unsustainable gas and oil-fired boilers. With district heating, the heat begins its journey at the production plant and is delivered directly to homes through an underground pipe network, resulting in annual savings in CO₂ emissions of several thousand tons.

Heat from waste – Alperia Ecoplus operates six of its own plants – Bolzano, Merano, Verano, Sesto, Chiusa and Lazfons, as well as managing the Silandro plant – and has a total of **2,629 exchangers** serving thousands of South Tyrolean households. To produce thermal energy, it uses both biomass (60% local) and natural gas. In addition, it utilises residual heat from industrial processes as well as heat from Bolzano's waste-to-energy plant, which recycles municipal waste. The Bolzano plant, in particular, is considered highly innovative: it is equipped with a powerful pumping station and an accumulation tank with a volume of 5,600 m³ of hot water. By integrating the waste-to-energy plant, coverage of the heat requirement of 60% from waste heat from the waste-to-energy plant is achieved, and with the accumulation tank, coverage of 95% is reached, with a significant reduction in CO₂ emissions. The valorisation of the heat recovered from the Bolzano waste-to-energy plant is essential to offer a safe and cost-effective supply to district heating customers. This is accompanied by a further positive effect for the city: winter pollution with nitrogen oxides and smoke from individual thermal power plants decreased significantly, waste heat was used 137.5% more and CO₂ emissions were reduced by 60% (figures between 2013- 2019). The system was also recognised by the **Global District Energy Climate Award**, an award dedicated to the best sustainable energy solutions based on innovative forms of urban heating and cooling.

For peaks in demand or in the event of breakdowns in the biomass boiler (where present), the district heating plants have gas and oil boilers, but the goal is to increasingly increase the share of biomass used to generate thermal energy. In eight (of which three in installation solutions at premises not owned by Alperia Ecoplus S.r.l.) plants, cogenerators (plants that simultaneously produce electricity and heat and thus guarantee very high levels of energy efficiency) running on natural gas have also been installed. According to the new Business Plan, about 100MW of new thermal power will be connected to the district heating network by 2024, with investments of €40 m over the plan period. For this reason, expansion projects also continued in 2022. Specifically:

- **Bolzano:** with a multi-year maxi plan worth €70 m, the Alperia Ecoplus network extends for 54 km, with 378 connected buildings that serve around 6,426 domestic customers and 339 business customers, supplying energy for 142 MW of connected power. The number of new customers has exceeded expectations, demonstrating a growing awareness of the potential of district heating. This is also thanks to the awareness raising work carried out by Ecoplus' technicians, together with those of Alperia Smart Services, who attend apartment block meetings to explain the technology, clarifying the savings in terms of tariffs and maintenance, as well as the environmental savings, since district heating works with the heat produced by the waste-to-energy plant. When the investment plan for Bolzano is completed, approximately 7.5 million cubic metres of gas will be saved per year, avoiding approximately 15,000 tons of CO_{2e}. Also in 2022, the co-generation plant that Alperia Ecoplus built in the building that houses the Infranet company was put into operation: a 140 kW_e and 209 kW_{th} plant which supplies electricity directly to Infranet via the SEU system and heat in the DH network. By 2023, a tri-generation plant (electricity, heat and cold) will be built to equip itself in the event of breakdowns in the waste-to-energy plant and district heating will be managed for the Bolzano hospital for which Ecoplus has activated the PPP and is now awaiting feedback from the Province. Another important project in 2022 was the achievement of the ISO 50001 certification for the energy management system. After two years of stoppage, due to the pandemic, initiatives for the public have also resumed, with an open day at the Bolzano plant that saw over 180 visitors. Presented NRRP also for Bolzano for new power plant project and grid extension and new 10MW emergency boiler (diesel) at the power plant.
- **Merano:** the district heating development plan in Merano actively continued, reaching 517 substations, 6,230 domestic customers and 571 business customers. In 2022, the Verano district heating was acquired and will be managed by the Merano group. Verano was the first biosolar district heating plant in South Tyrol, which went into operation in 1996 on the initiative of an agricultural cooperative. The plant made a redevelopment of the town possible; however, one of the disadvantages was the technical difficulty of managing it. In 2014, the plant was taken over by the Municipality of Verano and restructured, in collaboration with Alperia. Since the complexity of the operation and the related legal obligations have gradually increased since then, the municipality of Verano decided to sell the plant and in 2022 it was acquired by Alperia, which, in view of the new ARERA regulations but also as part of a major renovation, will carry out work on the distribution network, with the aim of mitigating losses and increasing operational safety, and will manage it. Also in Merano, a small co-generation plant was installed at the newly commissioned biomass power plant. The new power plant with an output of 8 megawatts will cover approximately 30% of the thermal energy requirements of the Merano-Lagundo district heating network, thus saving three million cubic metres of natural gas per year and avoiding carbon dioxide emissions of 5,800 tons. The new plant will burn virgin wood from forests. In this way, thanks to the use of a renewable source, the plant contributes to the reduction of climate-altering gases. In fact, in the process of burning woody biomass, the same amount of CO₂ is emitted as the plants have absorbed during their life cycle. Wood from sustainably managed forests therefore does not increase the amount of carbon dioxide in the atmosphere. Overall, the district heating system in Merano makes it possible to avoid the emission of 8,000 tons of CO₂ each year. Finally, to promote work at the plant, the Alto Adige Pass, the annual electronic season ticket for public transport in South Tyrol, has been given to Alperia Ecoplus employees to enable them to get to the Verano plant by cable car from Postal.

- **Chiusa and Lazfons:** the connections continued, amounting respectively to 5 at Chiusa and 13 at Lazfons, and a project was presented within the framework of the NRRP for the installation of a new biomass plant. The co-generation plant with the generator set was also put into operation. Also in Chiusa, with Alperia Green Future, work continued on optimising and increasing the efficiency of the plant, thanks in part to the adoption of an automatic programmer with a forecast model that allows it to react in advance to grid demand. An energy management system that will also be set up in the other Alperia Ecoplus offices, with the aim of making significant savings.
- **Sesto:** the installation of a second electrofilter was started, which will allow the two biomass boilers to be operated completely separately, increasing efficiency and not requiring the use of diesel during maintenance. The completion of the works is scheduled for 2024.

For all plants (except Verano which will be completed in the near future) the conversion factor has been certified and the CO₂ will be calculated and issued to offset operational emissions with green gas. In line with Alperia's 2023-2027 Business Plan, with Vision 2031 and with the requirements of the South Tyrol Climate Plan, Alperia Ecoplus will implement actions to reduce its CO₂ footprint and optimise consumption. This will involve investments in renewables, the expansion of the biomass plant in Merano (for which a feasibility study has already started) and the development of initiatives connected to deep geothermal energy (a topic already being analysed). A process that will directly involve the municipalities and that will be developed in line with the provisions of the provincial regulations.

In harmony with the territory - It is also noted that to reduce environmental impact, district heating plants have been built differently depending on the area where they are located. In the South Tyrolean capital, Alperia S.p.A., in collaboration with the Bolzano Association of Architects, launched a competition for ideas for the external covering of the thermal storage tank, to contribute to the city's architecture. In Chiusa, the district heating plant takes the form of a large wing rising from the ground. In Sesto, due to its proximity to the Nature Park, the structure was made entirely of wood. In Merano, geometric cubes was chosen to blend in with the surrounding landscape and make the most of the slope for the installation of a photovoltaic system. The Bosin plant features a Corten finish and a green roof, as well as numerous external green areas with various species of trees planted. Finally, to offer an ever more efficient service, Alperia Ecoplus has a freephone number for emergency assistance, a service that has proven to be useful and effective.

The Alperia Ecoplus integrated system is certified according to the UNI ISO 9001:2015, UNI ISO 14001:2015 and UNI ISO 45001:2018 standards and has an EMAS declaration. The Bolzano plant, as anticipated, was certified ISO 50001 in 2022.

Biomass

Italian and European forests have increased considerably in recent years, from 5 million hectares in the 1950s to 10.8 million today, or 34% of the national surface area. Biomass is the leading renewable source for the production of thermal energy in Italy, higher than wind, geothermal, biogas and solar, with a production of 7 Mtoe (million tons of oil equivalent) used mainly in domestic heating. Despite this, however, Italian forests are only growing by 30%, i.e. their increase over time, compared to a European average of 50% and over 60% in Germany and France.

The Bolzano district heating system in detail



The Bolzano district heating system (source: Alperia)

Heat created from waste. (1) Steam produced by combustion in the Bolzano waste-to-energy plant drives a turbine (2) to produce electricity. The residual heat (3) is used by the Alperia district heating plant, responding to the needs of the local population. In addition to the heat from the waste-to-energy plant, Alperia has a heat storage tank (4) and spare boilers and co-generators (5) which allow it to cope with demand peaks. From the power plant, the heat, in the form of hot water, is fed into the district heating network (6) made up of a closed circuit of underground pipes. The hot water flows into the district heating network, then onwards to individual homes. Here, thanks to a heat exchanger (7), energy is used to heat the sanitary water of homes and heating systems. All this happens without the loss of any water. After the heat has been released, the water goes back to the plant through the district heating network (8) to be reheated and resume its cycle. In addition to heating private homes, the district heating system meets the energy needs of many public buildings in the city, including the Bolzano hospital (9).

Strategic objective: We want to guarantee a safe, efficient and sustainable energy supply

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Initiation of projects on pumping systems and development of electrochemical/hydrogen storage systems		2027	-	-		New	SDG 7 SDG 9
Feasibility study for the use of deep geothermal energy		2027				New	SDG 7 SDG 9
Development of six new district heating plants, of which three with biomass, two with high efficiency gas and absorbers and one backup		2027	No. of new district heating systems	6		New	SDG 7 SDG 9
The acquisition of two biomass plants with estimated commissioning in 2025 and 2028		2027	No. of new district heating systems acquired	6		New	SDG 7 SDG 9
~100MW of new thermal power connected to our district heating network		2024	Connected power [increase 2020-2024] (MW)	100MW		Ongoing	SDG 7 SDG 9
Biomethane: construction of four biomethane production plants		2027	Annual capacity (MSmc)	8		New	SDG 7 SDG 9

6.3 Asset Integrity

How we handle the issue

For Alperia, the topic includes the use of solutions for the management and safety of plants so as to protect employees and residents, as they are subject to the direct and indirect impacts that the Group's commercial activities have on the environment, economy and society. Our asset integrity practices aim to ensure that our plants are maintained in the best conditions, so as to protect the environment and the people who live around them, ensuring a reliable and secure supply of energy to our customers and ensuring that our activities are carried out with minimum negative impact on people's health or the environment in which they live.

Failure to make the plants safe could have serious consequences on the workers, the territory and the society that resides there, involving a large number of people and irreparably damaging the flora and fauna.

Alperia's distribution infrastructure and power plants, reservoirs and dams are considered sensitive to accidents, natural disasters or terrorist attacks. Alperia seeks to minimise the risks through investments in safety and modernisation. Regular drills and comprehensive emergency plans are carried out to prepare for emergencies. A serious accident would not only have an impact on the surrounding areas but would also have a direct impact on the company. Responsibilities have been defined within each Business Unit.

The monitoring and assessment of the effectiveness of the actions undertaken during the year is carried out on an annual basis during the drafting of the Sustainability Report and the progress of the objectives declared in the Sustainability Plan through specific KPIs. Furthermore, the results are presented and evaluated by the top corporate bodies.

Stakeholder involvement took place through specific meetings with local communities during which the opinions and views of the various stakeholders were collected on the initiatives and projects to make the plants safe, as well as the communication of Alperia's initiatives to them. Furthermore, in the event of accidents, the Group promptly takes action to involve the affected community and inform them of the measures taken to remedy any damage caused to the environment and society.

Availability of hydroelectric plants and environmental accidents

Alperia produces an average of around 4,000 GWh of clean energy each year through thirty-five large, medium and small hydroelectric plants that it owns and/or are subject to management and coordination (another five plants are owned by Alperia Greenpower, but not subject to management and coordinated by Alperia) these plants include thirteen large dams, seventeen minor reservoirs, 160 kilometres of tunnels and 21 kilometres of penstocks. These are complex and sensitive infrastructures for which we plan monitoring and maintenance to ensure they are stable, safe and efficient at all times. In 2022, Alperia Greenpower and Alperia Vipower invested around €68 m in activities to improve plant performance in terms of availability, reliability and efficiency. A technical indicator measured by planned maintenance activities, refurbishment of hydroelectric plants and plant downtimes due to faults is the availability of generating units, which was 84.15% in 2022.

Energy availability {GRI EU 30}

	Energy availability ^{*1}	Unit	2022	2021	2020	2019
Energy source	Hydroelectric	%	84.15	84.49	88.88	86.43
	Photovoltaics	%	Not available	Not available	Not available	Not available

*1 This indicator refers exclusively to the AGP (100%) and Vipower (100%) plants. It is not available for photovoltaic systems. The availability factor of a power plant is the amount of time it is able to produce electricity in a given period

“A secure supply of primary energy is the basis of a functioning society. As extreme weather events such as the snowfalls in the winter of 2020 become even more frequent due to climate change, we should take precautions and prepare the infrastructure to deal with them.”

Comment from an employee; Stakeholder Survey 2021

Alperia replied: We are aware of how much climate change will impact our operations and we work on a daily basis to make our infrastructure more resilient. We strive not only to make them safe with regular and extraordinary maintenance activities, but also to make them more innovative and more sustainable. These measures include, for example, the replacement of mineral oil transformers with vegetable oil transformers, the securing of the St. Valentin tunnel, fibre connections and the burying of cables. In addition, we work with the Civil Protection Agency and startups to design and use innovative systems in our infrastructures.

Secure fibre

The connection of communication infrastructures via fibre optics is one of the projects in which the Alperia Group has invested to increase the availability of its facilities. Unlike traditional telephone networks, which can suffer blackouts in the event of violent weather conditions, fibre provides greater stability. Cables, being underground, are more secure and favour redundancy in communication channels. After the main sites, which are already fully connected, Alperia is also continuing this work at secondary plants.

From mineral oil to vegetable oil

The replacement of mineral oil transformers with **vegetable oil transformers** is one of the most important projects implemented by Edyna to reduce the risk of environmental accidents. Vegetable oil has a combustion point twice as high as mineral oil and therefore significantly reduces fire risk compared to currently used mineral oils. Vegetable oil is neither harmful to humans nor to the environment, it can be reused and is biodegradable. Edyna buys its vegetable oil transformers in Italy, after having subjected them to strict tests to ensure that they meet certain technical characteristics. Priority is given to substituting transformers in protected areas such as nature parks or areas crossed by rivers and/or streams within 15 metres. In 2022, there were no significant environmental incidents.

Environmental incidents

	Unit	2022	2021	2020
Number of environmental incidents	No.	0	2	2
Number of significant environmental incidents	No.	0	0	0
Financial impact of environmental incidents* ¹	€	0	0	0

*¹ Includes paid fines and cleaning costs.

6.3.1 The safety of our dams

The operation and maintenance of large dams are, by law, under the control of the Venice Dams Technical Office, which is part of the General Dams Technical Office of the Ministry of Infrastructure and Transport. The Condition Document for the operation and maintenance of dams precisely regulates management methods and indicates the parameters relating to controls and the frequency of detection. Each large dam with a reservoir of more than one million cubic metres of water and/or a barrier height of more than 15 metres has a Civil Protection Agency Document drawn up by the Autonomous Province of Bolzano. Twice a year, representatives of the Ministry of Infrastructure and Transport's Technical Office for Dams visit the plant and carry out inspections together with the responsible engineer appointed by Alperia Greenpower or their designated representative. The Hydrology and Dams Office of the Autonomous Province of Bolzano is responsible for checking "minor" hydraulic works. Its officials, accompanied by the appointed Alperia Greenpower technician, carry out annual inspections. The general criteria for managing flood events are set out in an Alperia Greenpower Operating Procedure called "Flood Management – Large Dams". The operation of reservoirs, during the increasing phase of flood events, ensures that the flows allowed to flow downstream from the dams are always less than, or at most equal to, those arriving at the reservoirs. In the decreasing phase of the event, the flows downstream of the dams will always be lower than the maximum flows reached in the increasing phase. Therefore, the presence of the dams helps to delay and mitigate flood phenomena and to reduce, as much as possible, any damage caused by natural flows. Flood development is continuously monitored by the staff of the Cardano Remote Control Centre, to which all the data collected from the plants, including the dams, is fed. In the event of major weather events, Alperia Greenpower provides reinforced dam monitoring with specialised technical staff.

The first phase of flooding is not considered an emergency because dams can **delay** or **reduce** the discharged flow rates in relation to the incoming flow (lamination effect). As a result, greater safety can be ensured for the population. In addition, any destructive effect on the ecosystems immediately beneath can be contained. During flood events, real-time data on the height of the reservoir, the flow discharged and the flow derived from the large dams managed by Alperia Greenpower are also sent to the operations room of the Civil Protection Agency of the Autonomous Province of Bolzano. Even under normal operating conditions, the dams are equipped with an extensive automatic monitoring system, supplemented by measurements and checks carried out by supervisory personnel, who are also professionally qualified and authorised to operate the outflow systems, even in the absence of telephone communication. Alperia Greenpower provides regular training for flood management personnel and carries out drills with the cooperation of the local Civil Protection forces. In 2022, **the Monguelfo dam was the scene of a flood management exercise**, which was also used to test the new TETRA communication system that the Civil Protection Agency has equipped itself with and which is also being used in Alperia. The exercise made it possible to draw up useful ideas for the use of this tool, which is intended to facilitate communication between the various organisations that make up the Civil Protection Agency in South Tyrol. Around half of Alperia Greenpower's 200 employees are in charge, in various capacities, of controlling and maintaining the dams and all electromechanical components of each hydroelectric plant.

To increase the safety of its hydraulic infrastructures, Alperia Greenpower is also developing innovative projects in collaboration with some startups: in particular, with **Fieldbox** we worked to apply artificial intelligence to penstocks. Algorithms made it possible to highlight possible critical issues and propose digital solutions applicable to other pipelines of the same type. The project was implemented on the Santa Valburga penstock. **Hydrosim 4.0**, winner of the third edition of Alperia Startup Factory, sees the participation of Alperia Greenpower personnel working with specialists from various sectors and focuses instead on the safety of the territory in the field of flood protection thanks to the intelligent use of dams. In particular, by using a flood simulator, it is possible to predict incoming water flows in reservoirs through artificial intelligence applied to weather forecasts, thus helping operators to choose the ideal intervention and mitigation procedures. The first tests were carried out on the Monguelfo plant for the Rienza reservoir. During 2022, the engineering activity of Hydrosim 4.0 continued, extending the use of the simulator also to the Rio Pusteria, Fortezza and Gioveretto reservoirs. The final activities are underway to make the product usable for operators, for ever better flood management to safeguard the area below the dams. It emerged that the correct forecasting of such events would make it possible to **reduce the flood wave by 30-40%**, thus eliminating or at least limiting flooding. Not only that, Hydrosim 4.0 also showed another important advantage, namely the possibility of **reducing the impact on fish** generated by excessive water turbidity. By carrying out a controlled sediment removal, it is possible to dilute the tail of the flood, transporting the material evenly over the river bed. In this way, the impact on fish fauna is much lower. The system has also made it possible to prepare a rolling plan for the Fortezza reservoir, which is currently being examined by the Provincial Offices. The purpose of the plan is to mitigate the effect of a flood on the areas downstream of the dam and, at the same time, manage the sediments present in the reservoirs in a more eco-sustainable way.

Strategic objective: We want to guarantee a safe, efficient and sustainable energy supply

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Increase the energy availability index for hydroelectric plants to over 88%		2024	Energy availability index (%)	88	84.15	On-going	SDG 7 SDG 9
Develop a system for programming and planning maintenance measures to make our plants safer, with a focus on maintaining a balance between environmental impact and production optimisation		2024				On-going	SDG 7 SDG 9
Capacity increase of photovoltaic plants (+13 MW)		2027	Increase in photovoltaic capacity	+13 MW		New	SDG 7 SDG 9

Strategic objective: We want to guarantee maximum safety of our systems, to protect employees, the population and the surrounding areas.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Increase the burial of cables to increase the resilience of the electricity grid to extreme climatic events		Annually	Under-ground cables/total electricity grid	-	75%	✓	SDG 9
Definition of a communication plan in order to make AGP's commitment to ensuring the safety of its plants more visible to stakeholders and to report KPIs (e.g. Inspections carried out and solutions implemented) and progress within the NFS.		2023	-	-		New	SDG 9
Continue with the Hydrosim 4.0 project		2023	-	-		On-going	SDG 6 SDG 9
Draft and implement a plan to proactively engage communities (e.g. road shows) on Asset Integrity		2024	-	-		On-going	SDG 9
Mapping/Standardisation of plants/buildings and identification of primary vulnerabilities, taking into account climate risk		2026	Plants mapped for climate risk (%)	100%	0%	New	SDG 9

6.4 Innovation, digitisation, research and development

How we handle the issue

Alperia promotes innovation in the energy sector through numerous research projects, testing and applying the most innovative technologies in hydroelectric and district heating plants as well as the electricity grid. The Group's research activities can have direct and indirect impacts on society, the environment and the economy through the development of new products and services that improve the impact on society and the environment. However, innovation can have impacts on people's human rights, both positive and negative. For example, the adoption of new technologies can improve access to education, health and other essential services, but it can also lead to job losses or the exclusion of some categories of people who do not have access to technologies or the skills needed to take advantage of the opportunities offered by innovation. In addition, innovation can affect how people protect their privacy and use their personal information. It is important that innovation is managed responsibly and that impacts on the economy, the environment and human rights are carefully assessed and managed.

Innovation, being also the result of cooperation between various subjects, can have impacts caused both by activities and by collaboration relationships with other entities (e.g. startup incubators).

Alperia invests in innovation and research to respond efficiently and effectively to the challenges of the energy market as well as to provide a modern energy supply and cutting-edge energy services in the future. The Group collaborates with local and international partners on various projects aimed at promoting research and developing intelligent systems for efficient energy distribution and production (e.g. smart grids, smart cities, smart meters).

Responsibilities are defined within the company with the involvement of all Business Units and expenses are reported annually in the context of sustainability reporting. The results of the projects are shared internally, to promote the dissemination of knowledge on the various topics pursued at corporate Group level. Innovation projects are typically traced through a structured procedure in five phases, now integrated into the management system of the Alperia Group. Following the monitoring results obtained in recent years through this procedure, Alperia has resolved to proceed with a review to optimise the management of innovation projects and a more precise measurement of the objectives and progress of each of the projects.

The involvement of the stakeholders took place through specific meetings and events during which the views and opinions of the stakeholders on the various initiatives were collected. These initiatives are complemented by the communication activities developed by Alperia. Lastly, the Group establishes relationships with stakeholders such as universities, research centres and other partners by discussing R&D activities in progress or to come. In launching innovation programmes or evaluating participation in other innovation programmes, as well as in starting new projects, the impact on stakeholders has always been assessed and the results have been disseminated appropriately. At the same time, the ideas deriving from the materiality analysis have been integrated into the contents of the initiatives.

International competitions and R&D investment

Innovation is key to supporting the energy transition. For this reason, Alperia has integrated innovation into the Group's strategy by providing it with dedicated governance, organisational structure and processes. This has made it possible to put down roots for and spread an innovative culture within the Group, with a positive impact on all BUs and organisational units.

Our procedure - According to the provisions of Vision 2031, innovation must be increasingly focussed on promoting sustainable and customer centric services/products and developing new businesses useful for decarbonisation (H2, biomethane, CER and photovoltaic). With this aim, in 2022, we invested €1,449,636 in R&D projects, involving 43 employees in these activities. These investments are subjected to an internal procedure during which the effectiveness of individual projects is assessed as is the allocation of resources, so as to standardise and strengthen their management. There is also a focus on innovation in **training**. Alperia employees were given the opportunity to participate in the Alperia Startup Factory and to receive 20 hours of training on Open Innovation topics realised with the Luiss Business School.

The Premio dei Premi – Alperia's commitment to innovation has been recognised nationally with the **Premio dei Premi 2022** in the Industry and Services – Large Enterprises category. The award was given for: "the commitment to developing a structured process that allows for the involvement of personnel and all stakeholders in innovation initiatives". The award was presented by the Minister for Technological Innovation and Digital Transition Vittorio Colao, the Minister for Universities and Research Maria Cristina Messa and the Minister for Public Administration Renato Brunetta, during a ceremony at the headquarters of the National Research Board in Rome. This Award, coordinated by the COTEC Foundation with the backing of the President of the Republic, is given annually to subjects operating in industry, design, the tertiary sector, the public administration sector and universities, who have distinguished themselves for the originality of the innovations they have developed in relation to products, processes and business models.

Innovation, research and development activities and expenses aimed at the supply of reliable electricity and the promotion of sustainable development. {GRI EU 8}

	Unit	2022	2021	2020	2019	YtY variation
Number of employees engaged in R&D projects	People	43	44	110	88	-2 ^{*1}
Total R&D expenditure	€	1,449,636	2,206,119	2,148,484	1,560,934	-34% ^{*2}
of which						
EU projects	€	161,354	143,790	185,223	167,293	12%
Other innovation projects	€	1,288,282	2,062,329	1,963,262	1,393,641	-38% ^{*2}

*1 From 2021 onwards, only people who actually logged hours in the innovation project management system were considered.

*2 The reduction in spending is due to the reduction of the research and development budget, in addition to the execution of two projects in 2021 which required significant investment.

6.4.1 A selection of our innovation projects

Alperia Startup Factory

Alperia Startup Factory is the startup accelerator launched by Alperia to promote innovation in the field of renewable energy and the green economy. Now in its 4th edition, it has involved 119 teams including companies, startups, research institutions and internal staff at Alperia. From 2021, Alperia employees have also been able to participate, thus having the possibility of realising their ideas with a view to future marketing. The topics covered by the contest were: Energy Communities, Hybrid Customer Engagement, Smart Region, Corporate Well Being and CO₂. The goal was to find cutting-edge solutions in one of these research fields, with a particular focus on aspects related to sustainability. In an initial screening of the applications, with the involvement of the Business Units of Alperia and Gellify – an innovation platform that connects high-tech B2B startups with traditional companies – the 10 best ideas for the next phase of Innovation were chosen Camp, where each team demonstrated their project. Four finalists were then chosen:

- **Eurac Research:** project dedicated to passive consumers of energy communities to optimise the level of self-consumption on site;
- **Alperia Metaverse:** project developed by an internal team at Alperia to promote greater engagement on sustainable behaviour with a gamification logic;
- **Flowtech:** artificial intelligence to understand natural language and improve customer services via email;
- **Eggup:** SaaS HR to analyse individual and team soft skills, reduce costs and increase productivity.

The four finalist teams had the opportunity to develop the project in the Proof of Concept phase, held between February and June 2022, working with Alperia and Gellify to put together a prototype. The students of Entrepreneurship and Innovation of unibz also took part in this phase.

In the meantime, the projects launched with the startups selected in 2021 have continued. Specifically:

- **DomoSafety** from Lausanne (Switzerland): the startup, which develops Safety@home solutions, i.e. linked to improving the quality of life at home, thanks to various technical solutions that provide for a 24/7 emergency assistance service, is now working with the Alperia company Care4You;
- **Hydrosim 4.0:** the project, focused on territorial safety, continued in its development by dealing with flood protection thanks to the intelligent use of dams. The tool predicts incoming water flows in reservoirs using AI (artificial intelligence) applied to weather forecasts, helping operators to choose the ideal intervention and mitigation procedures;
- **Uptime Analytics** from Bogotá (Colombia): the project, dedicated to optimising the operational and energy efficiency of industrial plants with AI-based anomaly detection, has completed its development and the operational solution has been integrated into Alperia Green Future.

Open Innovation

Alperia also renewed important national and international collaborations in 2022 to support the innovative process. Among the local partners with whom it develops innovation projects are: Eurac Research, UNIBZ, Fraunhofer Italia, Laimburg Experimentation Center, IDM Alto Adige and NOI Techpark, the innovation district of South Tyrol. There are also numerous Open Innovation projects in which it has participated at an international level. Specifically:

- **Disrupt Me:** initiative developed by EIT Innovation HUB Israel with the aim of promoting contact between innovative startups in Israel with corporates in the European Union. The EIT – European Institute for Innovation and

Technology – is an institute promoted by the European Commission to support technological innovation in the member states and associated states of the European Union. The programme allowed Alperia to benefit from a dedicated consultancy on Open Innovation from the EIT Innovation HUB and Deloitte Catalyst (a consultancy company specialised in industrial open innovation, partner of the Disrupt Me programme) and to take advantage of a scouting service for startups in vertical areas of strategic interest (i.e. Digital Payments, Customer Centricity and Smart City/Citizenship) based in Israel. In 2022, the project evolved into another programme, called CALLING2SCALE in which Alperia was a mentor, in collaboration with Doral-Energy, a reality that leads the energy innovation community in Israel, of some startups active in the field of renewable energies supporting them in the “scale-up” process.

- **“Mission Innovation 2.0: Green Powered Future Mission”**: global scale initiative, focused on energy transition, in which Alperia participates in reference to the “green powered future mission”. The objective is to demonstrate the technical feasibility of integrating 100% variable renewable resources into the energy mix, ensuring the achievement of an economically sustainable, secure and resilient energy system. Mission members are committed to developing a collaborative action plan, increasing their investment in research and development, as well as contributing to the implementation of demonstration projects. Mission representatives attended the COP27 United Nations Climate Change Conference held in Sharm el-Sheikh.
- **Verbund Accelerator (VXA)**, an Austrian innovation programme in which Alperia has already been participating for two years as the only Italian company. In this programme, feasibility projects have been launched in two areas: energy communities and options for improving the management of energy flows; energy trading to optimise consumption forecasting based on the load curves of industrial customers through AI and machine learning technologies.

Alperia’s innovation activity also continued in the hydropower sector through the joint venture with Hydrodata, and with Alperia Innovating, working on the development of new technology related to IoT, artificial intelligence, blockchain, Industry 4.0, etc., in the Group’s hydropower plants.

Furthermore, during 2022, the Alperia Innovation team participated in various public events – conferences, round tables, conventions – on an innovation theme. In particular, the following are noted: the “R&D Management Conference” of the University of Trento to which Alperia brought its experience as keynote speaker, and the Observers of the Milan Polytechnic, in the Energy & Strategy Group where Alperia contributed to eight working tables on energy issues involving dozens of employees throughout the Group.

LifeforHEATrecovery

In 2022, work continued on the LIFE4HeatRecovery project, launched in 2018 and dedicated to promoting a new generation of intelligent district heating and cooling networks, in which low-temperature waste heat sources can be redistributed to consumers. Traditional third-generation district heating networks distribute energy from a centralised plant to numerous remote users. Fourth-generation networks integrate a limited number of high-temperature energy sources into the network. The recovery of this energy requires complex works in the process plants. As most of the waste heat available in the urban environment is generated from low-temperature sources and offices, the proposed solution is to recover this energy in district heating networks by means of heat pumps. This is based on the water circuit concept used in commercial buildings and extended to district and city level. For high-temperature networks, a heat pump is needed to raise the temperature of the waste heat at network level. On the other hand, for a low temperature network, heat recovery can be carried out directly without heat pumps, which will still be necessary to raise the temperature of the energy redistributed to users to useful temperatures (35°C to 55°C depending on the use). LIFE4HeatRecovery solutions will integrate waste heat sources from urban wastewater and commercial buildings available along the network, managing energy at different temperature levels. This will provide flexibility and scalability to the grid design and reliable, safe and clean thermal energy for consumers. Together with storage, control strategies that optimise the collection and reuse of waste heat are crucial from both a technical and economic perspective. On one hand, strategies that ensure a thermal balance between integration, storage and use of diffuse energy will be assessed. On the other, energy trading strategies will be developed to manage energy purchases from various sources and electricity consumption when it is most convenient for customers and utilities. As infrastructure costs are a barrier to public investment in district heating, LIFE4HeatRecovery will also develop innovative financing mechanisms based on public-private partnerships and active investment models. This strategy circumvents the need for extensive private capital, incorporating European users, utilities and interests into a joint effort through plans for sustainability, recovery and profit for investors. LIFE4HeatRecovery also has a social dimension. It creates new business opportunities and fosters participation, in a model where users take a central position and become market players.

SINCRO

The SINCRO – SENSIBLE INTERACTIVE CONTROL SYSTEM FOR SMARTER BUILDINGS project was concluded with Alperia participating as a partner with Fraunhofer Italia, Eurac Research and Systems. The aim of the project was to develop an interactive system for the energy management of buildings with a view to sustainability and reduction of consumption thanks to both the control of the heating plant and the active and intelligent involvement of users. An IT solution has been developed for the management of building data from various sources with different communication protocols and an intelligent management system has been implemented for the heating system that integrates indoor comfort data and predictive user profiles. The team also developed an interactive interface based on artificial intelligence algorithms capable of actively involving and making users aware, providing information on energy consumption and suggestions for taking steps aimed at reducing energy consumption. SINCRO focused on two case studies, a residential building and a nursery school. In the first case, the focus was on the building management system, by monitoring the boiler and the occupants to obtain information on the

performance of the system and the use of the buildings by users, with the aim of reducing peaks and related energy consumption, creating awareness in users. In the second case, a digital twin was created for the nursery school, with the BIM models of the installed sensors (about 20) equipped with all the environmental parameters and indicators. The data was then integrated into a digital display platform, which can be accessed using any tool (pc, tablet, smartphone). It was thus possible to receive direct and immediate feedback. Furthermore, thanks to intuitive graphics, even nursery school children were directly involved, providing useful information on efficiency and comfort.

Hydrodata

In 2020, Alperia acquired 50.51% of the shares of Hydrodata, a technical consultancy company active in the development and offer of engineering services, technical-economic consultancy and applied research in the field of water management. With Hydrodata, Alperia has set up the joint venture Alperia Innoveering with which it is taking part in tenders for the reassignment of hydroelectric concessions, making use of a team of professionals with extensive experience and a high level of expertise capable of developing advanced and innovative design solutions both from a technical and environmental sustainability point of view. The acquisition of Hydrodata S.p.A. further reinforces the decision to internalise key engineering services for the company. In view of the forthcoming expiry of the major hydroelectric concessions, Hydrodata is assisting Alperia in the analysis of the assets involved in the renewal and in the analysis of the management and organisational aspects.

As regards engineering activities, in 2022, Alperia and Hydrodata collaborated in the replacement of the Lasa penstock which came into operation at the end of the year. In addition, work has also been done on the San Valentino sluice and the San Pancrazio penstock, which are currently in the authorisation phase and for which Alperia Innoveering has already prepared the executive project. A hydrodynamic analysis was also carried out to verify the overpressures in the pipeline of the Gloreza plant and a geological study was carried out for the defence of the central building from falling rocks of the Pracomune plant.

Again in 2022, Alperia Innoveering carried out the Aifa 2.0 project with unibz, developing a forecasting model of the hydrological inputs at some plants. At the basis of the model are artificial intelligence algorithms and a model reconstruction of the reservoir.

Alperia Innoveering is also active in research and development activities related to the issue of hydrogen. In particular, the site for the construction of the green hydrogen production plant, similar to the Cardano plant, was identified during the year.

At the same time, other planning activities were carried out, such as work to restore the navigability of the River Po, the implementation of a relining system for DN 800 water supply pipelines in the Taranto area for Acquedotto Pugliese S.p.A., and various works under the framework agreement for the reduction of hydraulic risk in the Sarno river basin in the Campania region.

Finally, in the field of services to agencies, and in particular in the field of hydrological monitoring, Hydrodata has been managing the hydrometric monitoring network of the Piedmont Region for over 10 years, both in terms of station operations and in relation to the validation and processing of regional hydrological data.

Alps Mining Farm

Another innovation project also began in 2021: Alperia's first **Mining Farm**. At the oldest power plant, in Tell, 190 industrial computers have been installed whose task is to sell computing power on this specific market. This power is developed from hydroelectric power. The project is managed in collaboration with the Trentino-based startup Alps Blockchain and aims to build a bridge between blockchain technology and the world of renewable energy. Part of the energy is therefore recycled and used for self-consumption on the Mining Farm.

Fusion Grant

Within the framework of the Fusion Grant, an initiative created by the Fondazione Cassa di Risparmio di Bolzano in collaboration with NOI Techpark together with the Südtiroler Wirtschaftsring and Rete Economia Alto Adige, Alperia was awarded the support of post-doctoral researchers under 40 engaged in scientific research projects in South Tyrol aimed at promoting development and innovation in the local economy.

Alperia, in partnership with the Free University of Bolzano, presented a project to the competition that aims to identify new methods to better understand the effects of sediment transport on fish fauna, using innovative CFD (Computational Fluid Dynamics) simulation software, a simulation technique that uses mathematical formulas to simulate fluid flow and heat transfer. With this project Alperia wants to reaffirm the importance of Research and Development and focus on sustainability issues, as evidenced by the commitment to solving environmental problems in the territory where we operate.

IDEE Project

The IDEE "Data Integration for Energy Efficiency" project aiming to make data on buildings easily accessible to public authorities for the optimal management of energy efficiency policies ended in 2022. The project, financed by the European Union through the European Regional Development Fund (ERDF), saw the collaboration of Alperia with the Bolzano-based company R3 GIS and the Faculty of Computer Science and Technology of the Free University of Bolzano. IDEE has developed innovative information technology to provide building information, including electricity, gas and district heating consumption, from a variety of databases, making it accessible in an intuitive way. This tool can support public authorities in pursuing sustainability goals by planning targeted works or surveying the most suitable buildings for the installation of photovoltaic systems. In addition, the system will be able to process the information by providing maps and charts, and comparing data on a time line, which is particularly important for monitoring the results of initiatives taken. The project was developed in the city of Merano, and is intended to be replicable and adaptable for other territorial organisations.

6.4.2 Digital transformation

In order to meet the business needs resulting from the many challenges faced by the energy sector, IT has worked to develop **new systems and applications**, especially in sales and billing. Enabling infrastructures were developed for organisational processes and the multi-channel system was perfected with a customer centric perspective. The migration to the **cloud** also continued and the activity relating to **security** was consolidated in collaboration with the DPO (with a focus on physical, application and cyber security). Furthermore, an in-depth study on the topic of the blockchain was carried out with the University of Trento, in terms of security protocols.

At the same time, IT integrated the companies that merged into Alperia Green Future following the reorganisation.

The evolution of the **data platform** also continued to integrate trading, production and sales data. This is a project that will be launched in 2021 with the aim of increasingly aligning data management with the business. With the expansion of the Group, the complexities and possible vulnerabilities increase, but also the business opportunities that can be explored thanks to this growing amount of data. The use of the Data Platform allows Alperia to cross-reference data to develop predictive analyses and new projects.

The digital transformation team, also in 2022, was involved in professional development activities and collaborated in **training** for Alperia employees. Furthermore, new people joined the team, following some retirements.

In the post COVID-19 period, there has been a focus on the **“second life” of the infrastructures** which can now be disposed of for family use, with the introduction of specific redemption procedures.

In 2023, many IT activities will be dedicated to supporting the development of the company from a customer-centric perspective, facilitating the introduction of customised products/services. All this, pursuing **continuous improvement of the service** also through the automation of some processes to simplify the work of the employees and the customer experience.

Strategic objective: We want to actively contribute to the energy transition and develop new technological solutions with innovative research projects that help limit negative externalities.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Increased investments in research and innovation	There are a total of 41 projects distributed across all BUs	Annually	Investments in research and innovation (€ millions)	+5% relative annual increase	€1.45 m (2022)	X	SDG 9
Increase in employees involved in innovation processes	There are a total of 41 projects distributed across all BUs, in which a range of people have been involved	Annually	Number of employees in research and innovation projects	More than the previous year	43	X	SDG 9
Implement a training curriculum for creating an innovation culture	Dedicated training during the Startup Factory 4 by Luiss Business School and Gellify on topics of innovation, entrepreneurship and open innovation	Annually	Number of employees trained on innovation issues	20 people/year with >5h/year	21 people 21 hours/person	✓	SDG 8 SDG 9
Cooperation and search for synergies with businesses, startups and research institutes (OPEN INNOVATION)	Thanks to the innovation procedure and the Startup Factory, various projects have been carried out in collaboration between Alperia, the startups	Annually	Number of projects with startups that have led to initiatives/total projects proposed (alternatively calcula-	>5	21	✓	SDG 9

	and research institutes		tion of SROI for each project)				
Development of tools and support the implementation of the best ideas of entrepreneurs during the acceleration phase and after it, supporting them during the Startup Factory process	During the Startup Factory 4, Alperia employees had the opportunity to apply with their own ideas	Annually	No. of suggestions on the internet portal	10	12	✓	SDG 9
Complete the Smart Meter return plan from the province	Compliance with the plan shared and approved with the Authority	Annually	No. of smart meters installed	Compliance with the plan shared and approved with the authority	49,809	✓	SDG 7 SDG 9
Development of KPIs to monitor the impact of Innovation Management		2023	-	-		New	SDG 9
Establish a plan to present the Smart Edyna project to stakeholders (e.g. public, schools, customers)		2023	-	-		New	SDG 9
Assess the integration of sustainability criteria in the choice of suppliers for PV panels (circular economy: how products are how products are manufactured and can be reused and recycled)		2023	-	-		New	SDG 9 SDG 12
Innovation projects (or investments) linked to the SDGs		2024	Innovation projects (or investments) linked to the SDGs/Total Innovation projects (or investments)	>80%		New	SDG 9 SDG 12
Introduction of a Trend Management system and disseminate the tool throughout the organisation		2025	-			Ongoing	SDG 9
Increase our efforts to develop technologies to create and exploit hydrogen		2027	production H2/day (t)	5		New	SDG 7 SDG 9

Strategic objective: We want to create economic value in the long run (e.g. through dividends, taxes, investments), and make our business model resilient in order to cope with new evolutionary and competitive scenarios.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Assess that new Engineering projects for the Alperia Group are aligned with the EU Taxonomy	Integration in feasibility studies	Annually (after 2024)	% of engineering projects aligned with the Taxonomy.			New	SDG 12
Assess that new Innovation projects for the Alperia Group are aligned with the EU Taxonomy		Annually (after 2024)	% of innovation projects aligned with the Taxonomy.	>80%		New	SDG 12
Complete Phase 2 of the AIFA (Advanced Inflow Forecast Algorithm) project to improve the management of water resources both in terms of plant performance and placement on the energy exchange.		2024	-			New	SDG 6 SDG 7 SDG 12
Assess the possibilities for investing in storage technologies (H ₂ , pumped storage plants, thermal storage, batteries)		2027	-			New	SDG 11 SDG 12

6.4.3 Cybersecurity

How we handle the issue

Alperia contributes directly to collected data security management through its commercial activity in the markets. The Group has set up a specific unit (DPS Data Protection & Security) which defines the guidelines in the management of security and data protection, monitors compliance and reports on the activities and measures implemented. IT security protects Alperia's know-how and the integrity of its management systems and the data assets of its customers, safeguarding the peace of mind of the public and guaranteeing the supply of electricity, gas and heat in its territory. The Group defines the boundary of information security as the set of all the boundaries that derive from the different areas involving IT and business. Specifically, these are the following boundaries and operating environments: Data Centres, Cloud Computing, WiFi, Mobile Network and Local Area Network, Internet of Things, Manufacturing Plants, Distribution Plants, Telecommunications, Smart Grids, Transmission Systems, Fixed and Mobile Devices. Specific limitations derive from the business organisational structure of the various BUs and areas each with their own specific needs.

Failure/inadequate upgrading of the IT infrastructure and preparation of contingency plans in the event of IT attacks could cause a possible impact on the continuity of service delivery, with consequent loss of data and reputational damage.

Management approaches include, among others, certifications such as ISO 27001, business continuity plans (INS-212.01 Business Continuity – IT Disaster Recovery), security threat prevention plans (INS-105.02 Information Risk Management, INS-220.01 Operating instructions for the secure handling of information), etc. The management approach aims to establish a cutting-edge and continuously updated data protection standard and a state-of-the-art security standard that optimally prevents and mitigates negative impacts inside and outside the company. Tools for this purpose include the implementation of ISO 27001 and the team capable of providing a professional response in the event of a cyberattack (INS-220.10 Incident Handling IT). Alperia has defined internal managers (e.g. Security Officer) who coordinate security-related projects; the DPO (Data Protection Officer) oversees the implementation of the GDPR (General Data Protection Regulation) and monitors compliance. The Group also participates in national safety conferences (e.g. CLUSIT) and promotes the training and continuous updating of its employees on the subject of security and data protection.

Management systems are evaluated on a regular basis (from daily to annually). For example, since 2015, the ISO 27000 certification has been assessed annually by an external auditor. The effectiveness of management systems is also regularly reviewed and monitored on the basis of set indicators and procedures. The necessary adjustments are constantly implemented throughout the year, if and when required. The results of the initiatives are presented to the stakeholders during the preparation of the Sustainability Report and the progress of the objectives declared in the Sustainability Plan through specific KPIs. Furthermore, the results are presented and assessed by the top corporate bodies.

The involvement of stakeholders in the definition of projects and initiatives relating to Cyber Security mainly took place during the meetings of the CSR Steering Committee and with specific meetings with the management and the reference function during which the views and opinions of the various stakeholders were collected on the various initiatives. The opinion of external stakeholders, and the communication of Alperia's initiatives to them, was gathered during the course of a number of roundtables when updating the materiality analysis

What was done during the year?

The **Data Protection & Security** structure of Alperia is committed to ensuring data security and protection and to guaranteeing the full security and operational continuity of the Group's information systems. In particular, the unit is responsible for: drawing up guidelines in terms of ensuring compliance with the GDPR for the protection of personal data and Cyber Security, monitoring the vulnerability of systems, introducing new state-of-the-art security measures, and promoting awareness and training programmes for employees on IT security.

For the **Data Protection** area, during the year the supervision and fine-tuning of all registers was carried out, as per practice, both for the compliance part and for personal data. The cookie policies have also been standardised in accordance with the provisions of the legislation and an assessment has been carried out to verify the correct progress of the activities, following which a report is sent to the individual data controllers. Furthermore, a project for the digitised management of activities was completed. The aim is to ensure compliance in the management of privacy according to the regulations. Furthermore, since 2022 work has begun to obtain **ISO 27701**, a certification that provides the management system framework for protecting personally identifiable information and which is expected to be obtained in 2023.

For the Security part, the **Security Plan** has been implemented which indicates all the steps to be followed in terms of analyses, measures and checks. This activity is carried out with the collaboration of the Digital & Technology department which then has the responsibility of installing and managing the technical and organisational measures / solutions identified. The aim is to try to reduce residual risk as much as possible, through advanced technologies and employee training. For this reason, the risk manager is also always up-to-date with the Plan, with whom a scale of priorities has been defined with respect to the most urgent actions to be taken. These priorities were presented to the Alperia board. Furthermore, as provided for in the Plan:

- **the SOC and EDR projects** have been completed: SOC is the Security Operation Centre, a 24-hour external facility that can rapidly implement remediation actions for the mitigation of automated security risks, is a process that is still

evolving; EDR or Endpoint detection and response, is a highly advanced antivirus technology for PCs, servers, smartphones and the cloud, that works through machine learning and artificial intelligence to track potential threats and intervene in time. The project, which started in 2021, was completed in spring 2022 and has been boosted by the introduction of Multi Factor Authentication.

- the **GRC (Governance – Risk – Compliance) system** was developed, used to monitor processes and achieve pre-set objectives (corporate governance), identify and counter possible risks (risk management) and comply with the regulations and rules that apply to them daily activity (compliance);
- the **DLP – Data Loss Prevention system** was implemented, to protect information assets also from possible internal theft;
- the programme to manage the **Portability Oblivion** is being developed in order to be able to respond, according to the provisions of the law, to any requests from customers on the erasure of their data from the data controller.

Again, for the **System & Operation** area, the evolution of Multifactor authentication is planned with the **Zero Trust** model according to which every network transaction must be authenticated before it can take place. Therefore, to prevent possible attacks, all the steps following access are checked and authenticated, including the so-called "lateral movements". It therefore does not matter whether the user has already logged on to the network once or several times, because the identity is not considered trustworthy if it is not verified again. In practice, all users, systems and servers should be considered untrusted until proven otherwise. Audits of new technologies introduced are also planned to ensure that specific international safety standards are met.

Furthermore, in the **networking & infrastructure** area, audits of the cloud section are carried out to ensure that the global CSA standard is followed, as well as targeted vulnerability and penetration tests. Incident management simulations are also planned first with middle management and in the future with top management. The full involvement of all areas of the company and a greater awareness of IT and systems security and data protection is considered essential. This is another reason why a large part of the activity is devoted to **training**. In 2022, Alperia delivered courses through the **automated and customisable training** platform introduced the previous year. More than 1,000 users were involved in the training, with about 8 training activities per year carried out. The e-learning courses use gamification methods and include tests at the end to analyse the most vulnerable areas. This activity is complemented by blind phishing simulations to field test the effectiveness of the lessons. To reduce the risks of external attacks, or at least mitigate them, it is not sufficient just to have the best technology. It is increasingly important to invest in greater awareness and training of people who are exposed to such risks every day when working with IT systems. Also for this reason, Alperia is developing courses dedicated to crisis management to be shared with colleagues in the Group by using simulations. Furthermore, again through the same platform, Alperia provided specific training on Data Protection, designed and implemented within DP&S.

During 2022, the Data Protection & Security structure obtained the renewal of the **ISO 27001** certification for the IT security management system, also extending it to the OT (Operation Technology) world.

The department also develops important collaboration activities, at regional and national level, with organisations and institutions that operate in the prevention of cyber attacks. Among these: **Clusit** (Italian Association for IT Security), the **Postal Police** of Trentino-Alto Adige, **AIEA** (Italian Association of Information Systems Auditors), and **CSA** (Cyber Security Angels). Furthermore, Alperia collaborates with CSIRT, the Utilitalia working group for the study of KPIs on security risk to be used as an inter-company benchmark.

Consumer privacy {GRI 418-1}

	Unit	2022	2021	2020	2019	YtY variation
Total number of complaints received about customer privacy breaches	No.	0	0	0	0	0%
i. complaints received from external subjects and confirmed by the organisation	No.	0	0	0	0	0%
ii. complaints from regulatory bodies	No.	0	0	0	0	0%
Total number of leaks, thefts or loss of identified customer data	No.	0	0	0	0	0%

Security figures

In 2022, Alperia did not encounter any significant IT security incidents, but threats did emerge. The protection systems blocked an average of 9,400 malicious emails (not only spam) and 2,000 malicious connection attempts every day. The number is 33% higher than in 2021 and is due to the new cloud platforms that have gone into production and are used by many users. During the year, however, additional security measures were implemented aimed at the preventive blocking of some flows even before they are analysed by the filtering systems. At the same time, spam blocking grew by 5% despite the high growth in the absolute number of incoming emails.

Each month, Alperia **identifies and blocks** an average of:

- 22 viruses: the figure compared to 2021 is down 60%, because attack vehicles (e.g. USB sticks) have been closed down, the switch to the Cloud controlled by the antivirus system has been made, awareness has been raised and measures on the perimeter firewall have been increased. Overall, this strategy has lowered the number of viruses present on local systems (PCs and servers).
- 25 pieces of spyware (software that collects information about a user's online activity): the figure compared to 2021 increased by 32%.
- 13 million malicious, suspicious or prohibited internet use incidents (activities related to suspicious or prohibited browsing): the value is down -20% compared to 2021 because as the number of threats increases, the number of blocks implemented on perimeter firewall systems increases.
- 18,400 malicious or disallowed applications: down due to the adoption of preventive application improvements.
- 104,000 malicious or disallowed content: also up 56% because as the number of threats increases, the number of blocks implemented on perimeter firewall systems increases. As a result of the generational change in firewalls, blocking rules were rewritten and the level of detection of malicious activity was raised. All traffic from the OT, VPNs and newly acquired BUs and sites was channelled through the new perimeter firewalls, effectively increasing the amount of traffic to and from the Internet. Many social networks or collaboration platforms are not allowed/permitted, so related activities are blocked. Attempts to access social platforms have increased, probably also due to smart working.

The results of Alperia's **Security Awareness Programme** are also noted:

- Security awareness: 88% out of 1,300 users is the rate of participation in safety training, considered adequate but with room for improvement. 90% is the overall result of the final test score. A percentage considered adequate.
- Phishing simulation: 16% of clicked links Click Rate. 1% Compromised access. A result that leaves room for improvement and is considered inadequate.
- Data protection: 80% out of 200 users is the privacy training participation rate. A percentage that can be improved but is considered adequate. 90% is the result of the final test score, considered adequate.

Other indicators related to cyber security

	Unit	2022	2021	2020	2019	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
malicious emails	No.	9,400	11,200	2,000	4,000	-16% ¹
% of malicious emails out of total email processed	%	24	29	24	-	-5%
malicious connection attempts	No.	2,000	1,500	1,000	6,000	33%
Every month, Alperia identifies and blocks an average of:						
viruses on local devices	No.	22	55	530	2930	-60% ²
spyware on local devices (software that collects information about your online activity)	No.	25	19	27	31	32%
malicious internet activity blocked on local devices	No.	47	74	557	2961	-36% ³

malicious, suspicious or prohibited Internet activity	No.	13,650,000	17,000,000	2,800,000	2,000,000	-20% ⁴
malicious or unauthorised applications	No.	18,400	270,000	360	200	-93%
malicious internal activity blocked on devices	No.	104,000	84,000	54,000	250,000	56%
Every year, the results of the Alperia safety awareness programme:						
Security awareness: % user participation rate in safety training	%	88% out of 1,300 users	90% out of 1,159 users			
Security awareness: % overall result of the final test	%	90	80			10%
Phishing simulation: % of links clicked	%	16	20			-4%
Phishing simulation: Compromised logins	%	1	7			-6%
Data protection: user participation percentage in privacy training	%	80% out of 200 users	88% out of 1,211 users			
Data protection: % overall result of the final test	%	90	89			

¹ In 2021, malicious email categories in general were added, i.e. not just spam. This decision was made to bring the term “malicious” into line with data from other systems as well.

² Various strategies have been implemented (e.g. moving to the cloud controlled by antivirus systems, raising awareness, increasing measures on the perimeter firewall) which overall have reduced the number of viruses present on local systems (PCs and servers).

^{3/4} Due to the generational change of firewalls, blocking rules have been rewritten and the level of detection of malicious activity has been increased.

Strategic objective: We want to ensure the security of computer systems and the protection of all data.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Obtaining and maintaining ISO 27701 certification over the years – privacy information management system	Obtaining ISO 7701:2019 certification	2022	Percentage achieved	100%	100%	✓	SDG 9
Maintenance of ISO 27001 certification over the years for the agreed perimeter	ISO 27001 annual audits	Annually	Cyber-security and ISO 27001 compliance	100%	100%	✓	SDG 9
No security incidents involving information management and data protection	Implementing a “Zero Trust” Solution	Annually	Security incidents	0	0	✓	SDG 9
Ensure business continuity in the event of computer incidents (such as server or power failures)	Expansion of platforms to ensure complete compatibility of infrastructures with needs	Annually	Business continuity and disaster recovery	100%		✓	SDG 9
Monitor IT systems in order to ensure proactive and reactive interventions in the presence of security events in the IT manned period	Maintenance of the SOC service and its progressive extension to further areas	2022	No. of security incidents notified by the SOC	-		✓	SDG 9
Create a culture of cyber security and data protection among our employees in order to reduce overall systems risks	Cyber security & Data Protection training plan	2022	Percentage of participating employees out of the total number of guests invited to courses relating to privacy and Cyber GDPR	85%	85%	✓	SDG 9



Customers

We want to give our customers all the tools to build a more sustainable future. We do this by dealing with them in an open, transparent, agile manner, putting mutual trust and respect at the centre.



We ensure access to affordable, reliable, sustainable and modern energy systems



We build and maintain safe and resilient infrastructure, foster innovation and support equitable, responsible and sustainable development



We want to make cities more inclusive, safe, energy efficient and sustainable



We ensure sustainable patterns of production and consumption

7. CUSTOMERS

Total customers	380,914	Total number of identified leaks, thefts, or losses of customer data	0
New customers acquired in 2022	+1%	Complaints per 100 customers	0.11
Percentage of revenues from sustainable products & services	45 %	Percentage of complaints promptly processed	99.75%

7.1 Sustainable products and services

How we handle the issue

As set out in the policy, Alperia is committed to developing and selling sustainable, innovative and green products and services that have a better environmental and social impact and meet customers' needs. The Group's choices in this regard generate direct impacts that are mainly on/to private customers and its business, and indirect impacts on the environment in relation to the development of sustainable products and services that diminish the negative externalities due to their use by consumers. Furthermore, the failure to develop and promote sustainable products and services could have impacts on the use of the Group's products and services that could slow down the energy transition of the population and the achievement of net zero for Alperia.

The impacts generated are largely due to the Group's own activities, however, impacts may be generated as a result of collaborations with other industry players in their business relations, for the dissemination of sustainable products or services (e.g. Neogy).

Alperia aims to develop its current product portfolio with a view to greater sustainability. The company's objective is to offer customers sustainable, innovative products and services that are designed to achieve energy savings and more efficient use of energy. The goal should be to use sustainable resources to save energy and use it more efficiently. In addition, Alperia is Carbon Neutral for operational emissions and intends to work towards net zero, contributing significantly to the reduction of CO₂ emissions, as envisaged in the 2050 Climate Plan of the Autonomous Province of Bolzano-South Tyrol.

Alperia has set itself the goal of increasing the revenue share derived from sustainable products and services. The achievement of goals and the implementation of agreed-upon measures is regularly monitored and evaluated as part of sustainability management. Responsibility lies with the respective Business Units. The share of revenues generated by sustainable products and services and investments to expand the range of sustainable products is calculated and published in the annual report.

Stakeholder engagement and consultation on the issue took place when the materiality analysis was updated in 2021.

What was done during the year?

Alperia produces **Green Energy** from renewable sources, through its managed hydroelectric plants within the province. In 2022, these plants, together with solar energy and biomass, generated around 3.01 TWh/year (around 4.08 TWh/year in 2021) of energy. Most power plants are certified, meaning that they produce 100% of CO₂-free renewable energy in accordance with current legislation, ensuring a sustainable energy supply. This energy is made available to both private and business customers in line with the Province of Bolzano's 2050 Climate Plan. In this way, Alperia customers can supply themselves with clean energy, produced from the power of the water that flows from the mountains, contributing to climate protection. This is also important for businesses, which can gain important environmental credentials by buying green energy.

With Vision 2031, Alperia has set itself ambitious goals regarding **sustainable products**. In particular, it has stipulated that **by 2031 it will only sell green electricity** and the same will happen, progressively, with **green gas and biomethane**. All this will also lead to a reduction in the amount of (non-green) energy sold to corporate customers. Vision 2031 therefore envisages a progressive increase in the percentage of Green Energy sold, currently equal to 35%, up to 72% in 2027 and 100% in 2031. The same will be put in place with Green Gas: currently equal to 5%, it must be 49% by 2027 and to this must be added 18% of biomethane.

In 2022, 45% of Alperia's revenues were generated by sustainable products and services. In 2021, the share was 47%. The objective, in line with the 2023-2027 Business Plan, is to significantly increase this share, investing increasingly in: green gas, green energy, district heating, energy efficiency and electric mobility. We are working to make our green products increasingly

popular at all levels. Currently, 100% of the energy sold in South Tyrol for residential customers is green, and the share of Green Gas has also increased, which from 2019 will also be offered outside South Tyrol to domestic and business customers. In addition, from 2020, through a unilateral contract amendment, we ensured that all customers in the free market could switch to Green Energy.

Partnerships - We have also signed an agreement with Südtiroler Wirtschaftsring, the association that brings together the six most representative business associations in South Tyrol – Unione Commercio Turismo Servizi Alto Adige, Unione Albergatori e Pubblici Esercenti dell'Alto Adige, Confartigianato Imprese, Unione Agricoltori e Coltivatori Diretti Sudtirolesi, Assoimprenditori, Associazione Liberi Professionisti Altoatesini – so that all member SMEs can use Green Gas. A mission that we continue to carry out even outside South Tyrol so that increasingly more SMEs adopt Green Energy and Green Gas.

Alperia provides a free-of-charge communication package including a Green Energy certification, a metal tag or Green Energy logo, which can be published on the website or printed on corporate material and product packaging. The same is true for those who choose **Green Gas**, a climate-neutral gas whose emissions are offset with climate protection projects that comply with the Gold Standard and/or the Voluntary Carbon Standard, which meet the Kyoto Protocol's strict criteria for climate protection. The climate-neutral position is certified every year by TÜV NORD, a renowned independent certification body. For further details on the supported projects, see the dedicated page on the company website¹¹.

“Green gas is greenwashing.”

Comment from an employee; Stakeholder Survey 2021

Alperia replied: *Green Gas is a climate neutral gas, the emissions of which are offset with climate-protection projects and certified annually by TÜV NORD, an established independent certification body. The gas distribution network always remains the same, but customers who choose Alperia's Green Gas have a certified guarantee that the amount of CO₂ generated is offset by Alperia through investments in environmentally friendly projects. These projects comply with the Gold Standard and/or Voluntary Carbon Standard, the two most widely used certification standards that meet the requirements of the Kyoto Protocol for climate protection. Alperia customers are therefore guaranteed that all greenhouse gas emissions generated are offset by a certified climate-protection project. In particular, in 2022 Alperia offset 121,493 tons of CO₂.*

Offsetting projects to protect the environment - Alperia supports projects that promote energy efficiency, green and sustainable energy production and reforestation. The projects comply with the Gold Standard and/or the Verified Carbon Standard, and meet the Kyoto Protocol criteria and requirements. Offsetting greenhouse gas emissions helps to generate a climate-neutral and environmentally friendly lifestyle. This is why Alperia invests in promoting green gas, and will increasingly do so in the future. Furthermore, to avoid additional emissions generated by using the postal service, green gas bills are sent exclusively in a paperless format.

The new **Fintel** company joined Alperia in January 2022 through a 90% acquisition. Fintel, one of the most important companies in the Marche region and operating nationwide, specialises in the marketing of energy and gas for private individuals on the free market and VAT numbers, as well as in the development of systems for domestic photovoltaics. For Alperia, it is responsible for the sales of Green Energy and Alperia MyHome, and from 2023 also green gas. Also in 2024, the company's integration activities for IT systems and HR will start. At the moment, Fintel is following a project born from the Marche region's "Safe & Green" tender (2018-19) dedicated to the rebirth of earthquake-prone territories, which has as its symbol a green building (67% owned by Fintel) equipped with a 10kw/h photovoltaic system with storage, consumption control systems and CO₂ emitted by the building and advanced efficiency systems. In 2023 it will be open to the public and will also be used as a showroom to test the efficiency systems. Furthermore, by 2025 we expect to have completed the acquisition of 100% of Fintel, thus further consolidating Alperia's roots outside the Autonomous Province of Bolzano also in the sales to end customers sector. The operation will allow for the expansion of the portfolio with around 30,000 customers, mainly concentrated on the residential market (domestic customers and customers with VAT numbers), and of the commercial network consisting of 3 branches managed by agencies, 3 directly managed branches, 29 corners and 50 agents.

7.1.2 Smart Region

To make a region more sustainable, it is essential to make it smarter as well. Adopting intelligent technologies allows energy management to be more efficient, to avoid waste and to literally revolutionise some sectors, such as mobility. In 2022, Alperia invested €17 m to develop innovation projects in collaboration with its companies and in synergy with other players in the area. Specifically:

E-Mobility: Alperia is at the forefront of developing electric mobility and supporting its diffusion at a national level. Together with the Dolomiti Energia Group, it founded the joint venture Neogy, which has already been awarded one of the "100 Italian Excellences" and has made South Tyrol one of the best equipped areas for green mobility in Italy and Europe. Also in 2022, the Smart Mobility Report of the Milan Polytechnic indicated this territory as having the highest density of e-mobility

¹¹ <https://www.alperiaigroup.eu/it/alperia-green-gas>

infrastructures in Italy and among the highest in Europe in relation to the number of inhabitants. In 2022 alone, **33 hypercharger stations** were installed in the province of Bolzano, for a total of 74 stations of this type in the area, which is set to become 150 by 2023. This is intended to make it easier to switch to electric vehicles. The stations installed are also ultra-fast charging stations for electric cars, allowing you to charge 100 km of driving in just 12 minutes. In addition: by 2023, Alperia will create **two charging parks** on the Brenner axis with 10-15 charging stations each. A project that in the coming years could be extended to the more tourism-focused areas of the region, where Alperia already launched a project in 2021 to bring shared electric mobility to accommodation facilities, providing an electric car free of charge for the car sharing service at South Tyrol's hotels. The first cars, all Renault ZOE full-electric, were delivered in 2021 to ten accommodation facilities that chose Alperia's energy from 100% renewable sources. As the data confirms, these are projects that make it possible to increase the propensity for e-mobility: the energy supplied from year to year by service stations is growing, going from 1.4 GWh in 2021 to 3 GWh in 2022. Staying on the subject of sustainable mobility for the tourism sector, in 2022, one of the European projects to which Alperia was committed with Neogy came to an end: **Mobster** (Electric mobility for sustainable tourism). The project intended to encourage the spread of electric mobility and promote sustainable tourism in cross-border locations in Italy and Switzerland, in the provinces of Bolzano and Verbano-Cusio-Ossola. Over three years, the project led to the installation of 50 charging infrastructures for electric vehicles in the areas indicated, thus contributing to the creation of "green" regions capable of attracting environmentally conscious tourists and educating more traditional tourists. the European **LIFE Alps** project (Zero Emission Services for a Decarbonised Alpine Economy) continues, which aims to turn South Tyrol into a model region for zero-emission mobility in the Alps. To make this happen, partners from all parts of South Tyrol have joined forces to expand the infrastructure network for zero-emission mobility, put pilot fleets on the road and develop zero-emission services (e.g. taxis, shuttle services and freight transport). As part of this, Alperia and Neogy will install and manage 10 fast-charging stations throughout the Alps. Furthermore, in 2022, the Neogy team worked to expand the provision of as-a-services with small utilities by developing a network dynamic made up of consultancy, technology and know-how. Finally, it should be remembered that in order to bring green mobility increasingly "within reach" for the public, Neogy has launched "Neogy ON", a complete electric car charging solution for private customers that includes the installation of a private charging station by a professional in the customer's garage or private parking space. Finally, the development of a proposal dedicated to electric car sharing is being assessed.

Care4u: is the company owned by Alperia dedicated to smart health, set up with the aim of putting technologies and experience at the service of the community, to improve the well-being of the public. In fact, it has an IT platform that offers a series of remote assistance services by monitoring patients, allowing them to be assisted wherever they are. It is in use in a number of in-patient facilities (homes for the elderly, nursing homes, clinics, hospitals) in the area, such as the RSAs in Terlan, Montagna, Sluderno and Bolzano and in the Bolzano hospital. Care4u technologies help nursing staff to better manage patients, developing new features as needed. In 2022, for example, a pilot project will be launched in the waiting room of the Bolzano hospital. It will use a wearable wristband to detect people passing through. Care4u's mission, besides being an expression of innovative technologies and cutting-edge know-how, therefore has an important social value for Alperia, which in this way contributes to the well-being of the local population: the ageing population and its care. An additional monitoring system for use in the home is also being developed. Finally, facilities where Care4u is adopted are also offered advice on possible energy efficiency improvements (from staff training to the installation of AI devices for more efficient consumption management).

Smart Land: to make the agricultural sector more efficient and reduce waste, Alperia has developed intelligent sensors which, when connected to a digital infrastructure for targeted irrigation in orchards, allow water savings of 30% or more. The sensors measure soil moisture in the fields and combine data from weather forecasts with current temperatures. As a result, Alperia's LoRaWan™ network enables this measurement data to be sent from the fields to the farmer in real time via an app. To make the solution accessible to all farmers, Alperia offers a complete package that includes both the sensor and the technical data transmission. In 2022, the project continued by extending the sensors to the vineyards as well and in collaboration with the Laimburg Experimentation Centre, sensors were installed in over 20 hectares of orchards on a farm near Merano. The amount of water saved compared to the previous year for irrigation was 73%. It will be increasingly important for Alperia to share results of this type and encourage the development of greater awareness of the topic. In fact, Alperia has presented its results on numerous dedicated public occasions, such as Interpoma.

Renewable Energy Communities (CER): The development of a greener and smarter region also includes more innovative energy management and **energy communities** fit perfectly into this sphere of action. The aim of CERs is to make the energy produced by renewable energy power plants – mainly photovoltaic and wind power – available locally so that several interconnected producers/consumers in an energy community can benefit directly. To optimise the energy flows exchanged between the members of the CER, Alperia's solution uses Regalgrid devices called SNoCU (Smart Node Control Units) which interconnect the users via the Cloud, transmitting and processing the data relating to the energy produced, consumed and stored by each member of the Community and activating and deactivating the production, storage and, sometimes, the consumption of electricity of each of them on the basis of the results processed by an algorithm developed by Regalgrid itself. Energy flows are thereby self-regulated and optimised to maximise profits (in terms of collective self-consumption and thus, indirectly, the economic incentives associated with it). Users, connected to a dedicated digital platform through a personal portal and an app developed specifically for mobile devices, are able to monitor and manage the energy produced, consumed, and interchanged in real time both at individual and community level. Moreover, the major innovation lies in the fact that CERs are mixed, so can be developed for residential, SME, large enterprise and public administration. Thus, a very significant energy balance can be achieved: thanks to the Regalgrid technology, the energy produced by an SME or a school can be put into circulation and also absorbed by activities – public or private – in the surrounding area. Energy flows are therefore generated

which can have significant benefits. In 2022, in particular, Alperia, Raiffeisenverband Südtirol and Regalgrid signed a memorandum of understanding to create **cooperative energy communities**. This will allow people to come together in energy communities to produce, consume and sell renewable energy and actively contribute to the energy transition. The memorandum of understanding envisages the start of meetings with local public administrations who are asked to lead the way throughout the municipality, followed by the identification of the areas where the systems can be installed in the municipal or inter-municipal area, and the consequent feasibility study, then meetings with the public and the opening of registrations. The meetings held to present the project included one with Assindustria and the Consortium of Municipalities, which was attended by more than 100 administrations. A counter has also been set up with the **Assoimprenditori**, where companies can go every week to find out more about CERs. Alperia will manage the communities under concession for the next 20 years. In South Tyrol, the first pilot project will start in **Postal**, while in Veneto a pilot project is planned with six furniture companies in **Pieve di Soligo**. The participating companies are: Biemmeri, Bocon, Bubola & Naibo, Euromobil, GD Dorigo, Gugel, Loran and Homes. The municipality of Pieve di Soligo is also part of the team. By participating in the energy community, it will be able to share the energy costs of public facilities in its territory (such as schools, gyms, swimming pools, offices). The energy community also remains open to other interested companies as well as employees of companies and the public, because the more entities network and participate in the community, the more energy can be exchanged, benefiting all participants, large and small. This will probably be the first energy community in the province of Treviso with a primary substation, to feed the excess energy produced by individual photovoltaic systems into the network through an intelligent grid. Alperia will implement the turnkey project in the energy community, from design, supply, installation, management and connection practices with subsequent remote monitoring and extraordinary maintenance. To enter the implementation phase, however, the Government's **implementing decree** on CERs is awaited. The realisation of a first CER in an apartment building in Milan was also supported. Meanwhile, the project launched at the **NOI Techpark** in Bolzano continues: on one of the buildings in the technology park there is a photovoltaic system that has been virtually subdivided to simulate distributed generation and provide some users with their own production system, complete with inverters and energy storage systems (batteries) installed by Alperia.

Photovoltaic: Since 2022, Solar Total Italia, a company founded on the experience of Solar Total Group, Europe's leading provider of turnkey photovoltaic systems for private and corporate customers with more than 30,000 active customers in Europe, is also part of Alperia Green Future. Its skills will be essential for the development of photovoltaic expansion projects and for energy communities. In particular, Solar Total's know-how will be instrumental in supporting the growth of Alperia MyHome, a product dedicated to domestic photovoltaics which is much in demand on the market. **Alperia MyHome** is the first is a turnkey photovoltaic system with storage specifically designed for homes. The system allows customers to produce their own energy through solar panels, supplying their entire home and covering up to 80% of consumption with a well-sized system. In addition, a storage system is included in MyHome so that some of the self-produced energy can be used even when the sun is not shining. Installation and contact activation is preceded by an inspection that allows us to assess the best solution to reduce bill costs, thanks to the latest generation panels designed specifically for each home. There are 5 solutions: Small, Medium, Large, Extra Large and Special (also suitable for apartment blocks and will become the basis for the development of the "MyBuilding" offer for collective apartment building consumption).

Energy efficiency: In 2022, with the new company **Alperia Green Future** – which incorporates Alperia Bartucci S.r.l., Gruppo Green Power and Solar Total – the Group has further strengthened its activities focussed on sustainability and the ecological transition. This new company is part of the "Smart Region" Business Unit, supporting with its activities the promotion of a series of high-tech initiatives for cities and citizens, reinforcing its position on apartment blocks, public administration, healthcare and smart services for citizens and cities. The activity of Alperia Green Future is developed along 4 main axes that represent strategic development factors for the companies and communities in the area: energy upgrading of buildings (Alperia Green Future operates as a General Contractor in the development of energy efficiency projects for buildings, acquiring the tax credit accrued by the end customer through government incentives, e.g. Ecobonus); strategic consultancy for companies (a high-level consultancy aimed at defining a decarbonisation strategy for companies or public bodies); Energy Performance Contracts (contracts where Alperia Green Future supports the investment of an energy efficiency and/or decarbonisation project, sharing the benefits gained with the end customer); and artificial intelligence (Sybil Solutions are advanced automation systems that predictively optimise complex production processes and building climate control systems).

In particular, the company has carried out **energy-efficiency** projects for large industrial and commercial groups, as well as apartment blocks and homes. These operations were supported by the 110% Superbonus which provided for deductions for energy efficiency work, anti-seismic work, installation of photovoltaic systems or infrastructure for recharging electric vehicles in buildings. This activity was developed in South Tyrol also through the cooperation with the South Tyrolean local enterprises networks of ARO and Lvh.Apa Confartigianato Imprese and at national level with the network of enterprises EfficienteRete. According to Alperia Green Future, each building has recorded at least 30% energy savings as a result of the work carried out. The measure has therefore had a significant impact in both economic and environmental terms. Furthermore, the company has developed ESCo projects and services (consultancy, EPC with efficient technologies from third party suppliers and credit transfers for tax deductions), and energy efficiency works based on Sybil's proprietary technology using Advanced Process Control Systems (APC). A specific product for homes will also be launched in 2023: Alperia Sybil Home.

In 2022, Alperia Green Future continued to develop energy efficiency projects with Ecobonus, Sismabonus, Bonus casa and Bonus facciate, partly in partnership with the MSM Consortium (of which Proger, Saccir and Gestioni Italiane are members), through the controlled business network EfficienteRete, a company that provides specialised consultancy and cutting-edge technology, and takes on the financial commitment of projects, thanks to its ability to absorb the transfer of tax credits. Work also continued in the field of **EPCs** – Energy Performance Contracts – for industries, with 101 (of which 32 EPCs, 69 EPSs) projects managed and total annual savings of 5,581 toe - tons of oil equivalent for total avoided emissions into the atmosphere of 23,215 tCO₂. Also in 2022, Alperia Green Future issued about 50,000 Energy Efficiency Certificates related to about 26,000

toe saved by/for the customers for whom, as ESCo, Alperia followed the procedure for obtaining Energy Efficiency Certificates (EEE).

Furthermore, since 2022, Alperia Green Future has worked much more closely with the **Public Administration**, also presenting a public-private partnership project for the energy efficiency of social housing in the municipality of Verona.

The **climate strategy** and **decarbonisation** service developed in 2021 also continued, with significant feedback from companies. The integrated service supports companies in defining a carbon neutrality strategy, offering all the services and products needed to reduce energy consumption and atmospheric emissions. Through the strategic consultancy offered by Alperia, companies can define the decarbonisation objectives and the investments necessary to achieve them. The transition to full sustainability with Alperia's Climate Strategy takes place in three phases:

1. Phase 1: GHG accounting and reduction report. The company's environmental impact is calculated and solutions to reduce it are outlined;
2. Phase 2: Carbon neutrality strategy. The decarbonisation strategy is defined and the "carbon budget" is planned
3. Phase 3: Monitoring and reporting. The results are analysed in relation to the company objectives.

In addition to planning a tailor-made climate strategy, Alperia is then able to implement all the necessary measures to make production processes more efficient, to support the company along its path to achieving climate neutrality. These are crucial projects for companies – also in the light of the rising cost of energy – which are developed starting with careful monitoring and then the identification and application of solid solutions.

Strategic objective: We want to promote an integrated value proposition (commodity and services) focused on the energy transition with 100% green offers and a portfolio of solutions enabling customer decarbonisation.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
Increase in emissions avoided by energy efficiency projects with customers in line with the Business Plan	Implementation of energy-efficiency interventions with customers, both in the industrial sector and in the building sector.	Annual-ly	Tons of CO ₂ avoided with energy-efficiency services	Reduction of 1,400 ktons in 2027 compared to 2021	23,215 tCO ₂ avoided by EPC/EPS projects 178.69 tCO ₂ avoided by BES projects in free building (greenhouse Ecobonus and 65% installations related to 385 cases + one apartment building under the Ecobonus) 156 tCO ₂ avoided by Sybil projects	Ongoing	SDG 7 SDG 11 SDG 12 SDG 13
Public sector awareness of the connection of public buildings to the district heating network and the purchase of green electricity in the framework of the new climate plan.	Part I of the PAB 2040 Climate and Energy Plan was published in 2022, which contains the general framework and does not go into the merits of how the general objectives will be implemented.	2022				New	SDG 7 SDG 11 SDG 12 SDG 13
Definition of internal guidelines to promote customer awareness (corporate) of our green products in line with the sustainable brand of Alperia		2023	Internal guide-lines	-		New	SDG 12
Definition of a target value for the share of	Target value for the share of turnover with	2023		-		✓	SDG 12

turnover with sustainable products and services within the scope of Vision 2031/Business Plan and subsequent anchoring of the objectives in the Industrial Plan	sustainable products and services within the defined Vision 2031/2023-2027 Business Plan.						
Internal and external communication campaign focused on the single point for the energy transition for our customers	<ul style="list-style-type: none"> - Publication of articles in our magazine which report ethical examples of customers who have opted for “green” solutions - Publication of the same articles on MyAlperia (internal communication) - Commercial offers with customers that include all the services of the Alperia Group (commodities and services) and where AGF offers itself as a partner for the energy transition - Participation in events (e.g. Key energy fair currently underway) where all the services of the Alperia Group are presented (commodities and services) and where AGF proposes itself as a partner for the energy transition. 	2023	-	-		✓	SDG 12
Among the various project options, present the most sustainable one in terms of impact (under construction, operation, decommissioning; also in terms of the life cycle of the materials/fittings used)		2023	-	-		New	SDG 12
49% of gas sold (based on volume) is green gas (plywood and biomethane)		2027	% Green gas sold	49		New	SDG 7 SDG 12 SDG 13
Quota of green gas sold in line with the provisions of the Business Plan		Annual-ly (after 2023)	% Green gas sold	21% (2023)		New	SDG 7 SDG 12 SDG 13

72% of electricity sold (based on volume) is green.		2027	% green electricity sold	72		New	SDG 7 SDG 12 SDG 13
Quota of green electricity sold in line with the provisions of the Business Plan		Annually (after 2023)	% green electricity sold	47% (2023)		New	SDG 7 SDG 12 SDG 13
Wholesale volume development (ATR) in line with the objective of reducing Scope-3 emissions		2031				New	SDG 12 SDG 13
Definition of measures and implementation to ensure that account managers are consistent with Alperia's green image with SMEs and corporate customers (e.g. e-cars, documentation)		2023	Approval of internal procedure/carrying out workshop with accounts	-		New	SDG 12
Assess offsetting exclusivity project in line with SBTi		2023	-	-		New	SDG 13
Increase in thermal energy sold (+155 GWht, +57%) through expansion of existing networks, new plants and acquisitions, reaching 431 GWht in 2027		2023-2027	Thermal energy sold (GWht)	431		New	SDG 7 SDG 13
Increase in customers served by district heating		2024	% of new contracts signed by district heating	+25% public customers; +14% non-public customers		New	SDG 7 SDG 11 SDG 13
Awareness campaign for district heating with municipalities		2022 - 2023	-	-		New	SDG 7 SDG 11 SDG 12 SDG 13
Increase the diffusion of domestic photovoltaic, corporate, apartment blocks, SMEs and PA		2027	Total cumulative installed power (MW)	84.8 MW		New	SDG 7 SDG 11 SDG 12 SDG 13
E-mobility: expanding the number of managed public		2027	Public charging points (number)	3000		New	SDG 7 SDG 11 SDG 12

charging infrastructures							
Energy Communities: development of distributed self-consumption solutions		2027	Cumulative number of prosumers	1431		New	SDG 7 SDG 11 SDG 12
E-mobility: expanding the number of private charging infrastructures		2027	No. of wall boxes sold	1000		New	SDG 7 SDG 11 SDG 12
E-mobility: promote car sharing based on 100% electric vehicles		2027				New	SDG 7 SDG 11 SDG 12
E-mobility: increase the energy supplied by green energy		2027	Energy supplied (GWh)	47		New	SDG 7 SDG 11 SDG 12
Increase the share of sales of sustainable products and services to 60%		2027	Share of sales of sustainable products and services (%)	60		New	SDG 7 SDG 12
Care4u: extend the teleassistance services to the service of healthcare facilities		2027	Active customers added	400		New	SDG 11 SDG 12

7.2 Customer satisfaction

How we handle the issue

Alperia is committed to involving customers throughout the lifecycle of the products and services it offers, and envisages initiatives to improve and expand customer service, with the aim of building a lasting and trusting relationship with the customer. The Group has a direct impact on customers from its electricity, gas and district heating sales activities. The impact concerns both the domestic customers of the protected and free market and district heating customers, as well as business customers (small and medium) and large customers.

Impacts arise from the Group's sales activities of products and services to various customers, also in partnership with other industry players, such as through the Neogy joint venture with Dolomiti Energia.

Alperia pursues the goal of improving and expanding customer service and service quality, minimising complaints. The complaint mechanism made available to customers is a freephone number answered by bilingual local operators. Customers can also contact freephone operators by email. Complaint response times are strictly regulated by the national regulator (ARERA), which obliges operators to comply with and, if necessary, improve on these requirements. The quality management system is certified according to the international standard ISO 9001 and the responsibilities have been defined within the company.

A dedicated control centre has been set up to ensure the timely processing of complaints, and a conciliation service is also available. In 2018, a customer survey was carried out which showed an 87% satisfaction index. The survey is conducted every two years and has been postponed to 2022 due to COVID-19. Adjustments or improvements are also made during the year, whenever necessary.

Stakeholder involvement and consultation on the issue took place during the update of the materiality analysis in 2021 and during contacts with customers via the hotline, energy corners and satisfaction surveys.

What was done during the year?

Alperia supplies electricity, natural gas and district heating to **380,914** households, large and small companies and public institutions. Eighty percent of customers signed contracts for electricity, 19% for gas and 1% for heat. 2022 was a year marked by intense pressure on the energy market with major repercussions on bills. This has generated an increase in critical issues for the customers and an increasingly widespread request for clarifications from operators. In the case of Alperia, the Group further strengthened its communication channels and focused on the direct, transparent and efficient relationship it had built up over the years with its customers.

Multi-channel company - We can claim to be to all intents and purposes a **multi-channel company** operating with different tools. In particular, we strengthened the **internal call centre** and signed an agreement with another external call centre – in addition to the existing one – and trained the employees of the Energy Points in the territories so that they could also handle customer service practices. To these tools are added: the website, the freephone number available at least 35 hours a week according to the service quality criteria imposed by ARERA (Italian Regulatory Authority for Energy, Networks and Environment), social networks and apps that we have continued to update regularly.

In addition: to be closer to the community, in Veneto we have three **Energy Corners** in the shopping centres of Venice, Padua and Treviso, one **Energy Point** in Vicenza and two in Verona, as well as a new store. In South Tyrol, on the other hand, we opened a new Energy Point in Varna in 2022. We have also strengthened our **network of agents**, currently consisting of 98 highly trained professionals whose work is highly appreciated by customers, thanks also to the contract validation process (each contract is validated by an Alperia employee). Our network is made up of professionals who are trained to manage customers in both the sales and post-sales phases, also using digital tools such as the new CRM. We want to give each of our customers the possibility of having a direct contact for their needs. In this regard, we have put in place a series of initiatives - which we report on in the "Transparent pricing" section - to demonstrate our proximity to households and businesses in the light of energy price increases. We are also working on improving the layout of our bills to make them easier to read.

Furthermore, Alperia in 2022 responded to customer questions also about **tax credits**: thousands of questions were received and resolved within the terms established by law, satisfying all questions received by August 2022. And there have also been numerous requests for payment by **instalments**, both from private individuals and non-energy-intensive companies. This is a very complex task, which, in addition to the launch of the new offers – Alperia Eco offer subscribed by more than 40,000 customers in a few months and Alperia Eco Business launched at the end of 2022 – generated a significant workload for the company.

Recognition – Over the years, our commitment has been recognised by important awards such as: **Altroconsumo**, the magazine of the consumer association of the same name and one of the most important in Italy, in 2021, gave us the award for the best operator in the gas supply sector and for second best operator in the electricity category. In 2022, we were recognised as **Top Utility Performance Operative** at the tenth edition of the Top Utility awards, reserved for local utility companies active in the energy, waste and water sectors. The selection is based on the analysis of performance and parameters carried out by the Althesys research team. Alperia was proclaimed the winner "for the high quality standards achieved in operational management thanks to the production and distribution of energy operated with respect for the natural environment in a sensitive area and in synergy with local communities", according to the organisers of the award.

The customer satisfaction survey, planned for 2022, has been postponed because we believe it is more appropriate to carry it out when the pandemic is finally behind us and the energy crisis has subsided, so that it can be compared with the survey carried out before the health emergency began (in 2018 Alperia had a satisfaction rate of 87.2%). We emphasise, however, that even in the most critical months we have done our utmost to respond to our customers' requests by operating in compliance with regulations and making our experts available both via the internet and the call centre, but also through appointments at counters. Access to our branches is still by appointment as established during the COVID-19 emergency. Customers can make an appointment at a specific time via the internet or the call centre (a tool that we improved by hiring more staff and integrating it with Salesforce), without the need to queue, making the whole process more efficient and limiting wasted time. At the same time, thanks to the digitisation plan we had previously set up, we were able to respond rapidly to customer requests, including virtually.

The Alperia **Facebook** page itself has also been very helpful for customer care, as the positive reviews show. We also have very positive reviews on Trustpilot.com, the website that hosts consumer ratings for companies all over the world. This double way of listening testifies to our commitment to professional and competent assistance, both physically and digitally, improving our standing in the eyes of consumers.

Finally, we would like to point out that Alperia is one of the companies for which the **Antitrust Authority** has opened an investigation to assess price changes in supply during 2022. However, this investigation has not yet led to any reports of irregularities.

7.2.1 New partnerships

In 2022, the partnership with the **Juventus FC** sports club continued, of which Alperia is the Official Green Partner, supplying 100% green energy to the Allianz Stadium. The partnership was formed to help Juventus on its path to sustainability by supplying energy from renewable sources, be it electricity, gas or heat. With the 100% green offer "Alperia Energia Juventus", for every Juventus victory in the league and European cups, the company gives away 12 kWh of 100% green energy. Also continuing is the PPA signed with **Barilla**, a leading Italian food group, which buys green energy from the Resia power plant, thus certifying not only the use of green energy but also its origin.

By the side of businesses:– In South Tyrol, to support the economy in this period of crisis, Alperia has developed a number of offers that have the aim of lowering energy prices for its customers. In particular, we have developed the **Alperia Eco Business** offer for companies based in South Tyrol, members of one of the associations affiliated to the South Tyrolean Economic Association – Economia Alto Adige and the Rete Economia – Economic Network. Companies subscribing to Alperia Eco Business receive 1,000 kWh per month at a fixed price, lower than the current market price. This has extended the existing agreement between Alperia and the **South Tyrolean Economic Association – Economia Alto Adige and the Rete Economia – Economic Network**, so that each company can choose the most favourable product according to its consumption profile. In line with Alperia's sustainable business strategy, all Alperia Eco Business customers receive 100% green energy from South Tyrolean hydropower. The initiative was welcomed by local business networks: thanks to the new offer, companies will be able to make significant savings.

Not only that, again in South Tyrol there is a framework agreement with the **South Tyrolean Cableway Operators Association** which allows cableway companies to source certified green energy for 2022 and 2023. In addition to the competitive energy prices provided for in the framework agreement, cable car companies that choose Alperia also receive "Green Energy" certification, which allows them to certify themselves as a sustainable business.

Furthermore, the structural agreement signed in 2020 by Alperia with **Sparkasse**, the Savings Bank of Bolzano, remains in place. The initiative provides for bank branches to offer electricity from South Tyrolean renewable sources and Alperia's green gas for domestic use, giving customers the opportunity to sign contracts directly at the bank. This partnership means a rational use of local resources and further strengthens Alperia's local presence. Thanks to the numerous Sparkasse branches in South Tyrol and Triveneto, Alperia will be able to be even closer to its customers, spreading its green energy services widely. Sparkasse has more than 100 branches in total, 70% in Trentino Alto Adige and 30% in Veneto, of which four in the Vicenza area. The joint work with Sparkasse is based on the common values of sustainability and customer focus.

7.2.2. Complaints management

In 2022, in light of the increases in energy costs, Alperia recorded a significant increase in requests for clarification: over 5,000 emails per week, 5,000 phone calls per week and 1,500 visits per week to the Energy Points. There were also other requests for clarification for billing errors following the launch of the new IT system. To manage this flow, Alperia has strengthened its internal call centre and started working with a second external call centre, in addition to the existing one. Furthermore, the Alperia Corners have also been set up for the management of customer care activities (30% of the emails received were managed by personnel from the Veneto region). Thanks to this system, Alperia has complied with the standards of ARERA (Italian Regulatory Authority for Energy, Networks and Environment), managing 85% of the requests received each month. Furthermore, in 2022, Alperia was included in the ARERA customer satisfaction survey. Energy Points also saw a higher influx of customers, around 1,500 per week, to which must be added those who came to the South Tyrolean Corners by appointment. The call centres that work with Alperia have signed the clauses of respect for human rights envisaged in the standard contract and employ bilingual assistants who respond to customer requests from Monday to Thursday, from 8 a.m. to 4 p.m., and on Friday from 8 a.m. to 12 p.m..

According to Alperia's monitoring – as required by law – there were **426** complaints in 2022, with a rate of 0.11 for every 100 customers. It reached 85% in 2022, down from 94% in 2021. This drop in service levels can be explained by the sharp increase in calls (205,723, +64% compared to 2021) recorded during the year. This increase derives mainly from the increase in electricity and gas prices. We are responding to complaints, taking them on and resolving them within ten days (the company is required by law to respond within a maximum of thirty days). The goal is to further improve by bringing the monthly response rate for incoming calls to 95% and the complaint management time to seven days. This, despite the unfavourable economic situation.

To constantly improve the quality of the service offered, Alperia promotes **training** days for front-office staff to maintain service quality, and provides them with the MyRetail service available in the MyAlperia space. This applies to the reference categories provided by the regulations (contracts, arrears and line suspension, market, billing, metering, connections, works and technical quality, social bonus, commercial quality and others). In 2022, Alperia processed 99.75 (99.5% in 2021) of complaints on time, compared to a target of 99%, and recorded 10 cases with the conciliation service.

Strategic objective: We want to offer our customers fast and solution-oriented customer service and improve the customer experience

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
95% of freephone calls are answered.		Annually	Percentage of telephone calls answered	95%	85%	X	SDG 12
Standardise and refine complaint responses and monitor response times.		Annually	Proportion of complaints processed promptly (within 30 days)	99%	99.75%	✓	SDG 12
Containment of the number of complaints (no. of complaints every 100 customers less than 0.14)		Annually	No. of complaints per 100 clients	0.14	0.11	✓	SDG 12
Increase outlets accessible to customers with disabilities or belonging to disadvantaged categories (e.g. pensioners)		2027	% of points of sale accessible to customers with disabilities	-		New	SDG 12
Create a communication channel accessible to customers with disabilities. Or belonging to disadvantaged categories (e.g. pensioners). For example plain language website.		2027	-	-		New	SDG 12

7.2.3 Marketing and transparent communication

Alperia communicates with its customers using various tools, to allow stakeholders to participate and get involved. In particular, in 2022, it launched the following marketing and communication activities:

- **Press and online:** Announcements, PR articles, customer website (www.alperia.eu) and institutional website (www.alperiaigroup.eu), social media, online portal and customer apps. In total, 2,946 articles (1,902 in 2021) concerning Alperia appeared during the year, both in the press and online, of which 1,663 (1,075 in 2021) in the local press, 1,167 (790 in 2021) in the national press and 116 (37 in 2021) in the international press. The articles reported on events in Alperia and only in a couple of cases had a disparaging tone (negative situations in Val d'Ultimo and Curon Venosta), situations that were handled by Alperia with immediate action.
- **Website:** all emissions resulting from the www.alperia.eu website and the Group's websites were offset. Alperia takes part in the "CO₂ Neutral Websites" climate initiative. The carbon dioxide emissions generated by both the site and its users are neutralised through setting up new renewable energy projects, CO₂ reduction projects and purchasing of CO₂ offsetting certificates.
- **Energy Point:** we continued Energy Point activities in South Tyrol, supporting our customers with qualified advisors and call centre staff, both in person and online. In addition, to reaffirm our proximity to our customers, we opened a new Energy Point in Varna, South Tyrol.
- **Stakeholder:** Alperia has met stakeholders on numerous occasions: during local councils, one-to-one meetings, and Energy Days, information evenings combined with consulting days, organised in South Tyrolean municipalities (Lana, Kaltern, Laives, Kastelruth and Latsch) to explain the reasons for rising energy prices and to present Alperia's offers designed to help customers cope better with high prices. With this in mind, we have also conferred with the provincial council, explaining transparently what we have done to respond to the energy emergency and what actions we have put in place to support our communities. We have also maintained an active dialogue with the Consumer Protection Service and with all the trade associations. Finally, when a negative event occurred in Val d'Ultimo, we met with local stakeholders and quickly intervened to resolve the situation.
- **Events:** in 2022 we organised an open day giving our customers the opportunity to visit the district heating plant in Bolzano. The Day was organised on the occasion of the 26th edition of the "Bolzanoinbici 2022" cycling race. Our district heating plant was one of the stops at the event, and the guided tour, given by specialised personnel, offered the visitors an overview not only of the operation of the plant, but also of the advantages and benefits it has brought and will bring to the city, reducing the consumption of traditional sources for the supply of heat to the public. In addition to the visitors interested in the technical aspects of the power plant, the focus of the day was children and young people, who were involved in various games and sports activities organised in collaboration with some of the city's sports clubs (Bolzano Baseball, Hockey Club Bolzano, pedal go-kart circuit, archery and football clubs). In addition: from 1 to 3 April 2022, the drive-to-store "Bee Green" initiative was held at the Energy Corners of Alperia in Veneto. By playing a game about bees, customers and potential customers had the opportunity to learn about the importance of biodiversity and how everyone can contribute to its protection by choosing Alperia's 100% green electricity and gas offers. We also took part in the Bolzano Leisure Fair with the Alperia Sport Hero stand, giving children up to 14 the opportunity to try out various sports such as football, street basketball, volleyball, pedal go-karts, golf, baseball, biking and an adventure trail. Having completed the course, getting five stamps they received a prize. Also in April, on the occasion of the Merano Flower Festival, Alperia provided the opportunity to visit the power station in Tel and augmented reality experiences to visit the Gloreza hydroelectric power station with the Resia reservoir, the Martello dam and the Bressanone hydroelectric power station. In addition: on 1 July 2022, we brought the Campiello Prize to Bolzano which, now in its 60th edition, organises literary tours in various Italian cities. Alperia has supported it for a number of years with the intention of making its contribution to improving the area by supporting culture. We hosted one of the summer meetings with the finalist authors of the 2022 Campiello Prize. Numerous literary enthusiasts took this opportunity to meet and listen to the authors up close. Finally, we would like to mention Alperia's participation in "Urban Play Agenda 2030", a step-by-step process to raise awareness and mobilise the public on issues of economic, social and environmental sustainability. "Urban Play Agenda 2030" is in turn part of a series of events organised as part of the Festival for Sustainable Development 2022 promoted by AsviS, the Italian Alliance for Sustainable Development, staged between 4 and 20 October 2022 in various Italian cities. Alperia contributed with a day dedicated to plogging (the collection of rubbish found on the street during a walk), collecting as many as 15 bags of rubbish. Waste that was taken to the district heating plant and converted into clean heat for the city.
- **Surveys:** Alperia did not carry out any new surveys in 2022.
- **Intranet:** Alperia uses its intranet to communicate with its employees and strengthen corporate cohesion. In 2022, we also started a newsletter, to communicate even more directly with the company population.
- **Information evenings:** during 2022 we held several information evenings with the public and stakeholders. The aim of the evenings was to explain the current energy crisis, clarifying the reasons that led to the price increases and presenting Alperia's new offers to limit the impact of the increases. We also held numerous information meetings dedicated to the Renewable Energy Communities and we continued to hold meetings on the topic of district heating.
- **Schools:** Alperia responded to the interest of South Tyrolean school children by developing a series of educational materials and offering guided tours of the hydroelectric and district heating plants. Guided tours with expert staff are designed for high schools and middle schools and are offered for the hydroelectric plants of Marleno and Tel, as well

as for the district heating plants of Silandro, Bolzano, Chiusa and Sesto. We have recently also planned guided tours of the Remote Monitoring Centre, the nerve centre of electricity distribution in South Tyrol. Last spring, 500 students participated in these initiatives. The innovative “Virtual Reality” box containing virtual reality viewers is also made available to schools: pupils can visit an Alperia hydroelectric plant in a 360° video or walk the tunnels of a dam without ever leaving the classroom. For primary schools, educational support material is available in the form of a book. With the firefly Lucy, children discover exciting detective games, quizzes and craft ideas on the subject of saving energy and climate protection. We are convinced that the new generations are crucial for building a greener future. Requests for guided tours and educational material can be made on the website www.alperia.eu. Not only that, in 2022 for the first time we organised a visit for teaching staff: teachers of the TFO (Technologische Fachoberschule) “Max Valier” technical high school in Bolzano were welcomed to Cardano and Edyna, providing them with all the information on the production and distribution of electricity.

- **Employees:** We also address the issue of sustainability with them through intranet communications and specific training.
- **Information material:** almost all the material Alperia uses for our communications to customers and internal use is printed on 100% Forest Stewardship Council-certified paper; we offset the CO₂ emissions. It has not been possible to guarantee this for all materials, because to use FSC paper, the relevant logo must be included on the printed product. Some products, such as business cards, don't have enough space to include the logo. However, we are already considering the use of new materials and printing methods in the coming years to reduce the climate footprint (e.g. paper coated with opaque acetate film made from cellulose or cotton). Every year, we scrutinise our advertising materials to ensure we are making sustainable choices. In addition, our consultancy system is also fully digital so as to further reduce the impact of paper. For gadgets, we have, where possible, found alternatives to plastic (e.g. aluminium water bottles or natural materials such as cotton, sometimes organic, e.g. sports bands or bags), as well as recycled plastic gadgets (bike seat covers).
- **Gadget:** The gadgets and small gifts that Alperia gives customers are in line with brand values. New customers also receive a basket of sustainable local products, assembled in collaboration with local Pur Südtirol companies.
- **Transparent bills:** All new contracts signed outside of South Tyrol include the adoption of 100% CO₂ neutral paperless bills. Those who are already Alperia customers in South Tyrol have the option to choose. Alperia is promoting the transition to paperless billing by offering tickets for events (e.g. tickets for hockey games) to incentive the change.
- **Monitoring complaints:** customer complaints are handled by Alperia Smart Services. Domestic users were also given a tool to give them a monthly estimate, making use management even more transparent for customers. All packages, as presented on the website www.alperia.eu, were subjected to independent verification and found to comply with the consumer code.
- **Online reviews:** Alperia is the only utility company that allows Facebook reviews to be left freely and openly. It is established as a Facebook partner and currently has a rating of four out of five. It also has a positive ranking on Trustpilot.com.

7.2.4 Transparent pricing

2022 was marked by a marked increase in electricity and gas bills. The average cost of a kilowatt-hour (kWh) of energy for a typical household has increased significantly starting as early as the fourth quarter of 2021 to reach the 66 euro cents (0.66 euros) in the fourth quarter of 2022. These changes were mainly due to changes in the price of raw materials used in production. The price of electricity is closely linked to that of gas on the Amsterdam stock exchange. In Italy, specifically, gas covers 39% of energy needs (24% in Europe). Renewable energies, on the other hand, still make up a too-low share at around 15% in Europe, and 19% in Italy. The increase in the cost of natural gas is due to lower available reserves. This is due both to the weather and geopolitical reasons (Russia, the main exporter, slowed down supplies to Europe and increased them to China). The increase in the price of CO₂ emission permits, on the other hand, is at least partly an intended effect. The European Emissions Trading System (ETS) is in fact a form of CO₂ taxation (so-called carbon pricing) supported to combat global warming. To contain these increases, Alperia has put in place numerous measures aimed at both families and businesses. For more information, see chapter 9.1.1. Economic value distributed.



Green Mission

We want a more sustainable future. Therefore, we operate with respect for nature, our main source of energy and life, and develop innovative solutions that allow us to strike the right balance between economic activities and environmental protection.



6 CLEAN WATER AND SANITATION
We optimise water network management, reduce the impact of our activities and work to protect the aquatic environment



12 RESPONSIBLE CONSUMPTION AND PRODUCTION
We ensure sustainable patterns of production and consumption



13 CLIMATE ACTION
We take specific measures to combat climate change and its consequences



15 LIFE ON LAND
We ensure the conservation of ecosystems and the protection of biodiversity including through the use of innovative technologies

8. GREEN MISSION

Renewable energy consumed	65%	Total emissions:	2.448.851 tCO₂e
Incidents of non-compliance with the requirements of the MVF (minimum vital flow)	0	Emissions avoided:	1.206.742 tCO₂e

8.1 Energy consumption

How we handle the issue

To mitigate the impacts of climate change, it is imperative to initiate a gradual transition to more sustainable modes of energy production and consumption. In addition to this, Alperia promotes a rational and responsible consumption of energy, supporting measures aimed at saving energy, improving company performance and the efficient use of energy by progressively switching to renewable sources, minimising emissions from the use of non-renewable fuels and the resulting impact on society and the environment.

Direct impacts arise from the company's activities in the production and distribution of electricity, generated by the operation of hydroelectric and district heating plants, electricity distribution infrastructure, and the Group's offices. The indirect impacts, on the other hand, derive from the use of the energy produced by the final consumers.

Alperia aims to promote energy and system efficiency (e.g. reduction of grid losses) and climate-friendly energy use within the company. In 2020, Alperia appointed an Energy Manager to strengthen its energy efficiency and emission reduction efforts. The energy efficiency projects already implemented by the Business Units and individual companies were assessed by interviewing the managers and identifying projects to be launched. The data was systematised and analysed in a structured way to define an improvement programme in the Group's energy management. Alperia EcoPlus (which manages district heating), Alperia Greenpower and Alperia Vipower (which manage hydroelectric power plants) have certified their sites according to the ISO 14001:2015 standard. They are also EMAS registered. Furthermore, in 2022, the **ISO 50001** certification was obtained for the Ponte Gardena hydroelectric plant and the Bolzano district heating and in the future it is planned to extend this management system to the other plants of the Group. This topic is coordinated centrally by the HSE department and then implemented in the individual Bus. The relative budgets are drawn up internally.

We implemented a structured reporting process for the Group and continue to improve the quality of data. We commissioned an external audit to provide a detailed review of the reporting process. In addition, the reduction targets for each Business Unit have been integrated into the new 2023-2027 Business Plan. Achievement of the target values will be monitored on an annual basis.

The involvement of stakeholders in the definition of projects and initiatives relating to energy consumption mainly took place during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and with specific meetings with the management during which the views and opinions of stakeholders were collected on the various initiatives. The opinion of external stakeholders, and the communication of Alperia's initiatives to them, was gathered during the course of a number of roundtables when updating the materiality analysis.

What was done during the year?

Alperia consumes energy directly and indirectly. **Direct consumption** includes the use of fuel for the production of electrical and thermal energy in plants (cogeneration, heating systems, boilers) and non-renewable primary-energy flows not directly related to energy production (e.g. heating and transport fuels), used in carrying out activities. **Indirect energy consumption**, on the other hand, relates to the energy that the Group buys and uses for its plants and offices. This energy is partly self-produced, and the associated data are included in direct fuel consumption. When Alperia buys energy from third parties at times of high demand, it is counted in indirect consumption. In 2022, the Group's direct and indirect energy consumption, defined as that of the Group's operating companies, customer offices and representative offices, amounted to **3,410 TJ** (3,560 TJ in 2021).

35% (36% in 2021) of energy consumption comes from non-renewable sources and **65%** (66% in 2021) from renewable sources.

For its premises and production areas, Alperia mainly uses energy from **renewable sources**, the use of which will be further expanded, as envisaged in Vision 2031 and the challenging South Tyrol Climate Plan. In fact, the photovoltaic systems already present on the roofs of the offices will be extended and new ones will be installed.

More efficient – In 2022 Alperia continued to carry out an **energy efficiency** programme by integrating some measures such as: the introduction of transformers to reduce losses, the installation of energy-efficient motors, the installation of BMS integrated with artificial intelligence systems. The redevelopment of some locations is also underway, such as Edyna – Resia.

An significant goal achieved in 2022 was the **ISO 50001** certification for two production sites: the hydroelectric plant of Ponte Gardena and the district heating of Bolzano. Energy efficiency measures were carried out at both sites. In particular, a new high-efficiency co-generation plant for the production of electricity and heat was added to the district heating plant, while in Ponte Gardena activities concerned plant lighting, with LED revamping. Further works on the plants are planned to follow, such as the lighting in Cardano and Castelbello. These projects are associated with **integrated energy management** to better manage the entire process at Group level. Alperia has set itself the goal of obtaining ISO 50001 certification for the entire Group, starting in 2023 from the premises in Dodiciville di Bolzano.

All **Business Units** will also be made aware of a programme dedicated to energy issues, so that good practices for reducing consumption are increasingly widespread, also thanks to ethical behaviour. An ideas contest involving staff is also envisaged as part of the awareness project.

Alperia obtained UNI 11352 certification, which verifies the results achieved in terms of energy savings by companies that provide energy services to the industrial sector.

In 2022, Alperia participated in the **Energy Saving** event with the Milan Polytechnic contributing to the Zero Carbon Policy Agenda: the event was an opportunity to launch the proposal to standardise offsetting activities with national guidelines. Furthermore, specific activities have been identified for achieving net zero (new technologies, hydrogen, biomethane).

Energy consumption within the organisation*1 {GRI 302-1}

	Unit	2022	%	2021	%	2020	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,203	35%	1,266	36%	1,171	33%	-5%
Gasoline	TJ	2,6	0%	3,1	0%	3,1	0%	-16%
Oil	TJ	36	1%	32	1%	25	1%	12%
Natural gas	TJ	801	23%	823	23%	738	21%	-3%
Electricity for own consumption (produced and acquired)	TJ	364	11%	408	11%	404	11%	-11%
Total energy consumption within the organisation from renewable sources:	TJ	2,207	65%	2,298	65%	2,478	67%	-4%
Palm oil	TJ	1,905	56%	2,026	57%	2,125	59%	-6%
Wood chips	TJ	193	6%	160	4%	168	5%	21%
Electricity for own consumption (produced and acquired)	TJ	110	3%	112	3%	185	4%	-2%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	
Total energy consumption within the organisation	TJ	3,410	100%	3,564	100%	3,708	100%	-4%

*1From 2022, following a refinement of the calculation methodology, gasoline consumption was included.

Strategic objective: We want to make our energy consumption more efficient.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Completion of the ISO 50001 certification process for Group sites	ISO 50001 certification obtained on DH Bolzano Alperia Ecoplus and Pontegardena Alperia Greenpower plant. ISO 50001 is also being implemented at the Dodiciville Alperia premises	2022	No. of certified offices	2	2	✓	SDG 7
Development of initiatives following the energy audits on the company's websites	Energy audits carried out and concluded on 19/12/2022. The measures identified in the energy audits will be analysed with the various BUs, and, on the basis of detailed technical and economic feasibility analyses, it will be decided how to proceed.	Annual-ly	toe saved/toe savings identified in the energy audits	-		✓	SDG 7
Preparation of a list of energy-efficiency projects both on civil and operational sites (proposal, budget estimate and quantification of the savings of the identified works)	Preparation of the list of activities to be carried out (BDG 2023) and progressive inclusion of energy-efficiency interventions in the Action Plans of ISO 50001 certified sites/companies.	Annual-ly	-	-		✓	SDG 7
Completion of the ISO 50001 certification process for Alperia Ecoplus (Bolzano site)		2023	-	-		On-going	SDG 7
Installation of a second microfilter in the Sesto plant to eliminate the use of diesel		2023	Diesel saved thanks to the interventions	50,000 litres		On-going	SDG 7
Implement measures to disseminate a culture of energy saving		2025	-	-		New	SDG 7
BIM implementation and adoption of consumption monitoring systems and BMS systems		2027	-	-		New	SDG 7
ISO 50001 certification for all Group properties		2027	% of ISO-50001 certified sites	100		New	SDG 7
Energy-efficiency interventions on civil buildings		2027	Consumption in civil buildings (kWh/m2)	97		New	SDG 7

8.2 Emissions

How we handle the issue

The topic was identified as core to the 2021 materiality analysis in terms of impacts generated but above all suffered. Greenhouse gas emissions have a significant impact on the economy, the environment and people's health. In economic terms, greenhouse gas emissions can increase costs for companies and have an impact on international competitiveness, through public policies on carbon pricing. In environmental terms, greenhouse gas emissions are one of the main causes of climate change, which can have negative consequences on ecosystems and agricultural production due to the increase in extreme weather events. In addition, greenhouse gas emissions can impact people's health, causing respiratory problems and heart disease. Finally, greenhouse gas emissions can impact human rights, especially the rights of the most vulnerable people, by limiting access to essentials such as food, clean water and shelter, and can cause displacement of entire communities.

Alperia's direct impacts are generated by the operation of hydroelectric and district heating plants and electricity distribution infrastructures.

Alperia aims to minimise noise pollution, electromagnetic fields and CO₂ emissions deriving from its activities.

Since 2020, Alperia has had an Energy Manager and an analysis has been carried out for each company to see the level of emissions generated and what they are derived from. During 2021, the company joined the Science Based Targets initiative (SBTi), undertaking to define binding targets for the reduction of greenhouse gas emissions harmful to the climate. Aligning its climate strategy with the goals of the Paris Climate Agreement.

Monitoring, already active in previous years, has been further streamlined and rationalised, so as to have a standardised and structured analysis in relation to the objective of reducing emissions at Group level with the launch of corrective actions. To this end, work is underway to develop a structured reporting system at Group level. Alperia EcoPlus (which manages district heating), Alperia Greenpower and Alperia Vipower (which manage hydroelectric power plants) run all the sites certified according to the ISO 14001:2015 standard. They are also EMAS registered. Furthermore, as already described above, the progressive certification of the sites according to the ISO 50001 standard is underway. This topic is coordinated centrally by the HSE department and then implemented in the individual BUs. The relative budgets are drawn up internally.

We implemented a structured reporting process for the Group and continue to improve the quality of data. We commissioned an external audit to provide a detailed review of the reporting process. In addition, the emission reduction targets for each Business Unit have been integrated into the new 2023-2027 Business Plan. Achievement of the target values will be monitored on an annual basis.

The involvement of stakeholders in the definition of projects and initiatives relating to emissions mainly took place during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and with specific meetings with the management during which the views and opinions of various stakeholders were collected on the various initiatives. The opinion of external stakeholders, and the communication of Alperia's initiatives to them, was gathered during the course of a number of roundtables when updating the materiality analysis.

What was done during the year?

“Commuting to work should be considered and made more efficient by encouraging the use of public transport or bicycles or low-emission means of transport to get to work”.

Comment from the business community; Stakeholder Survey 2021

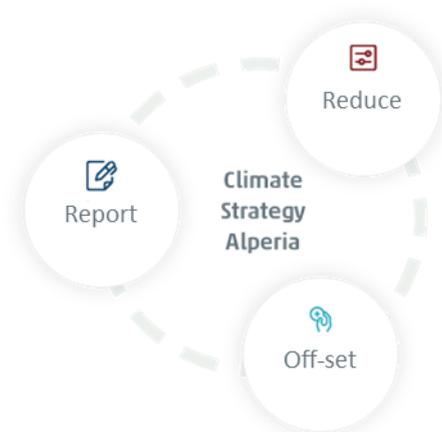
Alperia replied: *Alperia has developed a Sustainable Mobility Plan, for which it won the 2021 Sustainable Mobility Award. The aim of the Plan is to encourage companies to develop innovative ideas and strategies for sustainable mobility. This is something Alperia has been committed to for a long time and will continue to be in the future. In recent years we have worked to make our vehicles greener, reaching the milestone of 172 green (i.e. electric or hybrid) vehicles. In addition, we have provided ad hoc subsidies to incentivise green mobility and the use of public transport, and we have provided alternative measures, more convenient than car use, that generate benefits for employees (in terms of time, cost and comfort of transport), for the company or public administration (in economic terms and productivity), and for the community (in environmental, social and economic terms). A commitment that will be further strengthened in the future through the Mobility Manager position established in 2021. In 2022, a survey on commuting to work/mobility was given to all employees to identify further measures for sustainable mobility.*

In 2022, emissions management reached a new breakthrough. Thanks also to the activities carried out for the ISO 50001 certification, a more structured energy efficiency and CO₂ reduction process has been put in place and scouting has begun to make data monitoring more efficient so that it can be validated and reliable. Among the aspects considered are: Edyna's losses and the actions taken to reduce them by replacing transformers and increasing the grid voltage; **district heating in Merano**, where the biomass plant went into operation at the end of 2021 and will replace the use of natural gas and the use of **SF₆ gas** (improving consumption monitoring and evaluating new insulation solutions in the future). SF₆ gas is used by Edyna and Alperia Greenpower for maintenance activities and, as provided by Vision 2031, an experimental project has been launched for the replacement of the compartments with **SF₆ gas** insulation with compartments with dry-air insulation. Edyna is also evaluating a further alternative (Novec 4710 Insulating Gas) which has significantly better characteristics than SF₆ gas both in terms of GWP and GHG, considerably reducing climate-altering gas emissions during top-ups. In 2021, an environmental training programme on the subject of "Management of electrical equipment containing fluorinated greenhouse gases" was provided. It involved all the Alperia Greenpower's technical and operational staff to improve their skills in reducing greenhouse gas emissions.

8.2.1 Our climate strategy

We want to be a reliable partner for the energy transition and we are committed to reducing our emissions with a strategy that consists **of three steps**:

- o **Monitoring: calculate precisely and accurately the level of emissions we produce.** This is the first step towards reduction. Alperia has been reporting its emissions since 2016, but this process is continuously being improved;
- o **Reduction of emissions: define targeted action to reduce them, developing and adopting new technology** (e.g. converting existing plants to biomass, developing energy-efficiency projects at our sites and building the new Merano headquarters with the highest efficiency standards, expanding the district heating network). The intention is to create a structured process to implement and monitor all projects that provide for CO_{2e} and energy savings, including through ISO 50001 certification, with the aim of increasing the reduction of emissions. In this way, we want to avoid over 1,400 kton CO_{2e} equivalent by 2026 and 2,000 kton CO_{2e} by 2031;
- o **Offsetting: take action to offset remaining emissions** (Scopes 1 and 2) by joining specific climate protection programmes. In 2020, we achieved carbon neutrality for operational emissions (Scope 1 and Scope 2), with offsetting through VCS and Gold Standard certificates.



8.2.1.1 Monitoring

The Alperia Group's activities generate direct emissions, through production, and indirect emissions, through the supply of electricity from third parties. In particular:

- **Scope 1:** direct greenhouse gas emissions from installations within the organisation's boundaries due to the use of fossil fuels and emissions of any greenhouse gas into the atmosphere (CO₂ emissions generated by fuels burned in energy production plants and from the company's own fleet/vehicles);
- **Scope 2:** indirect greenhouse gas emissions from the Group's indirect consumption (e.g. emissions generated by the purchase of electricity from third-party suppliers and consumed both in plants and offices, as the Group is indirectly responsible for the emissions generated by the supplier for the production of the energy required);
- **Scope 3:** a category that includes emission sources that are not under the direct control of the company, but whose emissions are indirectly due to company activity. This includes upstream emissions such as emissions caused by the transport of materials and people, but also downstream emissions such as emissions caused by the use of our products (e.g. the sale of non-green energy).

In 2022, we further refined our emissions monitoring process: we have expanded the inventory of emissions with part of the indirect emissions of Scope 3 downstream, also including other emissions deriving from Business travel and we have improved the calculation process. In addition, we have implemented a reporting system of avoided emissions divided by Group company and Scope, resulting from all the projects and activities that the Alperia Group has put in place to reduce its carbon footprint. We have also started scouting to assess the most efficient software to use to improve monitoring. In addition: in 2023, we will review the monitoring method so that it is in line with the guidelines of the Science Based Target, a global and structured initiative, consistent with the Paris and Glasgow Agreements.

The monitoring carried out showed that in 2022 Alperia generated **79,011 tCO₂e direct and indirect market-based emissions** (83,583 tCO₂e in 2021), of which 5,84 SO_x and 44,41 NO_x. Gross direct emissions of greenhouse gases, i.e. Scope 1, which also includes SF₆, in 2022 were: **48,205 tCO₂e** (50,820 tCO₂e in 2021).

Finally, it should be noted that noise pollution is also monitored, through econometric surveys adjusted to the zoning plan. This monitoring, carried out by the HSE team, falls under the provisions of the consolidated company text with phonometric survey and is the subject of the EMAS declaration.

GHG emissions^{*1} {GRI 305}

	Unit	2022	2021	2020	YtY variation
Gross direct (Scope 1) GHG emissions ^{*2}	tCO ₂ e	48,205	50,820	45,483	-5%
Biogenic CO ₂ emissions ^{*2}	tCO ₂ e	10,201	10,922	11,364	-7%
Gross location-based energy indirect (Scope 2) GHG emissions ^{*3}	tCO ₂ e	24,280	25,474	34,878	-5%
Gross market-based energy indirect (Scope 2) GHG emissions ^{*4}	tCO ₂ e	20,605	21,841	25,596	-6%
Gross other indirect (Scope 3) GHG emissions ^{*5}	tCO ₂ e	2,409,840	2,871,885	2,833,961	-16%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	82,685	87,217	91,725	-5%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	79,011	83,583	82,443	-5%
Total GHG emissions location-based	tCO ₂ e	2,492,525	2,959,102	2,925,686	-16%
Total GHG emissions market-based	tCO ₂ e	2,488,851	2,955,469	2,916,404	-16%

^{*1} The main gases included are CO₂, CH₄, N₂O and SF₆.

^{*2} Emission factors used according to DEFRA (car fleet, biogenic emission); data consolidated according to financial control; data aggregated based on the GHG Protocol. Biogenic emission out of wood chip biomass and palm oil are calculated with DEFRA 2022. The increase in emissions is due to an update in the emission factor.

^{*3} Location-based emission factor used for purchased electricity: ISPRA (2020) based on the Italian energy mix; emission factor used for purchased heat.

^{*4} Market-based emission factor used for non-renewable purchased electricity: Italian residual mix; market-based emission factor used for electricity losses (T&D process): Italian energy mix. The accounting method used for market-based emissions in 2020 and 2021 is different from the previous year due to a more detailed analysis regarding the non-renewable electricity sources (split of electricity losses and purchased electricity).

^{*5} Includes rented car fleet and well-to-tank-associated emissions (emissions associated with the extraction, refining and transport of raw fuel material sources such as palm oil or natural gas). Downstream emissions related to the sale of products are included as well: gas methane (968,021 tCO₂e) and non-renewable energy electricity (1,273,461 tCO₂e). Emission factors used: DEFRA and cargo manifest.

Intensity of GHG emissions^{*1} {GRI 305-4}

	Unit	2022	2021	2020	YtY variation
Operational GHG emissions intensity (Scope 1 & 2 – location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.02	0.02	8%
Operational GHG emissions intensity (Scope 1 & 2 – market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.02	0.01	3%
Total GHG emissions intensity (Scope 1, 2 & 3 – location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.74	0.68	0.55	9%
Total GHG emissions intensity (Scope 1, 2 & 3 – market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.74	0.68	0.55	9%

^{*1} Biogenic emissions are included in the ratio.

Proportion of emissions	Unit	2022	2021
Scope 1	%	2%	2%
Scope 2	%	1.0%	0,9%
Scope 3	%	97%	97%

Emissions avoided	Unit	2022	2021
Scope 1 ^{*1}	tCO ₂ e	1,646	1,834
Scope 2 ^{*2}	tCO ₂ e	723	668
Scope 3 ^{*3}	tCO ₂ e	1,204,374	1,689,609
Total avoided emissions ^{*4}	tCO ₂ e	1,206,742	1,692,112

^{*1} Own consumption of energy from renewable sources; use of own electric vehicles instead of fuel-powered vehicles.

^{*2} Emissions reduction activities for office heating; procurement of electricity from renewable sources for offices; projects to reduce network losses in electricity distribution.

^{*3} Sale of electricity from renewable sources (self-generated and purchased); rental of electric cars for own use; sale of electricity and heat with lower emissions impact than separate generation; energy-efficiency projects for third-party customers; electronic billing; use of e-bikes.

^{*4} Compensations are not included.

8.2.1.2 Reduction of emissions

Alperia has taken significant steps to reduce emissions, also looking at the ambitious plan with which South Tyrol aims to:

- reduce CO₂ emissions by 55% by 2030;
- achieve net zero by 2040;
- ensure that 75% of energy needs are covered by renewable energies in 2030;
- reach 100% renewables by 2040.

The objectives indicated by Alperia's Vision 2031 provide for a **46% reduction in emissions by 2027, 70% by 2031 with offsetting for unavoidable emissions and achievement of net zero by 2040**. In detail, a reduction of emissions by 2031 is expected for Scope-1 emissions of 56%, Scope 2 of 6% and Scope 3 of 71% and offsetting for unavoidable emissions. The 2023-2027 Business Plan envisages the following intermediate reduction targets for 2027: Scope 1 by 39%, Scope 2 by 6% and Scope 3 by 71%. In particular, the reduction of emissions will be achieved through:

- sale of green electricity only and progressive sale of green gas and biomethane;
- switch to biomass plants or other district heating sources/technologies;
- sale/disposal of Biopower Sardegna;
- electrification of the fleet, where possible;

- reduction of natural gas to heat offices and increase in renewables with the extension of photovoltaics on the roofs of buildings;
- renewable EE supply contracts;
- staff awareness and waste reduction;
- capture & storage projects.

Through this and other projects outlined in the chapter, avoided emissions were **1,206,742 tCO₂e**, in line with the year 2021.

8.2.1.3 Offsetting

In cases where zeroing emissions is not possible, Alperia intervenes with offsetting operations. This is a constantly evolving project that we implement through international VCS and Gold Standards, certified by international auditors. Through the purchase of certificates equal to the quantity of emissions that we want to offset, the mechanism supports green practices such as the planting of trees or the installation of photovoltaic parks. Together, these operations have enabled Alperia to be carbon-neutral operational by 2020, i.e. to offset all **Scope 1 and 2** emissions.

In addition, in 2022, Alperia offset a total of 4,831.06 kg of CO₂e with GoGreen Climate Neutral services, the Deutsche Post DHL Group's programme to reduce the impact of its activities on the environment and help protect the ecosystem. The Deutsche Post DHL Group issued a certificate to Alperia and compensated the greenhouse gas emissions generated by transport and logistics through climate protection projects. SGS (Société Générale de Surveillance) verified the tracked greenhouse gas emissions and related offsets against the Carbon Management System and according to the "Greenhouse Gas Protocol – Product Life Cycle Accounting and Reporting Standard" for the period from 1 January 2022 to 31 December 2022.

For the future, moreover, Alperia intends to assess the possibility of activating offsetting projects in the country, although the process is still evolving and clear national guidelines are lacking.

Below is a brief description of the main offsetting projects bought by Alperia:

- **Benban – Solar – Egypt:** Benban Solar Park is a photovoltaic power plant with a total capacity of 1650 MW of nominal power, which equals an annual production of approximately 3.8 TWh. It is located in Benban (Aswan Governorate) in the Western Desert, about 650 km south of Cairo and 40 km northwest of Aswan. Benban is currently the fourth-largest solar power plant in the world. Benban was connected to the Egyptian national grid in 2019 and currently produces 930 GWh per year, enough to power 420,000 households, which is equivalent to 423,000 tons of CO₂ emissions avoided.
- **Guanaré – Afforestation – Uruguay:** This project will transform 21,298 hectares of land, used for grazing cattle for over 300 years, into sustainably managed forests. The project will convert this land into forest plantations to obtain high-value, long-lasting wood products and to sequester large quantities of carbon dioxide. Overall, the project's goals are carbon sequestration, timber production and land restoration through forest plantation in areas historically used for extensive grazing. The Guanaré project, consisting of 21,298 hectares of land, will absorb approximately 7 million tons of CO₂.
- **Pacajai – Deforestation prevention – Brazil:** The main objective of the Pacajai project is to prevent and avoid unplanned deforestation in native forests, avoiding the net emission of 264,116 tCO₂e over a period of 40 years of the credit period of the project. This will be achieved by managing the land in the form of a "private sector conservation reserve", developing and implementing a management plan. This plan includes a rigorous monitoring and inspection plan based on the experience of ongoing surveillance activities in the area since 2008.
- **Nouakchott – Eolico – Mauritania:** In operation since 2016, the Nouakchott plant is the first wind farm in the country and supplies green electricity to the equivalent of 140,000 people and avoids the emission of approx. 67,000 tCO₂ per year. The project includes 15 turbines installed on a 1,000-hectare site. Mauritania wanted to achieve 20% renewable energy in its energy mix by 2020 (target achieved in 2018 with 38% renewable energy in its mix). The plant supplies 14% of the electricity needs of Nouakchott, the capital of Mauritania.

Other projects financed by Alperia for CO₂ offsetting:

- Ortamandira WPP – Turkey
- Ege Wind Farm Project – Turkey
- Solar Photovoltaic Project in Rajasthan – India
- Zhangbei Lvnaobao Wind Power Project – China
- Bagasse cogeneration Project – Vietnam
- Seyitali 30 MW Wind Farm Project – Turkey
- Uri II Hydroelectric Project – India
- Boyabat Hydroelectric Power Plant – Turkey
- Kargilik 24 MW Hydropower Plant – Turkey
- BAESA Project – Brazil
- Patikari Hydro Electric Power Project - India
- Karas Wind Energy – Namibia

Strategic objective: We want to reach net zero by 2040 by significantly reducing our greenhouse gas emissions.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Definition of responsibilities within the general management for the achievement of net zero	- Hiring of a Climate Manager	2022				✓	SDG 13
Definition and monitoring of the SBTi for the Alperia Group		2023				New	SDG 13
Offsetting: offsetting operational emissions to make the Alperia Group carbon-neutral		Annually	Scope 1 & 2 offsetting percentage	100%		✓	SDG 13
Offsetting: offsetting operational emissions to make the Alperia Group Carbon Neutral		2023	Guidelines	-		New	SDG 13
Offsetting: secure offsetting projects in line with Science Based Target Initiative		2027		-		New	SDG 13
Scope 1: identification of measures to reduce emissions in our plants	Implementation and monitoring of energy-efficiency projects through an ISO 50001-certified energy management system also extended to Alperia Dodiciville (see draft Alperia Dodiciville Action Plan)	Annually	-	-		✓	SDG 13
Scope 1: include sustainability criteria (e.g. energy efficiency, use of renewable energy) in tenders for IT services and equipment	Include this request in the technical specifications of the purchase tenders	2022	Confirmation of inclusion in technical specification			✓	SDG 12 SDG 13
Scope 1: consolidation and rationalisation of application map and data lake		2023	Go live 2G measures project			New	SDG 13
Scope 1: inclusion of gas and F-gas distribution network leaks in the next Sustainability Report		2023				New	SDG 13
Scope 1: the new fleet of the Alperia Green Future company will operate with zero emissions (hybrid/plug-in with offsetting for residual emissions).		2026	Emissions from the use of company cars (without offsetting)	-		New	SDG 11 SDG 13
Scope 1: the electric vehicle fleet of new Group companies (Alperia Green Future, Hydrodata, Selsolar and Fintel) will operate with zero emissions.		2026	Number of electric vehicles in fleet	-		New	SDG 11 SDG 13

Scope 1: the electric vehicle fleet of the Fintel company will operate with zero emissions.		2026	Number of electric vehicles in fleet	-		New	SDG 11 SDG 13
Scope 1: the electric vehicle fleet of the Selsolar company will operate with zero emissions.		2026	Number of electric vehicles in fleet	-		New	SDG 11 SDG 13
Scope 1: 39% reduction of Scope-1 CO ₂ e emissions by 2027 and offsetting for unavoidable emissions		2027	% Reduction of tCO ₂ e	-39%		New	SDG 13
Scope 1: increase in the production of energy from photovoltaics for self-consumption		2027	Installed power of photovoltaic systems	943 kW		New	SDG 7 SDG 11 SDG 13
Scope 1: reduction of internal mobility CO ₂ emissions		2027	Reduction of internal mobility CO ₂ emissions	-32%		New	SDG 11 SDG 13
Scope 2: 4% reduction by 2027 and offsetting for unavoidable emissions		2027	% Reduction of tons CO ₂ e	-4%		New	SDG 13
Scope 2: reduction of CO ₂ emissions in civil buildings		2027	Reduction of CO ₂ emissions in civil buildings	-63%		New	SDG 11 SDG 13
Scope 3: 47% reduction by 2027 and emissions offsetting for the green gas product		2027	% Reduction of tCO ₂ e	-47%		New	SDG 3 SDG 13
Scope 3: reduction of commuting-to-work CO ₂ emissions		2027	Reduction of commuting-to-work CO ₂ emissions	-17%		New	SDG 11 SDG 13
Scope 3: evaluate the completeness of Scope-3 emissions reporting in line with the SBTi		2022				✓	SDG 13
Scope 3: mobility analysis of the new offices to identify measures for the green mobility of employees	At the end of 2022, a survey on commuting-to-work mobility was given to all Group employees and the results were published on MyAlperia in January 2023.	2022	Survey	1	1	✓	SDG 11 SDG 13
Scope 3: definition of a procedure to incentivise	On 13/10/2022, REG 217.04 was	2022	Procedure	1	1	✓	SDG 11

public transport use for employees	revised, introducing the subsidy also for public transport, which will be paid around 2023.						SDG 13
Scope 3: assess the possibility of creating a parking space at the offices outside South Tyrol for the free charging of employees' private electric cars.	REG 217.04 is being revised again to introduce a third incentive for employees with private vehicles: a value card for charging private electric vehicles. The initiative will also be extended to premises outside South Tyrol, and this will make it necessary to have dedicated charging stations	2022	-	-		X	SDG 11 SDG 13
Development of innovation projects and feasibility studies in the fields of biomethane, hydrogen, heat pumps, electric boilers, SF ₆ replacement and capture & storage to enable the technological switch necessary to reach net zero.		2027				New	SDG 7 SDG 9 SDG 13
Emissions avoided: avoid 1,400 ktons of CO ₂ equivalent.		2027	ktCO ₂ e avoided	1,400 kton CO ₂ e		New	SDG 3 SDG 13

8.3 Water and biodiversity

How we handle the issue

This topic was identified as essential by stakeholders and also in terms of impact. Alperia's activities in the field of hydroelectric production have direct impacts on water ecosystems. Poor water management or loss of biodiversity can lead to environmental problems such as soil erosion, water pollution and loss of habitat for wildlife. Water scarcity can also have a negative impact on people's health, as it can reduce the availability of food, clean water and other natural resources. Good water management is essential for the management of the external impacts towards the various reference stakeholders (local population, riparian municipalities), to ensure that the negative consequences are minimised and that everyone benefits.

Alperia's direct impact is due to the operation of hydroelectric plants and the infrastructure required to generate electricity, and failure to manage the impact of the company's activities on the hydrological cycle and reservoirs could have repercussions on the productivity of the plants and the local flora and fauna.

Electricity is generated from renewable sources through thirty-five hydroelectric power plants subject to management and co-ordination and five subsidiaries (50% San Floriano Energy— two plants, 49% TEW, 34% Enerpass and 25% Moos), thirteen large dams and seventeen minor works. The production is managed by Alperia Greenpower. The hydroelectric plants are located in South Tyrol, along the main watercourses. Each area is characterised by a complex superficial hydrographic network originating from multiple intersecting catchment areas.

Water is used with great care, ensuring its availability for **multiple uses**: from the water catchment and derivation works of the Alperia hydroelectric plants, several transfer stations have been built to supply fire-fighting services in various municipalities, irrigation and de-frost services for various consortia; some water supplies are also guaranteed for planned snowmaking in ski areas.

Hydroelectric plants produce renewable energy; thus, they do not consume natural resources. The water used in the energy-production process, after being taken from the intake structures, is returned to the environment (river or lake) through a canal or tunnel. With regard to the stretches of watercourses affected by the use of water resources for hydroelectric production, particular attention is paid to compliance with the quantities defined in the concession decrees (administrative act issued by the Province of Bolzano regulating the use of water for hydroelectric derivation plants), which also provides for the quantities to be released in the derived stretches (**Minimum Vital Flows**), and to the mitigation of the effects of plant management, providing – where necessary – for the consolidation of fish stocks.

The **management of sediment** that accumulates upstream of hydroelectric plant intake works (river dams and artificial reservoirs) is of particular hydraulic and environmental importance. During flooding, and also in low water periods, large waterways take in solid matter from various tributaries and transport it to the valley. Sediment transport is a natural phenomenon, which is necessary for the river system itself, but also for lagoon systems at the sea mouth and for the maintenance of coastal areas. In South Tyrol, Alperia operates a number of facilities with dams on the major watercourses of the Adige, Isarco and Rienza valleys and adopts mitigation and offsetting measures to protect the vulnerability of the species and habitats affected by the operation of its facilities. Rivers are a primary source of biodiversity and an important part of our rich natural heritage. The impacts of activities can occur both in the construction/renovation phase of a power plant and in its day-to-day operation. Dams and river barriers represent a potential obstacle for the migration of fish but also for the transport of sediments, which is a natural factor in the life cycle of aquatic ecosystems. Under natural conditions, there is a constant movement of sediment towards the sea, varying in quantity depending on the flow rates, while the presence of large reservoirs affects this. Management of accumulated sediments, which involves periodic discharging, if not done correctly, can harm habitats and species.

With regard to the above issues, which represent the most critical environmental aspects in hydroelectric plant management, Alperia not only adopts preventive behaviour and complies with the provisions of sector regulations, but also invests in technological innovation to find the best solutions for protecting biodiversity and acting responsibly in the local area. We want to minimise the natural and environmental impact of hydroelectric plants and actively protect the biological diversity of watercourses. For example, **renaturalisation and restoration of the original landscape** is carried out at disused intake works. In 2021, the Rio Fonderia intake (connected to the Santa Valburga plant) was decommissioned, while in 2022 the Foltin intake structure (connected to the Lasa plant) was removed.

For the large branches, the concession for which was renewed in 2011 (a total of 11 large plants), Alperia is obliged to manage a **monitoring system** that measures the quality of the watercourse concerned. Water quality monitoring is carried out in agreement with the Province of Bolzano. Any adjustments are made during the year.

To plan the activities necessary to ensure correct environmental management at the various stages of production, Alperia Greenpower has adopted an Integrated Management System in line with that of the Group. Alperia Greenpower is committed to achieving and reducing environmental impacts and risks in the management of hydroelectric plants also through the voluntary adoption of Environmental Management Systems certified according to ISO 14001 and Emas Registration. During 2022, Alperia

Greenpower renewed the aforementioned environmental certifications, in addition to those relating to quality (ISO 9001) and safety (ISO 45001), following the annual surveillance to verify compliance with regulatory requirements. It should be noted that the external certification audit ascertained the integration into the three Alperia Greenpower management systems (environment, safety and quality) of the design, development and management of physical fibre optic telecommunications networks, following the merger of Alperia Fiber into Alperia Greenpower

The involvement of stakeholders in the definition of projects and initiatives relating to water resource management mainly took place during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and with specific meetings with the management during which the views and opinions of various stakeholders were collected on the various initiatives. The opinion of external stakeholders, and the communication of Alperia's initiatives to them, was gathered during the course of a number of roundtables when updating the materiality analysis, in addition to the contacts made with the communities affected by the various emergencies during the year and the various fishermen associations who experience the rivers and their ecosystem first hand.

Furthermore, Alperia has implemented numerous measures to improve the waterways through the **compensation funds**, in collaboration with the Autonomous Province of Bolzano and the riparian municipalities, including consolidating fish stocks, restoration of river continuity and landscape conservation and improvement. To plan the activities necessary to ensure correct environmental management at the various stages of production, Alperia Greenpower has adopted an Integrated Management System in line with that of the Group. It has thereby identified the environmental risks related to its activities that trigger corrective and/or preventive measures.

8.3.1 Sustainable management of water resources

Our projects to support the territory

Every year, Alperia produces around 4,000 GWh of energy from a clean and sustainable resource: water. The year 2022 was marked by lower water availability as a result of the poor snowfall in the winter of 2021/2022 and prolonged dry summer periods. Energy production in 2022 therefore recorded a drop of around 25÷30% compared to the long-term average.

Alperia is in constant contact with the provincial offices in charge of managing water use for the various activities in the area, to protect the aquatic environment and fish. It is also consolidating various agreements, such as the agreement signed with the Venosta Valley Reclamation Consortium to guarantee the necessary amount of water to protect orchards from night frosts during the spring flowering period, identifying more efficient supply methods and providing for an increase in the quantities of water to be made available. Taking spring 2022 as an example, Alperia made around 5 million m³ of water available for the Vinschgau Valley alone in the period from the end of March to the beginning of May to protect crops from night frosts. This is made possible with the volumes stored in the artificial reservoirs in Resia and Gioveretto.

The reservoirs of Val d'Ultimo protect the apple orchards of the Lana and Cermes plains from frost; further important anti-frost measures are guaranteed by the Tel, Bressanone and Cardano plants.

The water is drained off for an entire night, reducing the company's possible profit margins, to guarantee an alternative use of the water for the region's agricultural economy. These examples demonstrate Alperia's commitment to promoting a **conscious use of water resources**, also through collaboration and dialogue with stakeholders (public institutions, consortia and trade associations).

The prolonged drought of 2022 led to an extraordinary water emergency throughout the Po Valley. Under the coordination of the political institutions and the Reservoir Authority of the Eastern Alps, Alperia was called upon to manage the production of its large plants and its reserves accumulated in the largest reservoirs, in order to guarantee a continuous flow level in the Adige River sufficient to maintain a flow rate of about 80 m³/s at its mouth so as to ensure the water supply, to prevent the salt wedge from rising and to ensure a certain availability for irrigating crops in the Veneto Region.

It was an exceptional situation that led to a de-optimisation of energy production, but at the same time provided important support for the downstream areas of our province and region.

What happened in the summer of 2022 further emphasises the strategic importance of proper water resource management through the function of large reservoirs serving hydropower plants.

Alperia acts in line with current regulations both in the area of water withdrawals and discharges. Alperia is aware of how important it is to implement proper water management, defining precise criteria to identify any critical situations linked to climate risks. This topic will be increasingly important in the future.

8.3.2 Minimum Vital Flow

Minimum Vital Flow (MVF) means the quantity of water that needs to be downstream of a water collection to guarantee the correct functioning and quality of the ecosystems concerned. The MVF is the residual flow rate that protects the natural biocoenosis of the water course in the short and long term. The term "Minimum Vital Flow" is therefore often replaced by the term "**Ecological Flow**".

During flooding and when natural flow rates are high, plants, depending on their size, withdraw water up to the maximum flow rate allowed by the concession decrees; in lean periods, meanwhile, there may be a reduction in the significant flow rate in

some sections of the riverbeds. In the Autonomous Province of Bolzano, the release of the MVF from a hydroelectric branch is regulated by the new General Plan for the Use of Public Water (PGUAP).

For **11 large hydroelectric plants** operated by Alperia Greenpower, when the concession was renewed in 2011, a laborious testing and monitoring programme was set up with the aim of identifying a quantity of water deemed to be ecologically optimal, guaranteeing the optimum condition of the watercourse downstream of the derivation. This testing process was planned to last around eight years. To date, the trial will be concluded for six of these plants, as certified by the assessments of the Environmental Services Conference and by the consequent resolution of the Provincial Council. In 2022, the collection of data on the **ecological status of the derived watercourses** was completed – also for the remaining five plants – by handing over the results of the analyses, the relevant reports and the request for the conclusion of the trial run to the competent authorities. Lastly, in 2022, an agreement was signed with the trade union organisations for the video surveillance of secondary intake works, from which the MVF is issued in most cases. This agreement allows us to equip these works with modern systems that can contribute to a more punctual and continuous control of releases, also optimising the work of maintenance personnel.

Water {ALP 6; ALP 7}

	Unit	2022	2021	2020	2019	YtY variation
Water released for minimum flow	litres per second	38,925	38,925	38,919	38,926	0%
Incidents of non-compliance with the requirements of the MVF (minimum vital flow)	No.	0	1	1	0	-100%

Fish ladders for derivation works

To support fish migration, Alperia has built “fish ladders” at some derivation works on watercourses of primary importance. During 2022, the construction of the fish ladder at the Lasa crossing (**Castelbello** plant) was completed. The fish ladder, which involved works costing around €1,700,000, partly financed by environmental funds, was designed by Alperia’s Engineering & Consulting department on the model of the fish ladder built in 2018 on the Talvera river at the Corvara intake to **serve the Sarentino plant**.

The passage of fish at the Lasa crossing is particularly significant, as it involves a large water course, the Adige, where flow rate fluctuations and variable levels persist. A system of tanks with sluice gates that adjust according to the water level has been designed.

In 2021, a **fish deterrent system was installed at the Fontana Bianca dam** in Val d’Ultimo. The system has been installed in front of the intake to prevent fish from entering the supply works. This is an experimental project carried out in cooperation with the University of Innsbruck. Initial feedback from monitoring seems to be positive. The monitoring activity continued in 2022 and the University of Innsbruck will shortly publish the results.

Finally, Alperia has signed a number of agreements with **local fishermen associations** for the management of their fishing rights. In particular, with the Val Martello Fishermen Association for the management of fishing rights in Gioveretto and with the Fischergemeinschaft Percha-Olang-Salomonbrunn in the upper Val Pusteria. With the Bolzano Fishing Association, on the other hand, the transfer of an area in the Ega valley is being finalised, where the association will build a new facility for the breeding of marble trout.

8.3.3 Sediment management

Mountain watercourses have a slow but continuous erosion effect on the ground and rocks. The degree of this erosion is influenced by the speed and flow of the water, the chemical-physical nature of the rocks and the adjacent land. The solid material (gravel and silt) deposited in the reservoirs disturbs hydraulic works and deep discharge units. It is therefore necessary to drain the reservoirs periodically, both to allow deposited material to flow downstream and to maintain the reservoir's useful storage capacity over time and to restore the watercourse. To achieve this, action can be taken with mechanical removal and/or the controlled release of sediment on the bottom of reservoirs by opening the deep discharge components in dams. Currently, the most effective method for removing accumulated sediment is **controlled release**, i.e. release carried out according to techniques, conditions and time schedules approved and controlled by the relevant provincial authorities. The release of silt and sand downstream from the dams is also necessary to regenerate the characteristics of the river bed.

Sediment release from large artificial reservoirs is regulated at both national and provincial levels. A reservoir management project approved by the competent authorities is required. For example, by nature, the Isarco and Rienza rivers see heavy transport of suspended solids during flooding periods, which accumulate in Rio Pusteria and Fortezza (Bressanone plant) reservoirs managed by Alperia Greenpower. The draining and purging operations of these two dams are provided for in the Operation and Maintenance Conditions Document of the two dams (drawn up by the Italian Dam Registry) and take place on average every four years. The relevant operating procedures (maximum and average allowed water turbidity values, duration of operations, maximum flow rates released downstream, etc.) have been authorised by the relevant offices of the Autonomous Province of Bolzano (Hunting and Fishing Office and Water Protection Office) through the reservoir management project and are managed by Alperia Greenpower, following a specific internal operating procedure. The amount of sediment discharged downstream during each draining varies according to the watercourse, the hydrological pattern of previous years and the time interval between two successive drainings. The depressing effect on the benthic microfauna generated in the aquatic environment by controlled flow operations are temporary. Surveys carried out on the **Isarco and Rienza rivers** following the draining of the Fortezza and Rio Pusteria reservoirs, show that previous normal conditions are restored within a short period of time (around two to three months). The impact on juvenile fish is greater, and this has led the provincial offices to request trials with alternative or complementary release methods.

In the summer of 2020, Alperia Greenpower carried out experimental dredging of the Fortezza reservoir. The pilot project involved the suction of sediment through a pumping device fed by a floating pipe and resulted in the removal of approximately 30,000 m³ of sediment. The dredging operation was also repeated in the **Curon and Colma reservoirs and in the Novale di Vizzo reservoir** with a positive outcome. In summer 2021, where the Fortezza branch was not active (due to renovation work on the generating units of the Bressanone power plant), the release of the overflow from the bottom outlet at low turbidity was tested, thereby also verifying the effectiveness of this method. Further trials were carried out in 2022, in particular aimed at sediment management during flood events.

Alperia worked with the Free University of Bolzano as part of the **Fusion Grant at NOI Techpark** to study river sediment management. The aim of the study – which is based on the results of Sediplan research – was to determine the quantity and quality of sediment deposited on the bottom of the reservoirs and, subsequently, how its management affects the ecosystem of the watercourse (microorganisms, flora and fish fauna) downstream of the dam, with a view to making hydroelectric power generation increasingly eco-sustainable. The ultimate goal of the project is to develop methodologies that will enable not only the monitoring of sediment releases from reservoirs but also the effective eco-sustainable design of these release activities. In a first phase, researchers involved in the Fusion Grant project constructed GIS digital bathymetric maps of the reservoir (graphically representing its depth) pre- and post-release of sediments. The difference between these maps show the exact amount of sediment deposited. Alperia has provided data on water and sediment discharges recorded by its monitoring stations. This is crucial information to enable the mathematical models used by Alperia and the University of Bolzano to perform the numerical simulation of soil erosion and sediment transport processes at the reservoir level. The results obtained clearly show that the phenomenon of sediment deposition and thus the silting up of reservoirs occurs mainly during particularly intense and abundant precipitation events (flood events).

8.3.4 Environmental Plans

For the large hydroelectric plants, whose concessions have been renewed since 2011, Alperia – in agreement with the competent authorities – has defined a plan of works for the improvement and conservation of the river environment and landscape. Environmental funds are also paid for large facilities whose concessions have expired and are awaiting renewal. Environmental improvement measures are implemented by the concessionaire, the Autonomous Province of Bolzano and the riparian municipalities. The types of measures for which compensation funds can be used, as defined in Provincial Resolution No. 199/2017, are:

- measures in favour of the aquatic ecosystem;
- measures to improve the environmental and social sustainability of energy supply;
- measures in support of nature, the landscape and the ecosystem;
- measures to prevent and protect against natural disasters and to secure rural infrastructures;
- measures to prevent and adapt to climate change;
- measures to improve energy efficiency;
- measures in the field of technical protection of the environment.

Every year, Alperia Greenpower makes **around €20 m** available for the implementation of environmental measures. The Autonomous Province of Bolzano is mainly active in the improvement and enhancement of watercourses and in the protection of sensitive habitats and species. Through the environmental funds, riparian municipalities have been able to obtain considerable funding and have carried out various projects, mainly concerning the improvement of the wastewater treatment system, the supply and distribution of drinking water, energy saving, reduction of pollution and preservation of the Alpine landscape. The concessionaire has focused its activities on implementing measures to improve the environmental compatibility of hydroelectric power plants.

In 2023, the new three-year intervention plans (period 2023-2025) will have to be defined for the environmental funds that are made available by Alperia Greenpower.

Finally, a **climbing** activity is planned on the Neves dam, in the municipality of Selva dei Molini, through the construction of two climbing routes, which will be added to the climbing route already existing on the Gioveretto dam, in Val Martello. These projects aim to create a sports attraction promoting soft tourism and sustainable development in peripheral areas of South Tyrol. The works will be carried out by Alperia Greenpower together with the Municipality of Selva dei Molini; Alperia will also provide for the burying of the overhead power lines at the Neves dam and in Val di Cesa, serving both the plant and various structures in the area. The measures are partly financed by the environmental compensation funds from the operation of the Lappago hydroelectric power plant, which amount to €1.3 m until 2022.

Strategic objective: We want to minimise the natural and environmental impact of our hydroelectric plants and actively protect the biological diversity of watercourses.

Operational objectives	Measures implemented in 2022	Deadlines (new)	KPI	Target value	2022 value	Status	SDG
Compliance with legal provisions on minimum vital flow/ecological flow.	Improvement on some intakes (Rio Tovo, Rio Piles, Rio Monego, Rio Vallaccia) of the MVF release device	Annually	% compliance on total intakes managed	100% absence of disputes	100	✓	SDG 6 SDG 15
Construction of fish ladders and compensation measures		2023	Number of new fish ladders	1		Ongoing	SDG 6 SDG 15
Extension of sediment management projects to all reservoirs serving the plants		2023	Reservoirs with sediment/total reservoir management programmes	100%		New	SDG 6 SDG 15
Assess sensor installation to find MVF drain blockages		2025				New	SDG 6 SDG 15

Strategic objective: We want to promote the efficient and responsible use of water resources.

Operational objectives	Measures implemented in 2022	Deadlines (new)	KPI	Target value	2022 value	Status	SDG
Be in continuous dialogue with stakeholders (e.g. in the areas of agriculture, artificial snow, fishing) regarding multiple uses of "water resources"	Anti-frost guarantee even in the event of system outages (cases of Bressanone and Glorenza)	Annually	-	-		✓	SDG 6 SDG 12
Introduce new projects and services to promote responsible use of water resources		2024	Saving water	22 Mm ³		Ongoing	SDG 6 SDG 11 SDG 12
Launch of water saving initiatives		2027	-	-		New	SDG 6

8.4 Use of resources and circular economy

8.4.1 Our sites

Sustainable, integrated, well-being focused

Sustainability and attention to people's well-being. These are the principles that inspired Alperia in the design of its new headquarters. The same ones that are guiding it in its planned maintenance and renovation activities for existing buildings, also in line with the energy efficiency targets of Vision 2030.

In particular, the Merano building, the tender for which has been concluded but is currently at a standstill due to appeals, was designed with the aim of obtaining to obtain the highest existing **energy and wellness certifications** (the LEED Platinum/Gold, CasaClima, WELL and CasaClima Work and Life standards will be met) with technology focused on sustainability, home automation and smart living. The spaces will be flexible and integrated into the urban landscape of the city. The architecture will be inspired by the landscape, incorporating essential elements such as water and nature, key elements in Alperia's corporate philosophy. The tender specified the construction of iconic buildings, recognisable and in some way representing the essential elements, such as water and the roof garden. The project sees the Alperia and Edyna buildings separated but linked to each other via the underground parking lot. Above this will be a large water pool mirroring the buildings which will appear to float. The Alperia offices will be located in the centre, in a 22-metre high elliptical building that will be connected by means of a walkway that will cross the water pool. The Edyna building will be much lower and partially underground, with a pedestrian entrance from the park-road. It will have a roof garden for collective use, creating a green cover with typical shrubs from the subalpine belt, such as juniper and mountain pine, alternating with a meadow and rock garden. The new headquarters will host about 300 employees from various Alperia Group companies, as well as Edyna offices, technical areas and warehouses. The approved budget for the entire project is around €38 m.

At the same time, work is underway on the definitive project for **Alperiatech**, Alperia Greenpower's new headquarters in Bolzano, where many of the company's offices and departments will be located, thereby reducing the number of leases and staff dispersion. The tender for Alperiatech will start in 2023 and the delivery of the property is expected in 2025. Also here, high energy and well-being standards will be respected, with the aim of obtaining LEED and WELL certifications. The entire area will also have to be smart and in line with the digital transformation that Alperia is working on, thereby providing for: control, management and automation of technological installations, intelligent control and management of light and water, reduction of consumption and operating costs, energy consumption monitoring systems, security management systems and remote control.

Alperia is also involved in **refurbishment** projects at Edyna's Resia site, where systems and windows are to be replaced, at the Cardano site, where windows and doors are also to be replaced, and at Alperia's Dodiciville site in Bolzano, where the work currently underway to refurbish the façade and improve energy efficiency will continue in 2023 with the refurbishment of the interior façade as well. Finally, as envisaged by Vision 2031, works will be developed to improve energy efficiency and expand

the photovoltaic system both in the headquarters in via Dodiciville in Bolzano di Alperia and in the headquarters in via Resia di Edyna and in the headquarters in via Claudia Augusta.

Alperia is also committed to promoting sustainable mobility, with targeted programmes for commuting. In 2021, it established the position of the **Mobility Manager** and presented the **Commuting Plan** to the competent offices of the Municipality of Bolzano. The plan provides alternative measures, more attractive than car use, which generate benefits for employees (in terms of time, cost and comfort of transport), for the company or public administration (in economic terms and productivity), and for the community (in environmental, social and economic terms). The measures identified are aggregated into 5 axes of intervention/strategies of interest:

- disincentivising individual private car use
- encouraging the use of public transport
- promoting cycling and or micro-mobility
- reducing the demand for mobility
- further measures

In 2022 we further updated the Plan, strengthening and/or reviewing some measures already in place such as the grant for the use of public transport (once exceeding 2000 km/year, Alperia plans to give a company grant of €200 at the start of 2023). The data on kilometres travelled can be taken from the “Alto Adige pass” cards and electric vehicle charging to simplify the grant recognition process. Great interest has been shown in the mobile cycle workshops: the initiative involves periodically setting up mobile cycle workshops at the Group’s main sites. In 2022 we carried out 8 events of this type in 4 Group locations. A pilot project will also start soon to encourage and promote intra-company car pooling, also by adopting innovative apps that will simplify communication between users. We will implement these and other incentive measures also in the light of what emerged from the **survey** we gave to our employees in November 2022.

647 people took part in the survey, corresponding to a percentage of 51.7%. An analysis of the data collected showed that **41.5%** use thermal cars (petrol/diesel), **21%** use bicycles and **10.1%** use local public transport to commute to work. From the answers to the questionnaire it also emerged that the main reasons influencing how employees choose to get to the workplace are:

- the need to minimise travel times (55.4%)
- stress reduction (43.2%) and
- the most freedom of movement (43%)

The data collected was included in the Commuting Plan (PSCL) which the Alperia Group is required to draw up for the offices in via Dodiciville and via Resia (both offices in Bolzano) and to send annually to the Municipality of Bolzano. Based on the information gathered, we will therefore undertake to implement initiatives in 2023 aimed at further promoting sustainable mobility among Alperia’s employees.

The Plan is supported by a Communication Programme, the main objective of which will be to circulate information on the results that the Commuting Plan aims to achieve. The aim is to help raise awareness among stakeholders and target groups of the importance of the measures. Finally, monitoring will be carried out, measuring the actual success of the actions implemented, end-user satisfaction and the measurement of the data required for the ex-post evaluation of the environmental benefits.

8.4.2 Waste management

Waste management in Alperia is carried out by the Waste Management area, which has the task of planning waste management, following its course from creation to disposal. By waste we mean a product that is no longer usable or a processing waste, as identified by current legislation. All types of waste are classified with an EWC— European Waste Catalogue code. It is then stored in a dedicated temporary waste depot for a maximum of three months.

For example, at the Edyna headquarters in Bolzano in via Lungo Isarco Sinistro there are three storage areas, one internal and two external. In the external ones we have large metal containers with covers (for weather protection) for non-hazardous waste (e.g. iron, copper, aluminium, wood, packaging); the areas are closed and controlled. Inside the warehouse, on the other hand, hazardous waste is stored in approved PVC baskets. Disposals are constant and periodic. In addition to these two large collection sites, there are other temporary waste depots located at the four operational sites in Cardano, Bressanone, Lana and Naturno, as well as Castelbello and Glorenza. As regards the ashes from district heating plants, disposal is always monthly, with cold ashes. This is to avoid re-ignition or fire during transport or spillage into other containers. In general, at Alperia we dispose of waste once a month, with the exception of production sites where the time limit is three months. In some sites, however, disposal is weekly. The waste disposal companies used are all located in South Tyrol. Alperia verifies that the waste transport and the disposal companies are authorised and that they dispose of the waste in an appropriate manner. An example in this case concerns IT products: we sign agreements whereby the suppliers themselves take care of the collection and correct disposal of obsolete or worn-out materials following a correct recycling treatment of materials, as also provided for by our Suppliers Register.

Every company that produces waste in Alperia has a waste depot and a waste manager. The waste depots are regularly checked and the entire transport and disposal process is recorded in a special loading/unloading register so as to keep track of every aspect.

Waste can be divided into industrial and civil. The former can be hazardous or non-hazardous. For certain hazardous waste types, a characterisation is performed, i.e. a clinical analysis by which they are certified on a nationally recognised scale. Normally, the characterisation of waste is performed when there are doubts about its hazardousness, or the exact concentration of the hazardous substances in question need to be known. In particular, for hydroelectric plants, more than 30% of the total waste is recovered from the grids at the intake works of the weirs or dams. These are foliage, branches, timber and a small amount of plastic found in rivers. In 2022, Alperia Greenpower introduced the latest generation filters adopted for wastewater from degripping which further reduce the percentage of waste generated. This is an area where two other important variables also play a role: 1) the weather conditions (in the event of a flood, more waste is produced) and 2) the quantity of production required. In 2022, for hydroelectric plants, there were 859 (2,100 in 2021) tons of waste, of which 350 (750 in 2021) were collected in the derivation works. The whole Group, excluding the plants, produced 1,230.68 (1,300 in 2021) tons of waste per year, of which 428.24 (347 in 2021) classified as hazardous. During 2022, **62% of the waste produced was recycled**. The other industrial waste associated with Alperia's activities are metals, packaging and oils. However, the Group tries to limit the disposal of exhausted products upstream, preferring less hazardous products when purchasing. One example is detergents for cleaning the contact parts of transformers and primary and secondary substations, for which Alperia prefers to buy products with lower levels of hazardous substances with the same performance. A trial has been launched with Edyna to use a 99% biodegradable dielectric oil. Even in the event of a spillage, the oil – being organic – would not harm the environment. Moreover, if the basic product is produced in a controlled manner, disposal obviously becomes easier.

The reference legislation is Legislative Decree of the 6 April 2006, No. 152 or consolidated environmental text and its recitals. The Autonomous Province of Bolzano has its own exceptions which we are required to follow. Our business is in fact subject to checks carried out by the Provincial offices and by the NOE Ecological Operations Unit of the Carabinieri as well as by the Chamber of Commerce. Those who are ISO 14001 and EMAS certified, being subject to periodic audits verifying legislative compliance, have greater guarantees, but this does not exclude the possibility of inspections by competent bodies. All waste management is internal to Alperia and our Waste Management area has always been found to be compliant with all the checks performed. Furthermore, the MUD – Environmental Declaration Form which summarises all the activities of the previous year is drawn up annually. This document is then sent to the Chamber of Commerce of Bolzano for the necessary checks. With this model we report all the waste produced, stored and disposed of throughout the year. For this reason we are required to have a daily loading-unloading register of all waste generated by the Group through dedicated software. Failure to comply with waste management regulations, in addition to fines, also carries criminal penalties up to and including arrest.

For **civil waste**, Alperia has several ecological islands or depots for the whole Group, as these are mainly created from office waste. Their management depends on existing contracts with local operators. All employees in Alperia are made aware of the issue of correct waste management, also through periodic information on the MyAlperia portal. Furthermore, the Group is making an effort not only to maintain the standards achieved, but also to increasingly reduce the waste produced, promoting circular management of materials and reducing the disposal rate. One of the recently adopted measures concerns, for example, the management of cleaning rags: Instead of disposing of the rags used to clean oil-soaked surfaces and mechanical parts, Alperia involved a company that supplies clean rags and takes them back dirty to wash them and return them clean. This reduces the amount of rags disposed of. Furthermore, Alperia Greenpower is installing water purifiers for the treatment of the waste water from the transformer tanks. If untreated, these waters are considered industrial waste and must be disposed of as waste, while if treated on site they can be discharged into the sewer or directly into surface waters. This reduces the amount of waste by several thousand kg. The same focus is also given to offices: the archives are predominantly digital, so much so that in the last ten years paper and cardboard in the Group have decreased by 30%, from 25 tons in 2010 to 15 tons today.

In 2022, there was a single emergency event due to a lightning strike that struck a primary substation of Edyna in Bolzano. This generated around 15,000 litres of water with a high concentration of hydrocarbons that had to be disposed of. The event was managed as required by the regulations without any environmental problems.



Territory

Our energy comes from this land. A resource that we protect, foster and promote by focusing on sustainability.

With our actions, we want to create added value for the community in the form of clean energy, jobs, support for the local economy and safe infrastructure.



We ensure access to affordable, reliable, sustainable and modern energy systems



We build and maintain safe and resilient infrastructure, foster innovation and support equitable, responsible and sustainable development



We want to make cities more inclusive, safe, energy efficient and sustainable



We ensure sustainable patterns of production and consumption

9. TERRITORY

Added value for the territory	€289 m	Total investments	€167 m
Net energy produced from renewable sources	€277 m	Percentage of contracts awarded locally (based on number of contracts)	60%
Contributions to society	€2.5 m		

9.1 Added value for the territory

How we handle the issue

Alperia is one of the largest companies in South Tyrol and all its shareholders are public institutions. The economic growth of the Group has direct and indirect impacts both internally and externally, creating and distributing wealth in the area in which it operates. Through the promotion of responsible business practices, compliance with environmental laws and regulations, and consultation with local communities, the added value generated by Alperia can help develop the local economy in a sustainable and inclusive way, benefiting both businesses and the people living there. Ensuring that all stakeholders can benefit from the wealth created by the Group.

The effects described derive from the commercial activities of the Group and from the investments in the community made during the year.

Alperia aims to generate significant added value for the various stakeholder groups every year, in order to boost local economic development (including dividends, salaries, taxes and environmental funds). In addition, economic growth has indirect effects, such as investments in the development of infrastructure or the Smart Region of South Tyrol, with which Alperia intends to create ecological added value for the province and to make its own contribution to a smart and digital South Tyrol.

Responsibilities are defined within the company. The financial resources used are measured annually as part of sustainability reporting and reported externally, examining effectiveness on the basis of previously defined indicators and adjusted if necessary.

The involvement of stakeholders in the definition of projects and initiatives for the territory mainly took place during the meetings of the Control, Risk and Sustainability Committee, the CSR Steering Committee and with specific meetings with the management during which the views and opinions of various stakeholders were collected on the various initiatives. The opinion of external stakeholders, and the communication of Alperia's initiatives to them, was gathered during the course of a number of roundtables when updating the materiality analysis.

What we want to do

We plan to invest €1 bn by 2027 with a focus on environmental, economic and social territorial impact. And we want to create an annual added value of €300 m in 2027 for our territory (through dividends, salaries, taxes and environmental funds). Alperia's commitment will focus in particular on energy transition and customers, with the energy refurbishment of buildings for over €450 m and the setting up of over 400 Energy Communities by the end of the Plan. Sustainability and innovation will be central to our activities. With targeted investments, Alperia aims to work towards the economic and social growth of the community in which it operates. Measures implemented to achieve the objectives of the Strategic Plan are available in the Newsroom on the company's website at www.alperiaigroup.eu.

9.1.1 Distributed economic value

The **revenue** generated by Alperia in 2022 was €3.6 bn (€2.1 bn in 2021), with around €3.3 bn (€1.8 bn in 2021) of the total covering operating costs. More than €289 m (€269 m in 2021) was allocated to the territories in which the Group is present, in terms of direct added value (+7% compared to 2021), of which **€117 m** (€104 m in 2021) were paid to public bodies in the form of taxes, environmental concession fees and electricity provided free of charge to the Province, €79 m (€72 m in 2021) allocated to salaries and social security contributions paid for employees, €2.5 m (€2.1 m in 2021) paid in the form of grants to society, such as sponsorships and donations. The owners were paid €32 m (€30 m in 2021) in dividends. Finally, procurement contracts with South Tyrolean companies amounted to around €59 m (€61 m in 2021). The economic value distributed indirectly benefits the whole province. Political institutions can fund numerous public initiatives that benefit the population through collected taxes and distributed dividends.

Direct economic value generated and distributed {GRI 201-1}

	Unit	2022	2021	2020	2019 ⁵	YtY variation
Direct economic value generated:	€	3,637,897,750	2,082,824,896	1,437,718,992	1,546,878,354	75%
<i>Revenues</i>	€	3,637,897,750	2,082,824,896	1,437,718,992	1,546,878,354	75%
Economic value distributed:	€	3,576,183,400	2,002,687,126	1,375,769,723	1,490,245,497	79%
<i>Operating costs¹</i>	€	3,342,507,242	1,814,571,098	1,196,350,493	1,327,594,723	84%
	% ⁴	91.9	87.1	83.2	85.8	
<i>Employee wages and benefits</i>	€	78,635,568	71,792,398	77,068,468	73,093,184	10%
	% ⁴	2.2	3.4	5.3	4.7	
<i>Payments to providers of capital</i>	€	35,384,714	11,472,319	9,514,673	9,250,687	208%
	% ⁴	1.0	0.6	0.7	0.6	
<i>Payments to government²</i>	€	117,170,004	102,703,726	90,180,251	78,524,074	14%
	% ⁴	3.2	4.9	6.3	5.1	
<i>Contributions to society³</i>	€	2,485,873	2,147,587	2,655,837	1,782,828	16%
	% ⁴	0.1	0.1	0.2	0.1	
Economic value retained	€	61,714,351	80,137,770	61,949,269	56,632,857	-23%
	% ⁴	1.7	3.8	4.3	3.7	

¹ The purchase of energy for trading purposes accounts for about 90% of the operating costs.

² This item includes taxes (IRES, IRAP, IMU, etc.) and other payments (such as water, state and riparian fees; free energy; environmental funds, etc.).

³ This item includes all investments in the community according to the B4SI framework (e.g. costs of sponsorships which are not part of the marketing strategy, financial and in-kind donations, energy-saving campaigns in schools, costs for refugee housing).

⁴ Percentage of direct economic value generated.

⁵ Data have been restated to align them to the new accounting method introduced in 2020.

The offers – to support the South Tyrolean economy in this period of crisis, Alperia has also developed a number of offers that have the aim of lowering energy prices for its customers. In particular, for businesses, Alperia has developed the **Alperia Eco Business** offer for companies based in South Tyrol, members of one of the associations affiliated to the South Tyrolean Economic Association – Economia Alto Adige and the Rete Economia – Economic Network. Companies subscribing to Alperia Eco Business receive 1,000 kWh per month at a fixed price, lower than the current market price. This has extended the existing agreement between Alperia and the South Tyrolean Economic Association – Economia Alto Adige and the Rete Economia – Economic Network, so that each company can choose the most favourable product according to its consumption profile. In line with Alperia's sustainable business strategy, all Alperia Eco Business customers receive 100% green energy. The initiative was welcomed by local business networks: thanks to the new offer, companies will be able to make significant savings. For **domestic customers** with dependent children, Alperia offers a bonus on their electricity bill worth €300.

The **Alperia Eco** electricity offer for South Tyrolean customers for their main place of residence was also extended until the same date: this means that 125 kWh per month will be available for main residences in South Tyrol for two years at an advantageous fixed price, regardless of the time of day, which is significantly lower than the current market price for electricity. This price is also lower than the market prices in South Tyrol and those of the protected electricity market. For an annual consumption of 1,500 kWh, Alperia Eco saves around €300 per year, which means 30-40% less in terms of costs. For an annual consumption of 2,700 kWh, which is the average consumption of a South Tyrolean family, the saving is around €340 per year, a 30% reduction compared to the protected market. Customers who choose Alperia Eco can therefore count on guaranteed savings compared to the protected market. In addition, those who consume less are rewarded proportionally more. An offer

that is not only socially fair, but also encourages a more conscious use of energy. This is just the latest measure by Alperia to support the area: since it was founded, the Group has always developed initiatives to distribute economic value locally, including through the development of discounted rates compared to the market price.

In particular, in the autumn of 2021, Alperia had already reacted to the increase in electricity tariffs by launching a fixed-price offer, anticipating the subsequent increase in prices, and more than 40,000 customers subscribed to this type of tariff. And now, with the launch of these other offers, a total of almost 120,000 Alperia customers benefit from discounted rates. Not only that, in 2022, customers were also given the opportunity to pay their bills in instalments: an initiative that Alperia put in place even before it became mandatory by law.

Value for the South Tyrol{GRI 201-1}

	Unit	2022	2021	2020	2019	YtY variation
Employee wages and benefits	€	78,635,568	71,792,398	77,068,468	73,093,184	10%
	%	27.2	26.7	29.2	30.6	
Payments to government* ¹	€	117,170,004	103,920,113	90,951,387	78,524,074	13%
	%	40.5	38.6	34.4	32.8	
Dividends to local governments* ²	€	32,000,000	30,000,000	33,300,000	26,000,000	7%
	%	11.1	11.1	12.6	10.9	
Contributions to society* ³	€	2,485,873	2,147,587	2,655,837	1,782,828	16%
	%	0.9	0.8	1.0	0.7	
Local procurement* ⁴	€	59,079,423	61,415,472	60,286,081	59,833,219	-4%
	%	20.4	22.8	22.8	25.0	
Total value for South Tyrol	€	289,370,867	269,275,570	264,261,774	239,233,306	7%
	%	100.0	100.0	100.0	100.0	

*¹ This item includes taxes (IRES, IRAP, IMU, etc.) and other payments (such as water, state and riparian fees; free energy; environmental funds, etc.).

*² Alperia's shareholders are: Province of Bolzano, City of Bolzano, City of Merano and Selfin. The proposed and approved dividends for the following year are shown.

*³ This item includes all investments in the community according to the B4SI framework (e.g. sponsorship costs that are not part of the marketing strategy, financial and in-kind donations, energy-saving campaigns in schools, refugee housing costs).

*⁴ 'Local suppliers' are defined as suppliers located in the same province as the registered office of the company they supply.

"From a social point of view, the South Tyrolean population should get more added value".

Comment from an employee; Stakeholder Survey 2021

Alperia replied: *We have set ourselves the goal of generating €330 m in added value for South Tyrol in 2031. In 2022, we allocated around €277 m to South Tyrol in terms of direct added value; €115 m was paid to public bodies in the form of taxes, environmental funds, concession fees and electricity supplied free of charge to the province; €69 m was for wages and social security contributions paid to employees; €2.5 m was provided in the form of sponsorships with benefits for the local community and donations. The owners received €32 m in dividends in 2022. Finally, South Tyrolean companies have been awarded contracts that have generated revenue of around €59 m. This distributed economic value indirectly benefits the entire region. Political institutions can fund numerous public initiatives that benefit the population through collected taxes and distributed dividends. We have also introduced measures to lower the cost of bills following the increase in energy prices.*

9.1.1.1 For the public administration

The Group operates in compliance with the current tax system, correctly fulfilling its duty as a taxpayer. For all companies controlled or jointly controlled by Alperia S.p.A., tax obligations are fulfilled by the holding company structures (Administration & Finance Department, Legal & Corporate Affairs, General Services, Procurement & Logistics) or by external consultants.

The tax risk is monitored by the staff in charge, supported by the Group Compliance Area, with an Assessment carried out by the Enterprise Risk Management Function and managed by Governance and Management, supported if necessary by external consultants. The Group has a dedicated internal Whistleblowing policy that also covers possible situations of non-compliance

with the current tax system. The regular submission of tax declarations and prompt payment of related payments are verified by the auditing company and the companies' control bodies (where present).

The quantification of direct taxes provided for in the financial statements of the companies and their correlation with what is reported in the related tax returns are subject to specific verification activities by the auditing company.

Alperia's contribution to the Public Administration in 2022 amounted to €115 m, in the form of taxes, environmental funds, concession fees and electricity supplied free of charge to the Province.

Taxes

As a publicly-owned company that puts sustainability at the heart of its strategies, the Alperia Group aims to operate in compliance with the tax framework in force, in order to correctly fulfil its duty as a taxpayer, aware of the social impact that taxes have on the territory.

Subsidiaries or jointly controlled companies of Alperia S.p.A. entrust the performance of their tax obligations to holding company structures (such as Administration & Finance Department for direct taxes and most indirect taxes and Legal & Corporate Affairs and General Services, Procurement & Logistics Departments for other indirect taxes) or to external consultants, with certain tax obligations sometimes fulfilled by the personnel of the companies themselves (invoicing, determination of excise and additional taxes, registration of deeds, etc.).

The relevant personnel, with the support of the Group Compliance Department, monitor the evolution of the current tax framework, carrying out an assessment with the Group Enterprise Risk Function. The assessment of the framework is made taking into account possible disputes by the tax authorities. There is also an internal policy that covers possible situations of non-compliance with the current tax framework (whistleblowing). The submission of tax declarations and payment of related payments are verified by the auditing company and the companies' control bodies (where present). The quantification of direct taxes provided for in the financial statements of the companies, as well as their correlation with what is reported in the tax returns are instead subject to verification activities by the auditing company. With respect to relations with tax authorities, therefore, Alperia implements procedures for audits carried out by the public administration. With this procedure, the Group can also respond to possible inspections or accesses (also) by the tax authorities. The Alperia Group is also a member of various trade associations to protect and represent its interests.

The corporate governance measures in terms of compliance with the tax framework are reported in the Organisational, Management and Control Model pursuant to Legislative Decree 231/2001 adopted by the individual companies. The need for correct and structured interaction with the tax authorities is reflected in an internal policy (Procedure for inspections and controls carried out by the public administration).

9.1.1.2 For the territory

Looking after the weakest

As mentioned above, Alperia has implemented numerous initiatives to support families and businesses in difficulty due to the energy crisis, with the **bonus** for families with children and the Alperia Eco and Alperia Eco Business discount offers. To these are added numerous charitable activities. For example, Alperia held two **auctions** for old furniture: the proceeds from the auctions amounted to €2,225.20 and were given, in equal parts, to the following associations:

- MOMO-- Association promoting palliative care for children in South Tyrol
- Frauen helfen Frauen

Not only that, some **furnishings**, for a value of around €4,000, were sent to the people affected by the flooding in the Marche region using furniture that was discarded but still fully functional, particularly a kitchen.

In addition: by virtue of its social responsibility, Alperia has always supported **humanitarian initiatives**. As early as 2021, for example, the company donated a mobile multidisciplinary specialist clinic to the South Tyrolean Red Cross and, in cooperation with the White Cross and the National Committee of the Italian Red Cross, installed eleven new defibrillation columns with public access. Alperia also supports numerous sports and social activities and makes donations to various associations active in the social field. A commitment that in 2022 was also extended in light of the conflict in **Ukraine**, with a focus on refugees. An agreement between Alperia and the Autonomous Province of Bolzano made it possible to host five families of Ukrainian refugees (26 people in total) in the Alperia Greenpower apartments in Barbiano. The refugees were assisted by the Red Cross. Thanks to an agreement with the Burgraviato district community, Ukrainian families were also hosted in Naturno. Alperia also temporarily changed the lighting on the Alperia Tower at the Bolzano district heating plant to the colours of the peace flag to show its solidarity with the people affected by the war.

Finally, to support South Tyrolean non-profit associations and promote the use of energy from renewable sources, Alperia launched the “**Invite a member**” initiative. South Tyrolean associations invited their members/supporters to use green energy from South Tyrolean renewable sources via the special platform. For each supporter or member who chooses Alperia’s 100% green energy (Alperia SmileDay & Night light offer), the association receives a contribution of €40, while the association’s supporter receives a welcome bonus of €60. A trial is currently being carried out with two South Tyrolean associations, after which the initiative will be extended to all South Tyrolean non-profit associations that wish to join.

Investments for the community

Alperia is part of the B4SI (Business for Societal Impact) Practitioners Network and has voluntarily undertaken to apply the B4SI guidelines in the reporting of voluntary investments for the benefit of society. The table below shows the breakdown of all investments according to the problem area addressed and by the type of investment according to the B4SI framework.

Investments for the community– Form of Contribution & Issues Addressed

	Unit	Money	Work time	Contribution (in-kind)	Total	Percentage
Total	€	1,506,725		44,351	1,551,076	100.0%
of which						
Education	€				34,500	2.2%
Health	€				744,113	48.0%
Economic development	€				27,000	1.7%
Environment	€				9,700	0.6%
Art and culture	€				447,500	28.9%
Social care	€				230,113	14.8%
Emergency aid	€				57,151	3.7%

The following table shows the contribution of our voluntary investments to the benefit of society in accordance with the SDGs

Investments for the community- Contributions to the SDGs

	Unit	Total	Percentage
GOAL 2: Zero Hunger	€	5,000	0.3%
GOAL 3: Good Health and Well-being	€	867,613	55.9%
GOAL 4: Quality Education	€	34,500	2.2%
GOAL 5: Gender Equality	€	1,113	0.1%
GOAL 7: Affordable and Clean Energy	€	2,200	0.1%
GOAL 8: Decent Work and Economic Growth	€	48,000	3.1%
GOAL 10: Reduced Inequality	€	59,500	3.8%
GOAL 11: Sustainable Cities and Communities	€	529,651	34.1%
GOAL 15: Life on Land	€	3,500	0.2%
Total	€	1,551,076	100.0%

Donations

Also in 2022, Alperia continued to support **associations** by donating €280,000 to the following organisations:

Pfarrei Montan zum Hl. Bartholomäus – Parish of Montan in San Bartolomeo
ARCHIMEDE – A.I.A.S. LAIVES
ost west club est ovest
Elki Meran
IL TRAPIANTO È VITA
DEBRA Südtirol Alto Adige
Senior Citizens Association
ASAA Alzheimer Südtirol Alto Adige – ASAA Alzheimer Alto Adige
AEB-Arbeitskreis Eltern Behinderter – AEB working group Parents of people with disabilities
Caritas Diözese Bozen-Brixen – Diocesan Caritas of Bolzano-Bressanone
Südtiroler Vinzenzgemeinschaft – Vincentian Community of South Tyrol
Social Cooperative Society Smile Academy
Hotel Masatsch – Albergo Masatsch
Vergissmeinnicht – Nontiscordardime
Verein Tierheim Obervintl – Obervintl Animal Shelter Association
VKE- Talferwiesen Ice Rink
Czech Union of Bolzano
La Strada – Project IL BRIDGE – DIE BRÜCKE Project with children and families
Parish of S. Maria Assunta – Lighting of the San Giovanni Chapel
Familienverband Suedtirol
Verband der Seniorenwohnheime Südtirols (Tranche 2022) – Association of senior citizens' homes in South Tyrol
RUN4CHILDREN
Centre for the Protection of Patients' Rights ODV
AIAS Bolzano
AISM Italian Multiple Sclerosis Association
Food Bank Trentino Alto Adige section
APSP S. Nicolò Foundation
Il Cerchio – Der Kreis
Città della Speranza Foundation

Sponsorship

“Sponsorship is very important at local level; without it some clubs might not exist. We must be careful about who to give to and how much to give, favouring those that work with young people.”

Comment from the business community; Stakeholder Survey 2021

Alperia replied: We are aware of how important sponsorship is. We have established a transparent process and sponsorship requests can only be received through our website: <https://www.alperia.eu/it/sponsoring.html>. Among the activities supported in 2022, there are a number of youth-related activities, particularly in the field of sport.

Again in 2022, Alperia decided to continue supporting South Tyrolean projects and organisations in the fields of sport (youth and popular sports and professional sports associations), culture (music, theatre and dance), environmental protection and safety, increasing the funds allocated to this area. Smaller associations have also been involved so as to create added value for the local economy and support the communities in which Alperia operates. It should be noted that all sponsorship is carried out in full compliance with the guidelines published on the company website. Applications for sponsorship must be made through the online portal. After checking that the documentation is correct and that the required conditions have been met, applications are submitted to Alperia S.p.A.’s Management Board, which decides whether to accept or reject the application and, if accepted, the amount of sponsorship.

During 2022 we consolidated the **partnerships** already formed in previous years. In view of the energy emergency, in fact, the main part of our activity was focused on handling issues for customers and boosting the initiatives already started. These include, for example, the **Rugby for All** project developed in the Veneto region, a programme to introduce people to the game that Alperia supports in the Veneto region, confirming its focus on projects of social value and sport, which have always been part of its corporate identity. Over 5,000 people were involved in the 13 events organised by Alperia and the Veneto Regional Committee of the FIR. And at the conclusion of the busy programme of matches divided by category from Under 5 to Under 13, a day of celebrations was organised during which the “Alperia Award” was presented to two of the athletes in each category who distinguished themselves for their positive energy not only on the competitive front, but also for their commitment, ability to team up and promote the spirit and values of the sport. Inside the sports facility, a number of info points set up by Alperia were positioned, available to the public for all information on the promotional services offered exclusively to the rugby community. It was therefore an important day for rugby fans but also for the company, which was able to further strengthen its ties with the community and meet new, potential customers.

9.1.2 Investment in infrastructure

In 2022, we invested €166 m to maintain and renew our infrastructure so that it remains safe and efficient. In detail, 30.2% was allocated to distribution networks, 40.7% to production, 8.9% to district heating, 10.4% to the Smart Region and 9.8% to IT infrastructure, facilities, supply and trading, and other areas.

Infrastructure investments and services supported {GRI 203-1}¹

Type:	Unit	2022	%	2021	2020	2019	YtY variation
Energy distribution	€	50,424,336	30.2%	50,914,000	46,390,000	41,571,000	-1%
Teleheating and services	€	14,769,529	8.9%	12,100,000	11,251,000	13,059,000	22%
Energy production – mandatory	€	64,785,077	38.9%	57,487,751	27,529,000	19,078,000	13%
Energy production – stay in business	€	2,953,198	1.8%	5,679,626	4,804,000	10,777,000	-48%
Smart Region	€	17,394,000	10.4%	27,321,000	14,003,000	9,235,000	-36%
IT infrastructure and digital projects	€	12,781,815	7.7%	21,909,834	20,783,000	7,836,000	-42%
Supply and trading	€	31,000	0.0%	0	1,095,000	1,430,000	/
Facility investments	€	848,774	0.5%	537,736	773,000	588,000	58%
Other investments	€	2,761,120	1.7%	4,419,319	72,000	1,126,000	-38%
Total	€	166,748,849	100%	180,369,266	126,700,000	104,700,000	-8%

¹ The balances shown in this table do not include increases in intangible and tangible assets arising from business combinations.

Investments in the electricity grid

The electricity distribution grid of Edyna, a subsidiary of Alperia, is **9,199 km** long (high, medium and low voltage), with more than 2.6 TWh of electricity distributed. Edyna in 2022 invested €48 m to maintain and make the network more efficient. In 2023, €73 m of investment is planned.

Edyna is one of the first national operators to introduce new generation “**Smart Meters**” in Italy. The replacement plan, which started in 2020 with a four-year duration, continued also in 2022, completing 46% of installations, i.e. 118,000 meters (the project is due to be fully completed at the end of 2024). The new meters also identify how much energy individual appliances use, an important development from the smart home perspective. The total investment is over €41 m and will eventually lead to the installation of 260,000 new-generation meters. These smart meters increase the quality of service offered to customers, allowing a more precise monitoring of energy consumption (customers can view their electricity consumption updated every quarter of an hour) and, thanks to connectivity features, lay the foundations for the development of new technology for home automation and energy saving, representing a new frontier for smart homes.

At the same time, Edyna continued its efforts to **upgrade and modernise its low- and medium-voltage plants** following the adverse weather events over the last three years, concentrated in the Isarco Valley, Martello Valley, Ultimo Valley and the Sciliar Plateau. The commissioning plan for the **2G smart metering** system continued. Network **resilience** works also included: the replacement of secondary substation and PTP pole substation (pole transformation station) transformers, using vegetable oil transformers, the installation of low acoustic impact transformers for the primary substations, activities for tree cutting and burying of power cables, the installation of 6 new primary substations, the unification of the medium voltage networks, the decommissioning of 93,175 m medium voltage lines, safer in the event of extreme weather events. Inspections of the entire network by helicopter also continued.

Most of these activities will continue in 2023, including:

- installation of more than 260,000 new-generation meters, including 20,000 meters for other local distributors;
- investment drive to ensure network resilience and increase the quality and continuity of the electricity service;
- burying of medium -voltage power lines equal to 70% to minimise the environmental and landscape impact;
- expansion and integration of the Bolzano and Merano network;
- construction of major new primary plants and new medium-voltage grid backbones;
- growth in gas networks;
- growth in services to other network operators in the area.

In addition to these measures, Edyna plans to build a **new office in Merano** and **renovate the Bolzano office** with energy-efficiency projects. In addition, the **vehicle fleet** was adapted in accordance with the Group’s plan, effectively completing the vehicles that can be electrified (some service vehicles cannot be replaced by electric vehicles).

Investments in district heating

Alperia Ecoplus manages 13 district heating production plants, supplying heat to users thanks to a network of over 154 km. A quarter of the thermal energy produced in South Tyrol by district heating is generated by the plants of Ecoplus, which, with **234 GWh** produced, is the fifth largest national operator and the largest in South Tyrol. In 2022, it invested €14.8 m (€11 m in 2021) to expand the district heating network in Bolzano and Merano and to support maintenance and innovation projects in the plants. Alperia Ecoplus also achieved the important goal of ISO 50001 certification in 2022. In the coming years, as envisaged by Vision 2031, we intend to:

- expand district heating networks and invest in new plants to reach +163 GWht of thermal power (+60%);
- favour a progressive switch towards biomass plants or other sources/technologies (by 2031, +12% of biomass in the production mix);
- acquire/manage new district heating plants in the South Tyrol area (+45 GWht);
- develop the organisational structure (+18 FTE) to support the planned development, operationally take charge of the new plants acquired and provide an ad-hoc service to customers.

In the 2023-2027 Business Plan, by 2027 the following is envisaged:

- increase the thermal energy sold (+155 GWht, +57%) by expanding existing networks, new plants and acquisitions, reaching 431 GWht with, specifically:
 - o Merano: 138 GWht (+11%)
 - o Bolzano: 230 GWht (+100%)
 - o Sesto: 22 GWht (+2%)
 - o Chiusa: 17 GWht (+8%)
 - o Verano: 2 GWht
 - o New acquisition: 22 GWht
- develop six new plants, of which three with biomass, two with high-efficiency gas and absorbers and one backup;
- acquire two biomass plants with estimated entry into operation in 2025 and 2028;
- carry out a feasibility analysis for the use of deep geothermal energy;
- obtain €18.7 m of PNRR funds (€18 m in Bolzano, €0.7 m in Chiusa);
- decommission the palm oil plant.

Finally, in 2022 additional investments were done to further expand the district heating network in Bolzano and Merano and support maintenance and efficiency improvement activities. The Merano biomass plant went into operation and a small cogeneration plant with a generator set was built in Chiusa to provide continuity of service in the event of breakdowns. Furthermore an automatic programmer was installed in Chiusa with a forecasting model that allows it to react in advance to the demand from the grid, thus generating fuel savings and optimising plant operation.

Investments in hydroelectricity

Alperia is third in the Italian ranking – after Enel Green Power and A2A – for renewable hydroelectric power generation with about **4,000 GWh/year** produced by 35 large, medium, and small hydroelectric plants (to which we must add another 5 plants, in which Alperia Greenpower has an interest, but which are not subject to Alperia's management and coordination) with a total capacity of about 1,300 MW. To ensure the sustainable and efficient management of water resources, Alperia continues to invest significant resources in its plants. In 2022, investments amounted to €68 m, mainly for the revamping of some plants, but also for other activities that improved their safety, environmental impact and reliability.

The main extraordinary measures envisaged in the 2023-2027 Business Plan, with their total amounts, are listed below:

- Tel – new plant on the Minimum Vital Outflow – €4.6 m (by the end of 2023);
- Bressanone (large derivation) – plant renewal – €43.1 m (by the end of 2023);
- Lasa (large derivation) – plant renewal and new penstock – €39.7 m (by the end of 2023);
- Cardano (large derivation) – plant renewal – €35.9 m (by the end of 2023);
- Lana (large derivation) – plant renewal – €42.8 m (by 2025);
- Pracomune (large derivation) – extension life – €20.4 m (by 2025);
- San Pancrazio – new penstock for approximately €42.8 m (as well as works on a further four penstocks post-2024 for a further approximately €30 m).

A task force was also set up, strengthened by the acquisition of a majority stake in Hydrodata S.p.A., a historical and prestigious engineering company in Turin, in anticipation of participating in future tenders for the renewal of the eight Alperia Greenpower concessions expiring on 31 December 2024.

In addition to continuing these projects, in 2022 Alperia Greenpower met with the relevant provincial offices to assess an expansion of floating photovoltaics. At the moment, the Province's urban planning regulations do not allow it, but a working table has been set up that could lead to new evidence, also in view of the fact that the Province of Bolzano envisages a significant increase in photovoltaics in its Climate Plan.

Investments in the Smart Region

In 2021, Alperia Smart Region renewed its commitment to making the region increasingly innovative, efficient and sustainable. In particular, with Alperia Green Future, it worked to implement **energy-efficiency projects** for large industrial and commercial groups, as well as for apartment blocks and individual homes, also launching consulting projects related to the decarbonisation of businesses. Alperia Fiber connected primary and secondary infrastructures with fibre technology to ensure more stable and efficient communication. It also continued to develop the startup **Care4u**, dedicated to smart health, bringing the diPAS Basic solution to market for hospital-based patient care and working on the development of an additional monitoring system to be used at home. The **Energy Community** development project also continued with the Südtiroler Bauernbund – Unione Agricoltori e Coltivatori Diretti Sudtirolesi. **Neogy's** activities to promote green mobility are also increasingly important, with the planned installation of a further 33 hypercharger columns throughout South Tyrol by July 2022, following the tender won with STA – Strutture Trasporto Alto Adige S.p.A. and the launch of an initiative for shared electric mobility at tourist accommodation facilities. Guests are thereby able to use the service free of charge to travel with zero environmental impact and experience driving an electric car during their stay.

In total, Alperia Smart Region has invested **€17.3 m** in 2022 and will continue to focus on the coming years, as foreseen in the One Vision plan update:

1. building efficiency improvements (including thermal insulation);
2. become a reference player on the Italian market in the management of photovoltaics, ranging from the residential to the industrial sector;
3. innovative energy-efficiency solutions, based on algorithms, data analysis and artificial intelligence;
4. continuing the development of Smart Health, Smart Land and Smart City solutions;
5. development of energy efficiency and facility management solutions also for public administration and health, including through strategic partnerships;
6. continued development of sustainable mobility (electric and hydrogen) both for the infrastructure of the territory and for the development of innovative commercial solutions;
7. being a benchmark operator in the area for the development of distributed self-consumption solutions – Energy Communities;
8. investments totalling over €160 m.

Strategic objective: We want to create added value for our region in various areas, including jobs, local taxes and social commitment.

Operational objectives	Measures implemented in 2022	Dead-lines (new)	KPI	Target value	2022 value	Status	SDG
Definition of a target value for the creation of added value in the framework of the next business plan for South Tyrol and the entire territory		2022				✓	SDG 12
Implement a device reuse project for disadvantaged people, also to extend the life of the devices	Maintenance of the service, which has seen significant employee participation	2022	% of devices given against requests received	>70% annually	100 %	✓	SDG 11 SDG 12
Organise green events in collaboration with sponsored companies		2023	Events	2		New	SDG 12
Creating added value for our territory with a particular focus on South Tyrol and Veneto		2023-2027	Value added for the territory (€ m)	300	289	New	SDG 12
Development of written guidelines that focus community investments on specific social and		2024	-	-		New	SDG 11 SDG 12

environmental outcomes and the desired impact expected from each programme							
Definition and reporting of impact KPIs		2024	-	-		New	SDG 11 SDG 12
Measure and communicate the impacts of projects financed with environmental funds		2024	-	-		New	SDG 11 SDG 12
Communication campaign on the added value (positive impact) created for the territory with the Hydrodata or Alperia Innoveering projects		2025	-	-		New	SDG 12
Obtaining Leed and WELL certification for new projects		2025	No. of projects	2		New	SDG 11 SDG 12
Spending increase for projects aimed at the local area (community investments) and strategic initiatives and projects for the community and for Alperia		2027	-	-		New	SDG 11 SDG 12

9.2 Supplier management

How we handle the issue

This topic was identified as essential both in terms of the impacts generated and suffered: as a full-service energy supplier, Alperia buys its products, materials and raw materials from various Italian and foreign suppliers, which leads to direct social and environmental impacts along the entire supply chain.

These impacts derive from the commercial relationships undertaken by the Group for the purchase of goods and services necessary for the performance of its activities from suppliers from different geographical areas.

Alperia also promotes a sustainable approach in its supplier management. Sustainability is also a requirement in tenders. All of Alperia's suppliers must accept the principles of the Group's Code of Ethics and uphold them, starting with the respect and protection of human rights (included in all tenders and purchase orders managed by Procurement. From 2019, in particular, all new significant contracts, i.e. contracts managed centrally at Group level by the procurement function and exceeding a value of €100,000 include this clause), occupational health and safety and respect for the environment and sustainability. The relevant Italian legislation, the procurement code and the Group's own regulations stipulate that in tenders, all suppliers must be treated equally, and the whole process must be carried out with total transparency, assessing various factors that affect, where possible, the quality of the supply as well as the price. So a local product does not always mean better quality/price or lower environmental impact. Due to the nature of some important procurements of works, supplies and services for the Group, it is not always possible to find local suppliers. Wherever possible, it favours the use of local suppliers, both for works and for materials and services.

Alperia has an organisational system to keep track of the information requested and received from suppliers. It includes the 231 Model, registration on the White List according to the provisions of the Anti-Mafia Code and other certifications held.

The involvement of stakeholders, and in particular suppliers in the definition of projects and initiatives took place mainly during the meetings of the Control, Risk and Sustainability Committee, CSR Steering Committee and in specific meetings with Management, during which the opinions and views of internal stakeholders on the various initiatives were collected, and with suppliers in the contacts made during the year on the portal and/or with the heads of functions.

What we have done

Alperia uses a variety of tools to verify that our suppliers comply with precise environmental and social standards:

- **Register of suppliers:** this includes suppliers who, depending on the product categories they are responsible for, have specific social-environmental certifications, such as ISO 14001, ISO 45001, EMAS, or who can demonstrate that they have adopted equivalent measures. The qualification is valid for three years. In 2022, the register was updated, also including the suppliers of Alperia Green Future. Now, the register has 3,373 registered suppliers with 1,269 qualified suppliers and 5,560 qualified product categories;
- **Tenders:** for the Group's supplies, Alperia has set up a process to assess the minimum sustainability requirements linked to the product and has implemented a checklist on contracts, which is attached to the RDA (Purchase Order) and contains both elements for the management of the tender and the drafting of the contract. Since the end of 2022, the digitised Jaggaer system has also been used to manage some Alperia Green Future tenders. This made the process much faster and more timely. Please note that the assessment or inclusion of product-related minimum sustainability requirements is not linked to a procedural obligation;
- **Vendor Rating System:** an instrument that guarantees the quality of suppliers and minimises the risk of loss and dependence. The system provides that the collaboration of suppliers of strategic importance is evaluated internally on the basis of a standard questionnaire, in which the quality of services provided, safety standards and commitment to environmental sustainability are considered. These criteria allow the performance of individual suppliers to be assessed. Vendor rating will become fully operational from 2023;
- **Supplier audits:** for each contract entered into with a new supplier, Alperia may carry out an audit, with on-site visits and interviews to verify the information received. In 2022, due to the ongoing COVID-19 pandemic, no supplier audits were carried out.

New suppliers that have been assessed using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2022*1	2021	2020	2019
Percentage of new suppliers that were selected based on environmental or social criteria	%	100	100	100	100
Percentage of active suppliers with an environmental or social certification	%	38			

*1 All suppliers must pass the screening of pre-established requirements (for example, minimum certification requirements such as EMAS, ISO 14001, OHSAS 18001 or ISO 9001).

Vendor Rating System

During the bidding phase, did the supplier impose penalty clauses for the Alperia Group? Were penalties applied? Was the contract terminated for reasons attributable to the supplier? Did the machinery, plant and equipment comply with and meet the standards required to carry out the services? Were occupational safety emergencies managed properly? Did the supplier manage chemical waste in accordance with current legislation? Has the supplier taken appropriate measures to reduce the environmental impact of its activities for the Alperia Group? These are some of the Vendor Rating System questions that ensure suppliers meet Alperia's requirements, with a focus on economic, social and environmental sustainability issues.

At Alperia, the entire supplier management process, from the first purchase requests to the final evaluation, is fully **digitised** and integrated within a single platform. The system generates contracts on the basis of clauses that are selected by buyers. The clauses related to respect for human rights, the Code of Ethics, Model 231, etc. are standard and cannot be changed, except in exceptional cases.

Alperia's purchases, if made centrally, are the responsibility of the Procurement department and, in 2022, they were 60% local.⁷ Turning to local suppliers, subject to business needs and procurement regulations, is one of the ways in which Alperia supports the economy of its territories and thus also contributes to the reduction of transport-related emissions. The percentage of products and services purchased locally in 2022 was 40% of total expenditure. Among these:

- origin of works suppliers: 78% local;
- origin of service suppliers: 23% local;
- origin of product suppliers: 17% local.

Proportion of expenditure with local suppliers^{*1} {GRI 204-1}

	Unit	2022	2021	2020	2019
Percentage of products and services purchased locally (based on spend in euros)	%	40	28	36	35
Percentage of locally purchased jobs spend (based on total jobs spend)	%	78	77	72	42
Percentage of services purchased locally (based on total services spend)	%	23	30	20	39
Percentage of products purchased locally (based on total spend on products)	%	17	5	21	18
Percentage of contracts awarded locally (by number of contracts)	%	60	59	58	62

*1 As of 2022, the geographical definition of "local" of the organisation has changed to suppliers located in the same province as the headquarters of the legal entity they supply.

The total volume of purchases made by Alperia in 2022 was almost **€149 m** (€223 m in 2021), of which **€59 m** with local suppliers (€61 m in 2021). These purchases mostly related to the Group's core business, such as: technical equipment (cables, transformers and turbines) and raw materials (natural gas, wood, oil, lubricants and chemical products for the production and distribution of electricity and for district heating). Office supplies make up a small percentage of the total volume of purchases. The focus on sustainability in procurement is also visible on Alperia's premises. This includes organic and fair-trade products in vending machines, the use of biodegradable coffee cups and corporate glass dispensers instead of plastic water bottles or glass/aluminium flasks for employees.

Tenders – In 2022, in particular, the **gardening tender** was launched, in which certain criteria on the use of products and waste disposal were taken into account, plus a specific chapter on sustainability. Sustainability is a core aspect of the Alperia Group's corporate policy and an integral part of its mission and long-term strategy, therefore it is requested that contractors actively commit, within the scope of maintenance or redevelopment activities, to include the areas concerned in the urban green system and to make them an integral part of the already existing green infrastructure; giving preference to local plant species, ensuring not only a limited environmental impact and respect for local biodiversity, but also the optimisation of all economic aspects of space management; adopting personnel management policies aimed at developing the individual's skills and promoting their professional growth; adopting social inclusion policies aimed at introducing protected categories and weaker sections of society into the world of work; undertaking to adopt production logics based on a circular economy model favouring and preferring, whenever possible, the use of eco-sustainable products and materials that allow a limited environmental impact of the activities involved in the supply service.

The same focus is given to the new tender for the **distribution of beverages**, in which a qualitative score has also been set linked to some sustainability characteristics (suppliers who adopt local and 0-km products are preferred; using personnel management policies aimed at developing the individual's skills and promoting their professional growth; using social inclusion policies; adopting production logics based on a circular economy model; preferring, whenever possible, the use of eco-sustainable products and materials that allow a limited environmental impact of the activities involved in the supply service.) The supply chain plays a key role in achieving sustainability goals. It is therefore crucial to choose business partners who share values and quality standards with Alperia, who care about the environment and are actively committed to gender equality and social inclusion.

A tender for the **framework contract for furniture** will also be launched in 2023, which will include sustainability criteria referring to suppliers adopting personnel management policies aimed at developing the skills of individuals and promoting their professional growth (continuous training); who adopt social inclusion policies; who comply with their obligations towards their employees in accordance with legal provisions (social insurance, accident prevention, social security and welfare) and who adopt remuneration conditions in line with collective agreements. In addition to the technical score there are MECs – Minimum Environmental Criteria – referring to: contaminants in recycled wood panels, formaldehyde emissions from panels, emission of volatile organic components, coating materials.

Also in 2023, a new tender for the **cleaning service** will launch.

In all tenders, in addition to safety and environmental criteria, a paragraph called "sustainability requirements" has been included, which must be completed.

Minimum Environmental Criteria

Minimum Environmental Criteria (MEC) are environmental requirements defined for the various stages of the procurement process, aimed at identifying the best design solution, product or service from an environmental point of view throughout its life cycle, taking into account market availability. MECs are defined within the framework of that, established by the Plan for the Environmental Sustainability of Consumption in the Public Administration Sector, and are adopted by Decree of the Minister for the Environment, Land and Sea. Their systematic and uniform application allows the dissemination of environmental technologies and environmentally preferable products and produces a leverage effect on the market, inducing less ethical economic operators to adapt to the new demands of the public administration. In Italy, the effectiveness of MECs has been ensured through various regulations, which have made its application mandatory for all contracting authorities. In addition to improving environmental quality and respecting social criteria, the application of the Minimum Environmental Criteria also responds to the public administration's need to rationalise consumption, reducing expenditure where possible. Alperia requires MECs for all its public tenders, which account for almost 80% of its contracts.

“Why is it not always possible to buy from local companies?”

Comment from an employee; Stakeholder Survey 2021

Alperia replied: *The relevant Italian legislation, the procurement code and the Group's own regulations stipulate that in tenders, all suppliers must be treated equally and the whole process must be carried out with total transparency, assessing various factors that affect, where possible, the quality of the supply as well as the price. So a local product does not always mean better quality/price or lower environmental impact. Due to the nature of some important procurements of works, supplies and services for the Group, it is not always possible to find local suppliers. Wherever possible, it favours the use of local suppliers, both for works and for materials and services.*

Strategic objective: We want our purchases to be as local and sustainable as possible from an environmental and social point of view.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Consider eliminating plastic bottles in vending machines and introducing fair-trade, coffee and organic products in the machines	The new tender for the distribution of beverages and snacks has been awarded, and, according to the specifications, plastic bottles will no longer be distributed, while organic and fair-trade products will be increased	2022	-	-		✓	SDG 12
Tender: inclusion of environmental criteria for renovation projects above a threshold of €200,000 for the following categories of works: <ul style="list-style-type: none"> • conservative restoration and renovation works; • building renovation works; • new construction works. 	Done for ongoing projects	Annually	No. of major renovation projects	100%		✓	SDG 12
Tender: assess the possibility of extending the sustainability criteria envisaged by the Alperia Group for various tenders (e.g. furnishings,	A specific section has been inserted in the technical tender specifications to require compliance	2022	-	-		✓	SDG 12

cleaning) also for new companies	with certain sustainability criteria. In 2022, these criteria were included in the tenders for: furniture and beverage vending machines						
Tender: inclusion of the obligation for applicants to assess sustainability criteria for the economically most advantageous tenders in the accompanying RdA		2022	-	-		✓	SDG 12
Tender: assess the adoption of diversity criteria envisaged by the NRRP in tenders		Annually	-	-		X	SDG 12
Due diligence: consider carrying out an ESG assessment of the supply chain (e.g. CRIBIS, Cerved, EcoVadis)		2023	-	-		New	SDG 12
Due diligence: consider drafting a written policy outlining Management's responsibilities for the social and environmental performance of the supply chain		2024	-	-		New	SDG 12
Harmonise and centralise reporting of KPIs for NFS for new companies		2024	-	-		New	SDG 12
Extend the measures taken in South Tyrol in the offices in Veneto and Piedmont, e.g. water dispensers, elimination of plastic, biodegradable coffee cups, introduction of fair-trade, organic coffee and products in vending machines		2024	-	-		New	SDG 12
Tender: introduction of minimum criteria in individual tender procedures		2025	% tender procedures with minimum ESG criteria	70		New	SDG 12
Supplier Qualification: progressive introduction of minimum ESG standards to qualify as a Group supplier		2027	-	-		New	SDG 12
Tender: attribute scores to predefined sustainability criteria (e.g. ESG rating) in the procedures for awarding points and introduce a system for monitoring increased spending		2027	-	-		New	SDG 12

Introduction of supplier awareness initiatives		2027	-	-		New	SDG 12
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9.2.1 Human Rights

Suppliers wishing to qualify on the Alperia Roll are required to issue a human rights declaration in which they affirm their acceptance of the **UN Global Compact**, the world's largest strategic corporate citizenship initiative that encourages companies around the world to create an economic, social and environmental framework to promote a healthy and sustainable global economy that ensures everyone has the opportunity to share in its benefits. The UN Global Compact requires participating companies and organisations to share, support and enforce within their sphere of influence a set of core principles relating to human rights, labour standards, environmental protection and anti-corruption. Alperia has also included a clause dedicated to human rights in the general contract terms and conditions and in the specific contracts. There is also a format for orders directly from the departments in which the Global Compact compliance clause has been included. There was only one case where a supplier did not accept the clause, but since it was a direct award, Alperia continued the relationship with that supplier.

People are our strength Respect for dignity, equality and freedom are core values on which Alperia bases the pillars of its working environment. Respect for human rights underpins all our activities, both internally and externally. As mentioned above, there is a specific clause requiring compliance with these values in our choice of suppliers, in our purchasing contracts and in our Group-wide General Terms and Conditions. In line with the UN SDGs, Alperia has also identified human rights as pillars of the sustainability actions described in the report. This includes:

- **Diversity and equal opportunity – right to freedom of information and opinion; right to non-discrimination; right to family life; right to a fair and satisfactory remuneration:** we have strengthened reconciliation and flexibility measures, including smart working, which has become part of our organisation in a structured way. Thanks to the measures implemented, such as paternity leave and part-time work, many men have also been able to manage their work-life balance better. We have developed women's leadership programmes, encouraging the empowerment of women and their full fulfilment in our Group. In 2022, we again confirmed our Family Audit certification from the Family Agency of the Autonomous Province and Chamber of Commerce. We have appointed a Diversity Manager, with whom we are developing a plan dedicated to valuing diversity based on the diversity policy.
- **Employee development – right to leisure and recreation time; right to privacy; right to the free expression of opinions; right to peaceful assembly; right to social security:** we have put in place the dedicated "Talent" plan to promote targeted career development. The plan also includes workshops on innovation. This initiative will also identify key figures to deal with the generational change. We have provided our employees with specific training activities, based on both hard and soft skills. Sustainability has also been the subject of targeted training. We promote the right to recreation and leisure time and support activities organised by the employees' recreational club, CRAL. Every employee is guaranteed the right to privacy and social security; we also protect the confidentiality of their data and information.
- **Occupational health and safety – the right to a safe and healthy working environment; the right to physical and mental well-being:** we promote the well-being of our employees by taking out supplementary health insurance and by providing specific activities and services as part of the Welfare package. We also intend to implement this in relation to remote working. We have installed Red Cross and White Cross semi-automatic defibrillators at our sites and continued to harmonise union agreements for all Group employees, with the aim of achieving uniform and fair framework conditions. To deal with the COVID-19 pandemic, we had a specific plan and a dedicated task force that met periodically to update infection prevention measures and ensure a safe working environment, applying the legal provisions, supplemented by Alperia through additional preventive measures. We also promote widespread awareness of the importance of safety at work through dedicated training and communication programmes, so much so that in 2022 we recorded the lowest number of accidents since the founding of Alperia.



People

We want to empower our employees to do their best work, with concrete growth opportunities, talent development programmes and worklife balance measures.

From people in operational to administrative roles, from management roles to new recruits: each of them, with their value, contributes to the success of the Group.

3 GOOD HEALTH AND WELL-BEING



We promote a healthy and safe working environment and are committed to reducing pollution through our products and services

5 GENDER EQUALITY



We are striving to achieve gender equality and female empowerment

8 DECENT WORK AND ECONOMIC GROWTH



Promoting an inclusive and sustainable economic growth and decent and safe employment

10. PEOPLE

Number of employees	1,211 people	Average hours of training per employee	30.3 h
New employee hires	9%	Percentage of women in middle management	23%
Hires under 30	46%	Accident severity rate (per 1,000 hours worked)	0.13

10.1 Employee development

How we handle the issue

With a staff of over 1,000 employees, the Alperia Group is one of South Tyrol's largest employers, active in all areas of the energy sector, from production and distribution to the sale of energy and innovative services. This activity has direct and indirect impact both inside and outside the company. By offering specific training courses, the Group promotes the adoption of sustainable practices and gender equality within the company, two aspects that have environmental and human rights implications. Together, these initiatives can lead to an increase in employee satisfaction and well-being, thereby reducing the costs associated with employee turnover.

The impacts of personnel management, training and development derive from the internal activities of the Alperia Group.

The energy sector is constantly evolving, with increasing demands. Within this context, the specialisation and qualification of employees is fundamental. To prevent any shortage of skilled labour resulting from the numerous upcoming staff retirements, Alperia is intensifying partnerships with universities and secondary schools. It also pursues the objective of ensuring regular training and further training of its staff. In order to increase satisfaction and performance, reduce fluctuations and ensure high-quality work, Alperia is committed to supporting its employees in various ways. In addition to promoting health in the workplace, the company offers measures to improve compatibility between work and family life, such as flexible working hours and various models of part-time working. The year also saw smart working introduced due to COVID-19 for more than 700 employees (all employees at the sites) who were enabled to work from home for three days a week.

A complaint tool is available on the company intranet page: MyIdeas gives all employees the chance to submit suggestions for improving services, processes, occupational health and safety measures or those that contribute to greater motivation or stronger identification with the company. During the year, the MyAlperia platform was also renewed. An additional whistleblowing instrument of a different nature was introduced in line with the legislation. Since 2018, Alperia has also adopted individual career development plans for employees and training programmes dedicated to the Group's "Talented Individuals" and "Pillars". The Talent Management project identified 30 talented employees (from the 63 who put themselves forward in 2019), giving them individual and Group development opportunities as well as career growth prospects, thereby helping to increase their motivation. Highlighting the skills and potential of talented employees and pillars is also useful for the succession plan that is currently being prepared by the HR department to better meet the challenge of key staff members retiring. Finally, from 2020, the executive MBO was also linked to the achievement of a sustainability target.

The management approach is regularly evaluated, also through the "Family and Work Audit". To assess and verify the effectiveness of the management approach, we conduct a regular employee satisfaction survey in cooperation with research and the consulting firm Great Place to Work. This survey was conducted in 2017 and repeated in 2019, highlighting a Group-level Trust Index of 50%, with an increase of nine percentage points compared to the previous result. In addition, feedback interviews continued in 2022 extended to all Group employees. Adjustments can be made continuously throughout the year. Measures sent via intranet are reviewed and evaluated quarterly and, if necessary, approved and implemented. In 2018, the whistleblowing hotline system was also introduced: through employee involvement, it aims to prevent any risk situations (fraud, crimes, unlawful or irregular conduct on the part of company individuals).

Internal stakeholders are involved through management, training and education activities, which are defined with their employees, through suggestions on MyAlperia and by analysing surveys for effectiveness.

2022: Acknowledgement and developments

“Alperia is a very good place to work, but we have to aspire to be better. A lot more could be done in the area of employee motivation and development.”

Comment from an employee; Stakeholder Survey 2021

Alperia replied: Alperia accompanies its employees on a growth path by developing various initiatives. These include the “Talent” project, through which it provided ad hoc workshops and training activities for potential talented individuals. In 2022, in particular, activities dedicated to innovation and entrepreneurship were developed. At the same time, we relaunched the “Team Alperia 2021”: a project that boosts team spirit and allows employees to get to know each other better through activities with colleagues in their area in a non-work environment.

Employees^{*1 *2 *3 *4} {GRI 2-7}

Geo-graphic area and gender	Unit	Total number of employees				Work contract								Type of employment							
						Permanent				Fixed				Full-time				Part-time			
		2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019
Total Group	People	1,211	1,176	1,087	1,017	1,152	1,104	1,023	961	59	72	64	56	1,083	1,052	980	916	128	124	107	101
	%	100	100	100	100	95	94	94	94	5	6	6	6	89	89	90	90	11	11	10	10
Of which women	People	320	294	261	230	303	274	244	211	17	20	17	19	214	193	173	147	106	101	88	83
	%	26	25	24	23	95	93	93	92	5	7	7	8	67	66	66	64	33	34	34	36
Of which men	People	891	882	826	787	849	830	779	750	42	52	47	37	869	859	807	769	22	23	19	18
	%	74	75	76	77	95	94	94	95	5	6	6	5	98	97	98	98	2	3	2	2
South Tyrol	People	1,032				979				53				919				113			
	%	85%				95				5				89				11			
Outside South Tyrol	People	179				173				6				164				15			
	%	15%				97				3				92				8			

*1 Alperia Bartucci was not included in the 2018 data. Gruppo Green Power is not included in the 2019 data. Hydropower S.r.l. is not included in the data for 2020..

*2 Employees who left the company as of 31/12 are included in the total number of employees as of 31/12.

*3 Directors are included in the number of employees.

*4 The percentages published in previous editions have been restated to align them with the new calculation methodology, using the total of each row as a denominator instead of the column. By defining percentages based on total employees by gender and geographic area, and not by year.

Supporting the growth of Alperia’s people is one of our strategic objectives, which we consider fundamental to ensure a stable future for the Group. Our workforce currently consists of 89% full-time, 95% permanent employees, most of whom are subject to the rules of the National Collective Agreement for Workers in the Electrical Sector (100% of employees are covered by collective agreements). For external workers, during 2022, the Group mainly employed agents, followed by temporary workers and (university) trainees.

		Total number of external collaborators	
Unit		2022	
Trainees ²	People	38	
Women	People	13	
	%	34	
Men	People	25	
	%	64	
Temporary	People	56	
Women	People	36	
	%	64	
Men	People	20	
	%	36	
Agents	People	98	
Women	People	13	
	%	13	
Men	People	85	
	%	87	
Total Group	People	192	

¹ Total number during the year.

² Not including school placements.

Among the objectives of the 2023-2027 Business Plan is the promotion of the launch of initiatives to increase talent acquisition and reduce the turnover rate: 113 people joined the Group in 2022, of whom 40 were women, for a recruitment rate of 9%. Furthermore, more than a third of new hires (46%) are under the age of 30, demonstrating the Group's focus on young talent.

New hires and turnover¹ {GRI 401-1}

Hires	Unit	Total					<= 30		31-40		41-50		> 51	
		2022	2021	2020	2019	YtY variation	2022	2021	2022	2021	2022	2021	2022	2021
Women	People	40	35	26	21	14%	20	13	10	17	7	2	3	3
	%	35.39	31.53	29.54	28	0%								
Men	People	73	76	62	54	-4%	32	24	24	28	13	22	4	2
	%	64.60	68.46	70.45	72	0%								
Total employee hires	People	113	111	88	75	2%	52	37	34	45	20	24	7	5
Total number of employees as of 31 Dec.	People	1,211	1,176	1,087	1,017	3%	46%	33%	30%	41%	18%	22%	6%	5%
Hiring rate	%	9.33	9.44	8.10	7.37									

¹ Hydrodata S.r.l. is not included in the 2020 data. Green Power Group, Bluepower Connection S.r.l., Green Energy Group and Unix Group S.r.l. were not included in the 2019 data. The total number of employees of the Alperia Group in 2020 can therefore not be compared with the total number of employees indicated for 2019 net of employees who left and new hires in 2020. This misalignment is due to a different reporting perimeter for 2020 compared to 2019 (entry of new companies).

The **turnover** in 2022 was 6%, equal to 78 people, 27 of which due to retirement – a slight increase over the previous year. At the same time, we continued the development of **succession plans**, which are considered essential to deal with the demographic development of personnel and promptly replace key staff. The plans were defined starting from the analysis of the key outgoing functions and involving the top management of the individual companies. Consequently, a “backup” has also been identified to cover the temporary absence of the staff member.

Turnover ^{*2}		Total					<= 30		31-40		41-50		>51	
		Unit	2022	2021	2020	2019	YtY variation	2022	2021	2022	2021	2022	2021	2022
Women	People	14	15	19	7	-7%	3	0	3	7	2	1	6	7
	%	17.94	25	24.05	11.86									
Men	People	64	45	60	52	42%	9	7	18	9	9	6	28	23
	%	82.05	75	75.94	88.13									
Total employee turnover	People	78	60	79	59	30%	12	7	21	16	11	7	34	30
Of which retired	People	27	24	-	-	13%								
Total number of employees as of 31 Dec.	People	1,211	1,176	1,087	1017	3%	15%	12%	27%	27%	14%	12%	44%	50%
Turnover rate	%	6.44	5.10	7.27	5.80									

*2 Employee turnover: employees who leave the organisation voluntarily or through termination, retirement or death in service; turnover as at 31/12; employees who leave the organisation on 31/12 are not included in employee turnover.

During the year, **smart working** became structural with most employees working remotely 2-3 days a week. We carried out a second survey to assess the level of satisfaction with this organisational typology, and the people of Alperia confirmed their broad satisfaction with this tool, both with regard to increased productivity and improved work-life balance time. In addition, aspects of severance were also regulated at the bargaining stage.

Again with the aim of promoting employee involvement and boosting team spirit, the **Team Alperia 2022** project continued. A budget was made available for each employee by providing for short trips, guided tours, dinners, non-threatening sports practices, etc. Among the initiatives carried out, there was a charity activity for the homeless that was particularly engaging.

Finally, in order to cope with the expansion of the Group and to be able to better supervise the staff, the HR department was reorganised, appointing a project manager and staff member to specifically deal with communication with employees.

10.1.1. The evolution of leadership and personnel

Innovation, talent and entrepreneurship in business

In 2022, we continued the Talent project, offering **training** courses dedicated to acquiring or expanding topics such as strategy, budget, marketing and sales, innovation and valuing diversity. Not only that, courses dedicated to soft skills and three **workshops** dedicated to innovation and entrepreneurship were set up in partnership with the Luiss Guido Carli University. Of the talented people chosen in the two Talent Management editions, **68%** succeeded in having a growth or development plan.

Growth paths – We have strengthened **leadership** programmes, not only from a gender perspective. We organised workshops with the managers of the entire Group with the aim of creating a shared leadership culture, and for 2023 we plan to organise the Leadership Forum during which the results developed by the corporate programmes held by the intra-company group launched by Alperia will be presented with the aim of working on shared corporate culture and leadership development.

At the same time, **feedback interviews** were held with all Group employees (76% of personnel in 2022), and we also scheduled an interview when returning from maternity leave or after a six-month absence so as to support the best possible reintegration of the staff member. Performance interviews were held for 68% of management and 74% of female employees. To better support our people in their growth path, we have renewed the **training courses**, providing **36,655 hours** dedicated mainly to: digitisation, languages, MS Office courses – D3 courses, workplace safety, 231 legislation and soft skills improvement (conflict management, communication and time management). Not only that, we have launched a compulsory sustainability training course for executives that we will soon extend to management and the rest of the corporate population. In fact, it is a core topic for the future of the Group.

Finally, the **Information Dashboard**, which provides management with useful data for managing people and activities, and the intranet portal **MyIdeas**, where every Alperia employee can submit proposals and share projects and which was expanded in

2022 with the newsletter “Insight”, dedicated specifically to HR projects, are very useful for managing people. Each project is linked to one of Alperia’s 10 Golden Rules, the Group’s golden rules for creating an equal and purposeful working environment.

Percentage of employees receiving regular performance and professional development reviews {GRI 404-3}

Percentage of employees receiving regular performance and professional development reviews by gender

	Unit	2022 ¹	2021	2020	2019
Women	%	67	2	3	3
Men	%	73	4	2	3
Total	%	76	3	2	3

Percentage of employees receiving regular performance and professional development reviews by employee category²

	Unit	2022	2021	2020	2019
Executives ^{*3}	%	110	92	5	19
Middle managers	%	68	2	11	15
Office workers	%	74	2	1	0
Workers	%	62	0	0	0

¹ From 2022, career development assessments, MBO reviews and employee feedback assessments are included in the count, and the percentages are calculated on total employees.

² Before 2020, the following breakdown was applied: top management (directors + line managers); middle management (level 2+3); employees.

As of 2021, the following breakdown applies: executives; middle managers; office workers; workers.

³ The percentage is greater than 100%, because the number of executives assessed during the year is greater than the executives present as of 31 December.

Average hours of training {GRI 404-1}

Average hours of training per employee by gender

	Unit	2022	2021	2020	2019	YtY variation
Women	Hours	25.1	28.8	17.1	15.9	-13%
Men	Hours	32.1	25.7	20.4	21.6	25%
Total	Hours	30.3	26.5	19.6	20.3	14%

Average hours of training per employee by employee category

	Unit	2022	2021	2020	2019	YtY variation
Executives	Hours	48.4	26.7	34.1	28.2	82%
Middle managers	Hours	38.2	38	33.2	25.3	0%
Office workers	Hours	27.0	24.7	16.4	19.2	9%
Workers	Hours	34.9	26.4	0	0	32%

¹ Before 2020, the following breakdown was applied: Top Management (directors + line managers); middle management (level 2+3); employees. As of 2021, the following breakdown applies: executives; middle managers; office workers; workers.

Strategic objective: We want to invest in a shared corporate culture that is based on trust and promote employee development and empowerment.

Operational objectives	Measures implemented in 2022	Dead-lines	KPI	Target value	2022 value	Status	SDG
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Continue to define uniform framework terms and conditions for the Group	Uniform remote working regulations have been implemented in all companies except Fintel and Solar Total. A uniform approach was introduced for the canteen fee in all companies outside South Tyrol (see trade union agreement 30/03/2022).	Annual-ly	No. of agree-ments/con-ventions	-		✓	SDG 8
Assessment of the ideas received on MyIdeas	We received ideas that were assessed but were not possible to implement	Annual-ly	No. of proposals implement ed	-		✓	SDG 8
Regular feedback interviews in all Group companies (except Fintel and Selsolar)	Carrying out interviews for all Group companies	2022	% of Group companies	100%	100%	✓	SDG 8
Promotion of a shared leadership and corporate culture (values, principles and behaviours)	Four working groups developed practical measures in the areas of Leadership, Performance Appraisal, Vision & Communication and Meeting Culture, also involving the culture group	2022	No. of meetings	-	Mentorship 3 with all participants "Kultur-gruppe" 3 meetings Working groups: individual meetings during the year	✓	SDG 8
Introduction of 360-degree feedback		2023	No. of interviews	-		New	SDG 8
Maintaining and developing company know-how and boosting employee training		2027	Average hours of training	28h	30.3h	New	SDG 8
Raising the satisfaction index of employees from 50% (2019) to 55%		2027	Employee satisfaction index	55%		Ongoing	SDG 8

10.2 Diversity and equal opportunities

How we handle the issue

The direct impact for Alperia, one of the largest employers in South Tyrol, with approximately 1,211 employees, relates to the moderately high average age and the relatively low percentage of women due to the specificity of the technical sector in which we operate. Diversity and inclusion can contribute to a work environment that is more inclusive and respectful of all employees, resulting in greater job satisfaction and the ability to attract and retain top-notch talent. Furthermore, diversity and inclusion can help reduce gender and ethnic differences and other forms of discrimination, protecting the rights of all Group employees.

The impact on equal opportunities and personnel diversity derives from the Group's own activities.

Promoting diversity and equal opportunity is important for a successful business. This improves adaptability to changing market conditions and increases the attractiveness of employers. Alperia is committed to providing a non-discriminatory working environment and equal opportunities for all Group employees, regardless of age, gender, linguistic origin or any disability. For Alperia this also implies the guarantee of equal pay and equal career opportunities for men and women. There are relatively few women in Alperia, due to the particular nature of its technical sector. This is why the company is trying to bring more and more women into technical professions. In the area of human resources management, there is a particular focus on the recruitment of disabled staff and compliance with the relevant quotas required by law, which in Alperia are slightly lower than in companies in other sectors due to the technical nature of the work carried out in the electricity sector.

Responsibilities have been defined within the company. As part of the calculation of economic value, we also consider the added value we pass on to our employees. There is currently no system for handling employee complaints. In addition, as part of the Talented Individuals project, a training module dedicated exclusively to women in the Talented Individuals group was organised to promote and strengthen their role within the Alperia Group. Furthermore, a specific workshop on the importance of D&I in the corporate context was organised in 2022.

Internal stakeholders are involved through the management of minority staff, training and education on the subject, and through the meetings of the specific committee that meets periodically in order to define projects to promote diversity in the company.

What we have done

“Alperia should pay equal wages for the same work by men and women and should strive to have more women in leadership positions.”

Comment from an employee; Stakeholder Survey 2021

Alperia replied: Alperia has appointed a Diversity Manager who will develop Diversity & Inclusion policies. Already today, we are working to promote the growth of women. Currently, 23% of women are in management positions and our gender pay gap is 10%, while for office workers it is 7%. To encourage greater participation of women, we develop numerous reconciliation and flexibility measures.

“There are still too many discrepancies in treatment of men and women. Fatherhood must be supported.”

Community comment; Stakeholder Survey 2021

Alperia replied: Alperia is a Family-Audit-certified company, a recognition awarded by the Family Agency of the Autonomous Province of Bolzano and the Chamber of Commerce that is a testament to efforts to promote a healthy work-life balance for staff. Parental leave is one of the planned measures, and, in 2022, 89% of men took advantage of it. 64% of the total hours of leave were voluntary.

Since 2021, Alperia has had a **Diversity Manager** whose task is to foster the Group's human resources, helping to create an inclusive and welcoming work environment. In 2022, we launched the second edition of the **mentorship** programme with which we supported the integration and improvement of the specific skills of the various generations in key positions and talent in the Group. At the moment, 11% of employees are under or equal to 30 years of age, 55% are between 30 and 50, and 34% are older than 50. The mentorship plan is an exchange between managers (mentors) and young key positions/managers (mentees): during regular meetings, mentors and mentees learn new ways of thinking and behaviour and exchange knowledge. It was developed at an intra-company level so as to create cross-cutting training networks. The selection of the participant(s) was made on the basis of the assessment results within the Talent Management programme and in cooperation with the HR Business Partners. Mentor/mentee pairs were selected by means of a questionnaire, and an attempt was made to bring together participants from different companies with similar values. There are also internal facilitators who accompany mentee pairs and mentors or intervene for conflict resolution.

Also in 2022, we launched the “**language tandem**” project, which promotes cultural exchange and language training through setting up groups of Italian and German native speakers interested in mutually learning each other’s language.

Gender issue – Gender is another important issue for diversity in Alperia: women make up 26% of the total employees of the Alperia Group (320), up by 1% compared to 2021. In corporate bodies, however, women make up 33%. To promote the growth of women, for years we have been organising **courses and workshops on women’s leadership**, collaborating with key organisations that promote gender balance and an inclusive culture within companies such as Valore D and Class of Excellence. To attract more women into technical professions, we also continue to invest in cooperations with universities and local colleges. Finally, in the 2022-2027 Sustainability Plan we have expressly set objectives aimed at increasing the presence of women.

In order to promote a better work-life balance, Alperia also strengthened its policy on flexible working hours, parental leave and parenting support tools, and renewed the **Family Audit** certification, awarded by the Family Agency of the Autonomous Province of Bolzano and the Chamber of Commerce. All measures implemented in this area have been successful. In 2022, **parental leave** was taken by 100% of women and 89% of men (entitled in 2022), with 100% returning to work on time. A total of 17,673 hours of leave were taken by women and more than 4,864 by men (including breastfeeding, parental leave and compulsory maternity and paternity leave), of which 64% of men’s and 40% of women’s leave was **voluntary**¹². In particular, for men the weeks of voluntary leave went up from an average of 3 weeks in 2021 to 6 in 2022.

As for wages and the **gender pay gap** in the Group: in management, women earn on average 10% less than their male colleagues, for female office workers the percentage drops to 7%. The 2023-2027 Business Plan provides for the progressive reduction of the gender pay gap up to its complete cancellation.

Strategic objective: We want to promote diversity and equal opportunity in all aspects of our work.

Operational objectives	Measures implemented in 2022	Deadlines	KPI	Target value	2022 value	Status	SDG
Promotion of female professional development within the Group		Annually	Women promoted/total promotions	-	24%	✓	SDG 5
Promotion of flexible shorter working hours for men and women and managers		Annually	Share of part-time personnel (%) or/and remote working hours/total working hours	-	11% (part-time employees)	✓	SDG 5
Promotion of voluntary equal parental leave		Annually	Employees taking paternity leave/total of entitled persons Hours of voluntary parental leave (men)	-		✓	SDG 5
Formalise the governance of Diversity Management within Alperia through the establishment of a specific committee		2022	Committee set up	█	█	✓	SDG 5
Approval and publication of a diversity and inclusion policy for Group employees.		2022	Policy			✓	SDG 5
Make recruiters and Top Management aware of the		2023	-	-		New	SDG 5

¹² Compulsory leave: all those who took the following leave in 2022 were taken into consideration: days of early maternity – compulsory maternity leave – compulsory paternity leave.
Voluntary leave: all those who took the following leave in 2022 were taken into consideration: breastfeeding, parental leave, optional maternity leave.

remuneration policy with particular reference to the gender pay gap							
Cultural diversity: promote language diversity and implement a language tandem in South Tyrol		2023				New	SDG 5
Define a succession plan for key functions in Hydrodata (generational change)		2025	-	-		New	SDG 5
Reduction of the gender pay gap between office workers and managers with the same classification		2027	Gender pay gap (employees of the same level)	0.95	0.97	New	SDG 5
Increase in the proportion of women in the company and in 1st- and 2nd- level management		2027	% women in the company	28%	26%	New	SDG 5
Increase in the proportion of women in 1st- and 2nd-level management		2027	% women in management	27%	23%	New	SDG 5
Age diversity: boost for intergenerational initiatives and those aimed at lowering the average age of women		2027	Average age women	41		New	SDG 5
Age diversity: boost for intergenerational initiatives and those aimed at lowering the average age of men		2027	Average age men	45		New	SDG 5
Age diversity: attraction of young talent and qualified professionals (bilingual in South Tyrol)		2027	Number of internships	60	38	New	SDG 5

10.3 Occupational health and safety

How we handle the issue

This topic was identified as core both in terms of impact and by stakeholders. There is certainly a direct impact for Alperia, whose around 1,211 employees make it one of South Tyrol's largest employers. In particular, certain tasks of the Group's employee(s) may pose a health and safety risk due to the type of activities performed in potentially hazardous situations or with potentially hazardous materials. Investing in the health and safety of employees can lead to a reduction in the long-term costs of occupational injuries and illnesses, promote environmental sustainability and ensure that the rights of employees to work in a healthy and safe environment are respected.

The impact of the safety and health of the employees mainly concerns the activities of the Alperia Group, which, due to the nature of the activities carried out, can cause serious consequences for those involved. In the context of working relationships with external collaborators, they are **informed of the potential risks** and asked to **comply with the Group's rules** on the subject, thereby reducing the impact on safety.

Alperia aims to minimise the risk of accidents for its employees, especially in areas classified as hazardous, such as plants and infrastructures, operating in compliance with Legislative Decree 81/2008. This is done through the systematic training of employees in safety, Personal Protective Equipment (PPE) and the continuous updating of work equipment. Alperia is committed to providing ever greater protection for employees and third-party companies in the area of health, safety and the environment. Alperia has promoted and completed the implementation of **certified integrated management systems** (ISO 14001, ISO 9001, ISO 45001) for all the main Group companies. Despite the major risks associated with its activities, the systems implemented have made it possible to keep the severity and number of incidents very low at all times.

We work to create a healthy and safe working environment. We take all necessary measures to reduce the risks arising from our activities. We involve our employees in training to increase their safety awareness.

Alperia provides for medical examinations for each of its employees (depending on the position) to check their professional suitability. The examinations are specifically tailored to the job description and are carried out in cooperation with occupational physicians with whom we have been working for decades. All this is intended to ensure better doctor-patient relationships and to encourage as much of a "family doctor" approach as possible.

Alperia also provides a **dedicated welfare program, supplementary health insurance**, insurance against **accidents at work** and those outside work in the event of permanent disability. It therefore promotes measures to improve health and well-being at work and to lower absenteeism rates.

To cope with the COVID-19 emergency and to allow all workers to work safely, Alperia set up an Emergency Board. In addition to applying the measures laid down by national and provincial legislation to prevent the spread of the infection, Alperia decided to implement additional safety measures, obtaining CSQ COVID-19 Restriction certification from IMQ.

All accidents are monitored and reported, becoming the subject of information reports and "**lessons learned**". Through regular reports, employees are therefore involved in the implementation of the occupational health and safety management system.

Alperia also monitors the activities and accidents of its suppliers to avoid and mitigate significant negative impacts on occupational health and safety directly related to their activities. This is already taking place upstream: Alperia has implemented a supplier register and a Vendor Rating System that allows suppliers to be assessed on the basis of predefined indicators, including accident indices.

IMS Integrated Management System compliance is checked regularly through first-party (internal) and third-party (external, by an accredited body) audits. Effectiveness is monitored several times during the year using set indicators, with adjustments made where necessary.

Scheduled periodic meetings are held for each certified company (management reviews and meetings, pursuant to Art. 35 of Legislative Decree 81/2008) to share results and improvement programmes, the outcome of internal and external audits, the outcome of health surveillance and the progress of training programmes.

10.3.1. Safe working

Training and certifications

Ensuring safe working areas and reducing the risk of accidents, especially in activities classified as hazardous, is a primary objective for Alperia, which we pursue with multiple tools. Each company in the Group has an HSE manager and a Prevention and Protection Service Manager (RSPP). This person is in charge of promoting all the procedures to protect workers, analysing and predicting conditions that may be dangerous to their safety. The role is mandatory and indispensable in maintaining a safe and healthy working environment. HSE is also responsible for publishing the monthly report on quality, asset integrity, environment, as well as health and safety, in which any accidents at work are discussed. In addition, there is also a section on zero waste. This awareness-raising also continues with information bites on the company intranet and lessons learned. Not only that, with the aim of being even more efficient and further improving the monitoring of events, the entire activity has been digitised, and the IMS management system has been integrated with the provisions of the GRI. IMS Integrated Management System compliance is checked regularly through first-party (internal) and third-party (external, by an accredited body) audits. Effectiveness is monitored several times during the year using set indicators, with adjustments made where necessary. Scheduled periodic meetings are held for each certified company (management reviews and meetings, pursuant to Art. 35 of Legislative Decree 81/2008) to share results and improvement programmes, the outcome of internal and external audits, the outcome of health surveillance and the progress of training programmes. In addition, the HSE department collaborated in drafting the Taxonomy, involving a number of Group companies and mapping all company processes.

The significant risks for Alperia are assessed in the risk assessment document. For the management of accidents and near misses, Alperia has a procedure in place to speed up the reporting of such events. In addition, with the aim of assessing both the accident performance within the Group and that of external companies operating at Alperia sites, there is a consolidated system for collecting data on the activities carried out by staff (e.g. hours worked) and a procedure for reporting accidents. The data collected is disseminated inhouse through the monthly HSE report.

In 2022, there were 12 accidents recorded in Alperia involving our employees. Absence days, on the other hand, were **242**, a marked decrease from the previous year. The **Frequency Index (FI)** was therefore **6.31** and the Severity Index (SI) was **0.13**. These values are down compared to previous years, demonstrating how much the Group's awareness of safety has increased. The improvement noted is also due to the investment made in terms of culture and training. In 2022, 11,743 hours were dedicated to safety. The training was addressed to all Group companies and 564 employees participated. Among the topics covered, there were also insights into certification, sustainability and non-financial reporting, with a focus on the Global Reporting Initiative. In addition to training, each employee is provided with Personal Protective Equipment (PPE) and suitable work equipment, which is regularly maintained and, where necessary, replaced.

In the contractual conditions there are clauses dedicated to the health and safety of employees and workers of third-party companies. Work performance of contracting companies is assessed through a dedicated rating system. According to the data collected, there were **4 accidents during the year**, with no day of absence from work. The FI index, the accident frequency rate of contractors, was therefore 6.37 in 2022 while the SI index on work absences was 0.00. As the years of collection go by, the data becomes increasingly punctual, but it is not tracked in the same way as employee accidents, rather monitored against that reported by suppliers. Alperia has also implemented a supplier register and a Vendor Rating System that allows suppliers to be assessed on the basis of predefined indicators, including accident indices.

In 2022, Alperia renewed its **ISO 14001**, **ISO 45001**, **ISO 9001** and **ISO 27001** certifications which, as required by the standards, are subject to triennial reassessment and annual monitoring, and obtained ISO 50001 certification.

Finally, work with the provincial Civil Protection Agency continues to manage any critical situations or even serious emergencies in a more efficient and resilient way.

Accidents at work {GRI 403-9}

Employees ^{*1}	Unit	2022	2021	2020	2019	2018	YtY variation
Fatal injuries	No.	0	0	0	0	0	/
High-severity occupational injuries (excluding fatal injuries) ^{*2}	No.	0	0	0	0	0	/
Accidents resulting in days off work	No.	12	21	14	14	13	-43%
Accidents resulting in work limitations or transfer to other duties	No.	N/A	N/A	N/A	N/A	N/A	/
Injuries requiring medical treatment ^{*3}	No.	1	0	0	0	0	+100%
Other significant injuries diagnosed by a licensed healthcare professional ^{*4}	No.	0	0	0	0	0	/
Hours worked	No.	1,902,443	1,891,290	1,721,452	1,613,516	1,454,474	1%
Days of work lost ^{*5}	No.	242	472	320	427	293	-49%
Rate of deaths following an accident at work (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0.0	/
Rate of high-severity workplace injuries (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0.0	/
Recordable work accident rate (per 1,000,000 hours)	Rate	6.31	11.10	8.13	8.68	8.94	-38%
Lost days rate (per 1,000 hours)	Rate	0.13	0.25	0.19	0.26	0.20	-49%

Contractors ^{*1}	Unit	2022	2021	2020	2019	2018	YtY variation
Fatal injuries	No.	0	0	0	0	0	0%
High-severity occupational injuries (excluding fatal injuries) ^{*2}	No.	0	0	0	0	0	0%
Accidents resulting in days off work	No.	4	2	16	2	1	0%
Accidents resulting in work limitations or transfer to other duties	No.	N/A	N/A	N/A	N/A	N/A	0%
Injuries requiring medical treatment ^{*3}	No.	0	0	0	0	0	0%
Other significant injuries diagnosed by a licensed healthcare professional ^{*4}	No.	0	0	0	0	0	0%
Hours worked	No.	627,904	731,328	770,223	656,616	584,353	-14%
Days of work lost ^{*5}	No.	0	57	73	86	13	-100%
Rate of deaths following an accident at work (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0	0%
Rate of high-severity workplace injuries (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0	0%
Recordable work accident rate (per 1,000,000 hours)	Rate	6.37	2.73	20.77	3.00	2	133%
Lost days rate (per 1,000 hours)	Rate	0.00	0.08	0.09	0.13	0	-100%

*1 Accidents in transit have only been included if the transport was organised by the organisation.

*2 Work-related injury involving an injury from which the worker cannot, fails, or is not expected to fully recover to their pre-injury state of health within 6 months.

*3 Other than first aid or loss of consciousness.

*4 Does not involve death, days off work, job restrictions or job transfers, medical treatment beyond first aid, or loss of consciousness.

*5 When calculating "days lost", "days" means "calendar days"; the "lost days" count begins the day after the injury.

10.3.2 Emergency Board and infection prevention measures

The Green Pass and new procedures

In 2021, Alperia had already renewed the safety measures defined in the previous year to manage the COVID-19 pandemic. These measures were updated and applied also in 2022. The Emergency Board, which was set up at the start of the health emergency, continued to meet periodically – first weekly, then fortnightly, depending on the need – sharing infection numbers and the effectiveness of the measures put in place. The Emergency Board members are: the directors of the individual Business Units, the Director of Communication, the Head of HSE Alperia, General Services and the trade unions. All decisions taken by the Emergency Board were communicated to employees via the MyAlperia intranet and through targeted communication activities.

10.3.3 Focus on health

Wellness-focused

Alperia, in compliance with Legislative Decree 81/2008, organises medical examinations to check the professional suitability of their employees and gives them the opportunity to use part or all of their production bonus to benefit from a welfare programme (for example, they can apply for reimbursement of school expenses for a family member or reimbursement of expenses for the care of dependent or non-dependent living relatives). It also provides that employee can take advantage of a **dedicated welfare programme, supplementary health insurance, insurance against accidents at work** and those outside work in the event of permanent disability.

At sites, also as a result of suggestions through the employee MyIdeas tool, it has introduced glass water bottles, or aluminium bottles, for operational staff, drinking water dispensers, free apples and hand sanitiser at site entrances and in each bathroom (in addition to the new bins for the disposing of masks).

In addition, support for CRAL activities continued and agreements were renewed with some sports centres in Bolzano and other local organisations. And the theme of well-being will also be central to the architecture of the new headquarters in Merano, where there will also be a fitness room and a relaxation room. All these measures contribute to creating a more welcoming and welfare-focused environment, with a positive impact on engagement and – in the absence of a pandemic – absenteeism. The Group-wide **absenteeism rate** in 2022 was **5.8** (per 1,000 hours worked), about 4% higher than in 2021. In addition, the number of working days lost due to illness increased by 8%, amounting to 13,600. There were zero cases of occupational disease in 2022, as was the case in 2021.

Health at work {GRI 403-10}

Employees	Unit	2022	2021	2020	2019	2018
Deaths due to work-related illnesses	No.	0	0	0	0	0
Work-related illnesses resulting in days off work	No.	0	0	0	0	0
Days of work lost due to absences of all kinds ¹	No.	13,600	12,566	16,698	11,729	10,033
Work-related illnesses resulting in work limitations or transfer to other duties	No.	0	0	0	0	0
Work-related illnesses requiring medical treatment ²	No.	0	0	0	0	0
Other work-related illnesses diagnosed by a licensed healthcare professional	No.	0	0	0	0	0
Cases of recordable work-related illnesses	No.	0	0	0	0	0
Hours worked	No.	1,902,443	1,891,289	1,721,452	1,613,516	1,454,474
Expected working hours	No.	2,329,755	2,243,027	2,086,963	1,950,015	1,822,584
Absence rate (days of absence per 1,000 hours worked) ³	Rate	5.8	5.6	8.0	6.0	5.5

¹ the “lost days” count begins the day after the injury.

² Other than first aid or loss of consciousness.

³ Excludes permitted absences such as holidays, study leave, maternity or paternity leave and medical leave.

Strategic objective: We want to promote a healthy and safe environment.

Operational objectives	Measures implemented in 2022	Dead-lines (new)	KPI	Target value	2022 value	Status	SDG
Safety: no incidents involving employees and external companies	Inclusion of the HSE part in company onboarding	Annually	No. of accidents with lost days	0	12 injuries with 242 days of absence	X	SDG 3
Health: introduction of a communication programme on workstation ergonomics		2023	-	-		New	SDG 3
Health: organise an ergonomics course		2023	-	-		New	SDG 3
Health: organise stress management training for employees (incl. prevention of anomalous situations)		2023	-	-		New	SDG 3
Health: development of corporate wellness measures and working methods consistent with smart working		2023	-	-		New	SDG 3
Safety: offer safe driving courses for operating personnel of the new companies		2024				New	SDG 3
Safety: improve the monitoring of external companies for safety aspects (new companies)		2025				New	SDG 3
Health: reduction in the rate of absence		2027	Absence rate (days of absence per 1,000 hours worked)	5.3 (2021)		New	SDG 3

11. APPENDIX

11.1 LEGISLATIVE DECREE 254/16: MAPPING AND RISK MANAGEMENT

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
Social aspects	Security of supply	Strategic/operational/financial	<p>RISK 1: STRATEGIC – Risk of inadequate measures/failure to manage long-term climate change with potential variable demand of various stakeholders determined by different weather scenarios (e.g. expansion of the heating network vs. global warming).</p> <p>RISK 2: OPERATIONAL – Risk of potential malfunctions or interruptions in the distribution of energy, gas and district heating due to:</p> <ul style="list-style-type: none"> - inadequate activities to prevent damage from adverse weather events; - inadequate inspection and maintenance; - inadequate level of automation (e.g. fault and malfunction detection); - inadequate new connection planning. <p>RISK 3: FINANCIAL – Risk of inadequate investment in measures to improve plant performance in terms of availability, reliability and efficiency.</p>	<p>MITIGATION/CONTROL ACTION 1 – We want to be ready to face climate change, increasing the Group’s resilience. For this reason, we include objectives directly related to this topic in our Strategic Plans and are diversifying the business by increasingly focusing on sustainable products and services. In addition, we are beginning to explore the management of climate change risks.</p> <p>MITIGATION/CONTROL ACTION 2 – We have created a portal for businesses on the Edyna website (“LineRegister”) where they can register to view the status of underground lines to avoid the risk of potential malfunctions in electricity distribution and excavation damage, with the aim of reducing both the frequency and duration of power interruptions themselves. In addition, we have taken out insurance policies. Primary substations are equipped with supervision systems that automatically sound alarms in the event of malfunctions, and there is also a 24-hour on-call service for any malfunctions. To improve the quality of service, modernise the network infrastructure and make it more resilient, we have planned:</p> <ul style="list-style-type: none"> - the progressive burying of overhead lines; - expansion of automation on the medium-voltage network and remote control of secondary substations; - the periodic monitoring of overhead lines by helicopter; - periodic inspections of electrical systems. <p>MITIGATION/CONTROL ACTION 3 – We have planned major investments in generation and distribution (2023-2027 Industrial Plan), to improve the availability, reliability and efficiency of plants; we are also expanding the district heating network in Bolzano and Merano.</p>
	Economic development	Strategic/operational/financial	<p>RISK 1 OPERATIONAL – Risk associated with both the failure to comply with or implement the environmental prescriptions contained in the Concession Specifications and the failure to bear the costs of improvement measures in favour of the riparian municipalities.</p>	<p>MITIGATION/CONTROL ACTION 1 – In the spirit of maintaining and improving the environment and the area surrounding the hydroelectric plants, Alperia scrupulously complies with the requirements of the regulations and promotes and participates, together with representatives of the Autonomous Province of Bolzano and the riparian municipalities, in the Hydroelectric Plants Councils.</p> <p>Lastly, Alperia pays the funds for the implementation of the environmental improvement measures, according to the provisions of the relevant provincial resolutions. When within its competence, Alperia implements the mitigation measures set out in the three-year plans.</p>
	Marketing and transparent communication	Strategic/operational	<p>RISK 1: OPERATIONAL – Risk of failure/non-definition of motivational measures for customers to increase the number of customers receiving paperless bills.</p>	<p>MITIGATION/CONTROL ACTION 1 – We want increasing numbers of customers to take up paperless billing. We are promoting this choice through consumer behaviour activities to stimulate the take-up of green products.</p>
	Customer satisfaction	Operational	<p>RISK 1: OPERATIONAL – Risk of inadequate management in terms of speed and efficiency of customer/user service and</p>	<p>MITIGATION/CONTROL ACTION 1 – To limit the risk of inefficient management and to offer our customers a rapid and solution-oriented service, we use numerous communication tools, including a bilingual</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			complaints with possible impact on customer satisfaction and loss.	freephone number which is backed up by an external call centre to cope with peaks in requests. This is how we meet all the service SLAs.
	Cyber security & privacy	Compliance/operational	<p>RISK 1: COMPLIANCE – Risk of non-compliance with privacy law provisions in relation to the protection of personal data.</p> <p>RISK 2 OPERATIONAL - Risk of security incidents responsible for potential damage to information, personal data protection, intellectual property and continuity of service due to cyber attacks arising from events such as phishing and malware conveyed through the multiple channels of the cyberspace in which we are present and to which we are exposed. Risk of a low level of regulatory compliance and holistic view of the cyberspace in which we operate due to a lack of management and awareness of cyber security issues with possible impact on the entire organisation in terms of regulatory deviations and inconsistent oversight of IT and OT systems with respect to, for instance, response plans to adversary events such as incidents or new and emerging threats.</p>	<p>MITIGATION/CONTROL ACTION 1 – We want to ensure compliance with privacy legislation (GDPR). To achieve this objective, we are taking the following measures:</p> <ul style="list-style-type: none"> - implementation and monitoring of specific procedures and processes; - information systems monitoring (including data flow); - implementation of privacy and security by design; - census of all personal data processing in the record of processing activities (including risk assessment and TOM measures under Art. 32 GDPR, etc.), periodic updating; - privacy training; - implementation and monitoring of additional measures as required by privacy legislation (appointment of Data Protection Officer, processing authorisations, disclosures, DPIA, etc.). <p>MITIGATION/CONTROL ACTION 2 – We want to protect data and systems from security incidents or attacks and guard Business Continuity (e.g. system failures, power outages, cyberspace events). To this end, we employ efficient protection systems against internal and external attacks and intrusions, annually renew ISO 27001 certification, develop business continuity and incident response plans, and implement security plans aimed at continuous technical and organisational improvement, all aimed at lowering the risk level. We also run awareness campaigns in the field of data protection and security in order to raise the sensitivity and awareness of the entire organisation to maintain a certain level of attention and approach.</p>
	Innovation, Research & Development	Strategic/operational	<p>RISK 1: STRATEGIC & OPERATIONAL – Risk of not identifying/planning innovation projects and R&D activities, as well as inadequate channelling of resources to the aforementioned projects/activities with potential impact on the development of new business opportunities.</p> <p>RISK 2: STRATEGIC & OPERATIONAL - Risk of non-alignment of innovation projects with ESG objectives relevant to the Alperia Group's corporate strategy, with potential impact on the achievement of sustainability objectives.</p>	<p>MITIGATION/CONTROL ACTION 1 – We are reviewing PRO 307 (Innovation Management) identifying the <i>competence areas</i> involved in projects related to achieving the vision. Launch of a monitoring and reporting system of both the idea and the projects with the intention of finding a way to identify the expenditure related to innovation.</p> <p>MITIGATION/CONTROL ACTION 2 – We compare each new innovation project opportunity with ESG objectives, mapping the expected impact of each initiative. This is how we ensure that our investments in innovation are consistent with our corporate strategy and sustainability goals.</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
	Sustainable energy products and services	Strategic/operational	RISK 1: STRATEGIC – Risk of failure/inadequate development of new energy concepts (e.g. products and services) with potential impact on the strategic objectives to make the business 100% green.	MITIGATION/CONTROL ACTION 1 – We want to develop new business activities in line with the 100% Green DNA concept, promote the take-up and purchase of green products and increase the sales share of sustainable products and services. For this reason, we are examining consumer behaviour programmes aimed at stimulating the purchase of green products.
Environmental aspects	Water	Strategic/compliance/operational	<p>RISK 1: STRATEGIC – Risk associated with underestimating the effects of climate change and the increasing intensity of acute weather phenomena (e.g. floods, droughts, etc.), with serious consequences for plant productivity.</p> <p>RISK 2: OPERATIONAL – Risk of non-implementation of compensatory environmental measures (e.g. fish ladders) with a consequent loss of biodiversity.</p> <p>RISK 3: OPERATIONAL – Risk associated with flood phenomena affecting large dams.</p>	<p>MITIGATION/CONTROL ACTION 1 – We also invest in the efficiency of hydropower plants through the renovation and installation of new generation units and alternator turbines with high efficiency. We build new hydroelectric plants for the recovery of energy otherwise dissipated by the Minimum Vital Flow. We promote research and development activities aimed at determining the improvement actions resulting from climate change. Studies have been underway since 2023 to diversify the source of production while remaining in the field of renewables (photovoltaic, hydrogen and micro-wind).</p> <p>MITIGATION/CONTROL ACTION 2 – We actively protect the environment as well as the biological diversity of derived watercourses by using funding from environmental funds to implement morphological improvement measures for watercourses affected by hydroelectric derivations. Furthermore, to define the most suitable compensation measures, we promote and participate, together with representatives of the Autonomous Province of Bozen/Bolzano and the riparian municipalities, in the Hydroelectric Plant Councils.</p> <p>MITIGATION/CONTROL ACTION 3 – Revision 02 of the PRO GP 303 procedure “Management of large dams”. The simulations of flood events continued involving the operational personnel and the South Tyrolean Civil Protection Agency, with which specific memoranda of understanding were written. Software developments are underway aimed both at forecasting flood events and at automating the exchange of information with the provincial bodies responsible for flood events.</p>
	Emissions	Operational	<p>RISK 1: OPERATIONAL – Risk of failure to define and implement a road map to achieve net zero (defined according to the Science Based Target initiative). In detail, the risk is divided into:</p> <ul style="list-style-type: none"> - lack of staff awareness and competence building to implement the net-zero strategy; - non-implementation of projects/definition and implementation of projects that do not perform as expected; - failure to monitor or improper monitoring of projects included in the road map. <p>RISK 2: OPERATIONAL – Risk of non-compliance with mobility plans developed for the company vehicle</p>	<p>MITIGATION/CONTROL ACTION 1 – Alperia signed the Letter of Commitment to the Science Based Target initiative, committing to transform the accounting carried out so far for the Sustainability Report into a net-zero strategy. In detail, the Sustainability Report reports on Scope 1, 2 and 3 emissions and also monitors all the activities that Alperia carries out to reduce its carbon footprint. By participating in the SBTi, Alperia will revise its emissions reporting in order to make it aligned with the SBTi and will also validate its KPIs in the SBTi so that they are aligned with the SBTi. Alperia supports the South Tyrol 2040 Climate Plan by reducing its greenhouse gas emissions. To achieve increased effectiveness, the sustainability and net-zero objectives were integrated into Alperia’s Business Plan.</p> <p>MITIGATION/CONTROL ACTION 2 – We want to reduce mobility-related emissions. As part of Vision 2031, Alperia has committed itself to minimising mobility-related emissions by promoting initiatives in</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			fleet in relation to reducing emissions.	both internal and external mobility (commuting to work) through the Mobility Manager.
	Energy consumption	Operational	RISK 1: OPERATIONAL – Risk of inadequate monitoring of energy consumption and energy efficiency levels of Alperia Group plants and buildings with potential negative impact on plant design, energy efficiency projects and actions aimed at reducing the Group's carbon footprint.	MITIGATION/CONTROL ACTION 1 – We structure and improve the monitoring and control of energy consumption to improve the quality of analysis and increase the effectiveness of energy-efficiency measures in plants and buildings also thanks to the progressive introduction of an ISO 50001-certified energy management. The activities planned and decided by the individual companies of the Alperia Group are coordinated by the Group's Energy Management, assisted by Alperia Green Future, the Group's ESCO, which, thanks to its many years of experience in energy efficiency and sustainability, has all the tools to support all the Group's companies in improving the monitoring of energy consumption and emission impact and in undertaking the most effective activities to reduce both energy consumption and climate-changing gas emissions that are in line with the efficiency objectives of the Group's Strategic Plan.
	Supplier management	Strategic/operational	<p>RISK 1: STRATEGIC – Risk of failure to identify specific criteria/requirements to ensure corporate purchases are made as locally and sustainably as possible and risk of inadequate choice and selection of suppliers.</p> <p>RISK 2: OPERATIONAL – Risk of potential non-ethical conduct by suppliers.</p>	<p>MITIGATION/CONTROL ACTION 1 – To help create local value and select suppliers of raw materials suitable for our business, we strategically set ourselves the objective of making our purchases as locally and sustainably as possible from an ecological and social perspective. 100% of our new supplier(s) are screened according to environmental and social criteria. To achieve the target objectives that we have set ourselves for the selection of new suppliers on the basis of social and environmental requirements, we have adopted the BravoSolution system, assessing sustainability criteria by goods category (high, medium, low criticality).</p> <p>MITIGATION/CONTROL ACTION 2 – To avoid the risk of a lack of transparency in the supplier selection process, in particular in relation to active/passive corruption issues, we are committed to ensuring responsible supply chain management by checking that suppliers meet the requirements of integrity, professionalism, technical standards and good reputation. Furthermore, to avoid the risk of non-ethical conduct on the part of suppliers, employees, customers and stakeholders, a clause on respect for human rights is included in the Group's General Terms and Conditions for contracting.</p>
	Asset integrity	Operational	RISK 1: OPERATIONAL – Risk associated with the partial or total failure of the hydraulic works attached to the plants, with potentially disastrous consequences on populations residing nearby.	<p>MITIGATION/CONTROL ACTION 1 – In accordance with the relevant legislative provisions in force, derivation dams and river crossings are subject to controls by the Ministry of Infrastructure and the Autonomous Province of Bolzano Dam Office respectively. The controls include supervisory visits every six months.</p> <p>Mandatory provisions on the subject are also contained in Resolution 221 issued by the Autonomous Province of Bolzano and in the concession specifications. In addition to the legal provisions, Alperia Greenpower carries out inspections, measurements, targeted checks, etc. for the plants at its disposal, as a voluntary improvement action, and then carries out the relevant maintenance work.</p> <p>In terms of investments, the campaign for the installation of differential protection devices on the penstocks of the plants was completed. The following were completed:</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
				<ul style="list-style-type: none"> - full replacement of the Lasa plant penstock, during which extraordinary maintenance was also carried out on the derivation tunnel; - the “relining” of a long stretch of the Glorenza plant branch tunnel. <p>Lastly, the plan to replace the penstocks of some of the hydroelectric plants whose concessions were renewed in 2011 continues, and, in particular, the contract for the replacement of the penstock of the San Pancrazio plant is underway.</p>
Personnel management	Occupational health and safety	Compliance	RISK 1: COMPLIANCE – Risk of failure to achieve adequate/maximum levels of occupational health and safety for employees and collaborators (external companies), in relation to injuries, accidents and occupational diseases with potential non-compliance with the legislation on the protection of occupational health and safety in workplaces.	MITIGATION/CONTROL ACTION 1 – We want to ensure the highest level of safety in the workplace for our employees and external staff (external companies). We have numerous tools including: a monthly HSE report on health and safety, online information tips on the issue of safety, dedicated training for each Group company, and ISO 14001, ISO 45001, ISO 9001 and ISO 27001 certification, revised and renewed every year. External companies are also assessed on the basis of safety-related criteria.
		Compliance/operational	RISK 1 COMPLIANCE & OPERATIONAL – COVID-19: risk of incorrect transposition of requirements or inadequate definition of additional measures to reduce/avoid the risk of infection in the workplace.	MITIGATION/CONTROL ACTION 1 – To manage the COVID-19 pandemic, the Alperia Group set up the Emergency Board and Committee provided for in the shared protocol of 24 April 2020. All measures were managed at Group level (purchase of protective equipment, introduction of remote working and the necessary hardware, limits for worker presence at sites, limits for stores and front offices).
	Employee development	Operational	<p>RISK 1: OPERATIONAL – Risk of inadequate implementation of staff training plans for the development of specific skills (e.g. development plans for management, high-potential programme, digital skills, e-learning courses).</p> <p>RISK 2: OPERATIONAL – Risk of inadequate Group-level human resources policies and procedures with potential impact on recruitment, management and development.</p> <p>RISK 3: OPERATIONAL – Risk of non-compliance in relation to staff training activities ensuring compliance with specific regulatory requirements (e.g. SSL, Legislative Decree 231/01).</p> <p>RISK 4: OPERATIONAL – Risk of employee dissatisfaction leading to potential inefficiency in the management of company activities.</p>	<p>MITIGATION/CONTROL ACTION 1 – We have created individual career development plans for our employees and organise specific internal training/e-learning courses according to needs (e.g. workplace safety, change management, cyber security, etc.).</p> <p>MITIGATION/CONTROL ACTION 2 – We want to ensure the presence of and compliance with Group-wide policies and procedures for the recruitment, management and development of staff. To achieve this, we apply the measures required by the 231 Model, pursuant to Legislative Decree 231/01 (segregation of duties, powers of attorney and proxies, traceability, objective definition and selection, performance measurement, etc.). For the integration of new companies, they are informed about the application of the procedure as soon as possible.</p> <p>MITIGATION/CONTROL ACTION 3 – We want to ensure compliance with regulatory obligations relating to staff training, updating training plans in accordance with the quality system and monitoring their actual performance in the area of compliance (e.g. SSL, Legislative Decree 231/01).</p> <p>MITIGATION/CONTROL ACTION 4 – We want to increase our employees’ satisfaction. For this reason, we carry out periodic surveys, including in consultation with external bodies (e.g. Great Place to Work® Institute Italia). The survey carried out in 2019 showed a 50% satisfaction rate, with an increase of 9 points compared to the survey carried out in 2016.</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			<p>RISK 5: OPERATIONAL – Risk of inadequate definition of retention measures and new recruitment planning to replace retiring key staff with a potential impact of loss of know-how and expertise, including technical.</p> <p>RISK 6: OPERATIONAL – Risk of conflicting relationships between parties with the consequent impossibility of developing effective personnel policies.</p> <p>RISK 7: OPERATIONAL – Risk of lack of motivational systems (e.g. team building) for employees, with potential inefficiencies in the management of company activities due to the lack of dissemination of a communication culture to ensure performance feedback and internal awareness through targeted workshops.</p>	<p>MITIGATION/CONTROL ACTION 5 – We want to create a stable and efficient company that has long-term economic success and is capable of consistently addressing the retirement plans of its key staff. To achieve this:</p> <ul style="list-style-type: none"> - we carry out promotional activities at the main schools and universities in the area to attract young talent, in particular in the technical professions; - we launched the Talent project which identifies employees with growth potential among internal staff; - we continue to develop career development plans for Pillar employees and those who take on more responsibility, get involved and who have the skills Alperia needs; - we have defined the succession plans for the individual Bus; - we have defined backups for key positions; - we have also prepared succession plans for management positions to better plan for any replacements. <p>MITIGATION/CONTROL ACTION 6 – We establish relationships with employees and their respective unions based on dialogue, limiting conflict and generating development opportunities in the mutual interest of all parties.</p> <p>MITIGATION/CONTROL ACTION 7 – We want to establish a culture of transparent communication to avoid potential inefficiencies in the management of company activities. We do this with motivational and team-building activities and with training and career development activities.</p>
	Diversity and equal opportunity	Strategic/operational	<p>RISK 1: STRATEGIC – Risk of not defining/expanding measures (e.g. round tables, training) aimed at involving stakeholders (educational institutions, employees) to raise internal and external awareness on the topic of “Women in technical professions and management”.</p> <p>RISK 2: OPERATIONAL – Risk of work-life imbalance.</p>	<p>MITIGATION/CONTROL ACTION 1 – We want to attract more women into technical professions and managerial roles. We promote our company in the main schools and universities in the area, including through meetings with professional women who already work in Alperia. We started working with the Valore D Association and created a module dedicated to female empowerment in our “Talent” programme with the aim of increasing diversity in governance.</p> <p>MITIGATION/CONTROL ACTION 2 – We want to be a family-friendly company for both men and women. For this reason, we promote reduced and flexible hours for our employees. As a result of the measures we have adopted, we have been awarded the Family and Work Audit certification from the Family Agency of the Autonomous Province and Chamber of Commerce. Furthermore, in 2020, following COVID-19, we introduced remote working and involved employees in a survey on this way of working, which produced very positive results. Therefore, we plan to keep it as part of our business organisation even after the health emergency is over. Starting from May 2022, structural smart working was introduced, the foundations of which are contained in the union agreement of 21 December 2020.</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
Combat corruption	Anti-corruption	Operational	RISK 1: OPERATIONAL – Risk of failure to monitor processes and activities with a risk of corruption between private individuals and in relationships with the public administration, as well as relationships with related parties.	MITIGATION/CONTROL ACTION 1 – We want to minimise the phenomenon of active and passive corruption, as well as conflicts of interest, both between private individuals and in relationships with the public administration. To this end, we adopt and keep constantly updated the Organisation, Management and Control Models pursuant to Legislative Decree 231/01 and the Group's Code of Ethics. We have also appointed 231 Supervisory Bodies and implemented the whistleblowing procedure.
Respect for human rights	Supplier management Diversity and equal opportunity Occupational health and safety Employee development	Operational	RISK 1: OPERATIONAL – Risk of violating human rights.	MITIGATION/CONTROL ACTION 1 – Respect for human rights is fundamental for Alperia. We adopt a system of values based on transparency and respect for the dignity, equality and freedom of each individual. This is a commitment that we make both internally and externally, including in supplier selection, to the extent that purchase contracts and the Group's General Terms and Conditions include a binding clause of respect for human rights (beginning with the respect and protection of human rights, occupational health and safety, as well as respect for the environment and sustainability). We are committed to providing a non-discriminatory working environment and equal opportunities for all Group employees, regardless of age, gender, linguistic origin or any disability. For Alperia this also implies the guarantee of equal pay and equal career opportunities for men and women. That is why we have appointed a Diversity Manager for the Group. In 2022, a diversity policy was also drawn up, which lays the foundations for the above. Every Alperia employee has the right to keep themselves informed and freely express their opinions, without being discriminated against for any reason (racial, political, religious).

11.2 GRI CONTENT INDEX

Statement of use	Alperia Group has reported in accordance with the GRI Standards for the period 01/01/2022–31/12/2022.
GRI 1 used	GRI 1 – 2021
Applicable GRI Sector Standard	No applicable GRI Sector Standard

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 101: Foundation 2016					
General disclosures					
GRI 2: General disclosures 2021	The organization and its reporting practices				
	2-1 Organizational details	198			
	2-2 Entities included in the organization's sustainability reporting	198			
	2-3 Reporting period, frequency and contact point	198-199			
	2-4 Restatements of information	127; 165; 167			
	2-5 External assurance	174			
	Activities and workers				
	2-6 Activities, value chain, and other business relationships	50-166	none		
	2-7 Employees	127; 167	none		
	2-8 Workers who are not employees	127; 167	none		
	EU 1 Installed capacity	158	none		
	EU 2 Net energy output	49; 158	none		
	EU 3 Number of residential and commercial customer accounts	165	none		
	EU 4 Length of above and underground transmission and distribution lines by regulatory regime	74	none		
	Governance				
	2-9 Governance structure and composition	37-39	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	2-10 Nomination and selection of the highest governance body	37-38	none		
	2-11 Chair of the highest governance body	37	none		
	2-12 Role of the highest governance body in overseeing the management of impacts	38-41	none		
	2-13 Delegation of responsibility for managing impacts	38-41	none		
	2-14 Role of the highest governance body in sustainability reporting	40-41	none		
	2-15 Conflicts of interest	48	none		
	2-16 Communication of critical concerns	48	none		
	2-17 Collective knowledge of the highest governance body	25	none		
	2-18 Evaluation of the performance of the highest governance body	37-38	none		
	2-19 Remuneration policies	37-38	none		
	2-20 Process to determine remuneration	37-38	none		
	2-21 Annual total compensation ratio		2-21	Confidentiality constraints	In 2022 the new General Manager was appointed; a salary comparison is not possible due to privacy issues.
Strategy, policies and practices					
	2-22 Statement on sustainable development strategy	4-5	none		
	2-23 Policy commitments	20-24; 123	none		
	2-24 Embedding policy commitments	20-24	none		
	2-25 Processes to remediate negative impacts	82-83	none		
	2-26 Mechanisms for seeking advice and raising concerns	48	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	2-27 Compliance with laws and regulations	47-49	none		
	2-28 Membership associations	12-13	none		
	Stakeholder engagement				
	2-29 Approach to stakeholder engagement	24-25	none		
	2-30 Collective bargaining agreements	127	none		
Material topics					
GRI 3: Material	3-1 Process to determine material topics	26-27	none		
	3-2 List of material topics	27	none		
Added value for the territory					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	108-113	none		
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	109-112; 154-155	none		
GRI 203: Indirect economic impacts 2016	203-1 Investment in infrastructure and services supported	114-117; 156	none		
	207-1 Approach to tax	111	207-1-a-i	not available	Alperia does currently not have a formalised tax strategy.
GRI 207: Tax 2019	207-2 Tax governance, control, and risk management	111			
	207-3 Stakeholder engagement and management of concerns related to tax	111	none		
Supply chain					

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	119-120	none		
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	121; 157	none		The organisation's geographical definition of "significant location of operations" refers to the Province of South Tyrol.
GRI 308: Supplier environmental assessment 2016	308-1 New suppliers that were screened using environmental criteria	120; 157	none		
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	120; 157	none		
Energy					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	88-89	none		
	302-1 Energy consumption within the organisation	88-89; 162	none		
GRI 302: Energy 2016	302-4 Reduction of energy consumption	88-89	none		
	302-5 Reductions in energy requirements of products and services	88-89	none		
Water					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	99-104	none		
Alperia own 2017	ALP 6 Water released for minimum flow	101; 162	none		
	ALP 7 Incidents of non-compliance with MVF requirements	101; 162	none		
Emissions					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	91-94	none		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	93; 163	none		
	305-2 Energy indirect (Scope 2) GHG emissions	93; 163	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	305-3 Other indirect (Scope 3) GHG emissions	93; 163	none		
	305-4 GHG emissions intensity	94; 163	none		
	305-5 Reduction of GHG emissions	94-95	none		
	305-7 Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	93	none		
Employee development					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	126-129	none		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	128-129; 168	401-1-a / 401-1-b	not applicable	Split by region: Alperia is a national company.
	404-1 Average hours of training per year per employee	130; 169	none		
GRI 404: Training and education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	127-128			
	404-3 Percentage of employees receiving regular performance and career development reviews	130; 169	none		
Occupational health and safety					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	135-136	none		
	403-2 Hazard identification, risk assessment, and incident investigation	136-.137	none		
GRI 403: Occupational health and safety 2018	403-9 Work-related injuries	137	none		
	403-10 Work-related ill health	138	403-10b	Information not available	Information on occupational diseases of external workers is not available due to the type of suppliers Alperia contracts with.
Diversity and equal opportunity					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	132-133	none		
GRI 401: Employment 2016	401-3 Parental leave	133; 171	none		
GRI 405: Diversity and equal	405-1 Diversity of governance bodies and employees	37; 132-133; 170	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	133; 170-171	none		Significant locations of operations: all our consolidated companies are included.
Customer privacy					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	68-69	none		
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	69	none		
Alperia own 2017	Other cyber security indicators	70; (Table 16) 163	none		
Security and accessibility of supply					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	49	none		
G4 Electric utilities sector disclosures 2013	EU 10 Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	158	split by regulatory regime	not applicable	Split by regulatory regime is not applicable.
	EU 29 Average power outage duration	52; 159	none		
	EU 28 Power outage frequency	52; 159	none		
Customer satisfaction					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	82-84	none		
Alperia own 2017	ALP 1 Monthly average of calls answered – green number	84; 165	none		
	ALP 2 Customer complaints	84; 165	none		
Innovation, research and development					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	61-65	none		
G4 Electric utilities sector disclosures 2013	EU 8 Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	62; 161	none		
Sustainable products and services					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	74-78	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
G4 Electric utilities sector disclosures 2013/Alperia own 2017	ALP 4 Share of revenues from sustainable products and services	169	none		
	ALP 5 Description of new business initiatives with sustainable products and services	75-78	none		
Asset integrity					
GRI 3-3: Management approach 2021 G4 Electric utilities sector disclosures 2013	GRI 3-3 Management of material topics	57-58	none		
	EU 21 Disaster/emergency planning and response	58	none		
	EU 30 Average plant availability factor by energy source and by regulatory regime	57; 162	split by regulatory regime	not applicable	Split by regulatory regime is not applicable.
Integrated governance and good corporate conduct					
GRI 3-3: Management approach 2021	GRI 3-3 Management of material topics	35-36			
Economic development and business model resilience					
GRI 3-3: Management approach 2021	GRI 3-3: Management of material topics	28-29			

11.3 FULL INDICATOR LIST

Territory

Added value for the territory

Table 1: Direct economic value generated and distributed {GRI 201-1}

	Unit	2022	2021	2020	2019 ⁵	YtY variation
Direct economic value generated:	€	3,637,897,750	2,082,824,896	1,437,718,992	1,546,878,354	75%
<i>Revenues</i>	€	3,637,897,750	2,082,824,896	1,437,718,992	1,546,878,354	75%
Economic value distributed:	€	3,576,183,400	2,002,687,126	1,375,769,723	1,490,245,497	79%
<i>Operating costs¹</i>	€	3,342,507,242	1,814,571,098	1,196,350,493	1,327,594,723	84%
	% ⁴	91.9	87.1	83.2	85.8	
<i>Employee wages and benefits</i>	€	78,635,568	71,792,398	77,068,468	73,093,184	10%
	% ⁴	2.2	3.4	5.3	4.7	
<i>Payments to providers of capital</i>	€	35,384,714	11,472,319	9,514,673	9,250,687	208%
	% ⁴	1.0	0.6	0.7	0.6	
<i>Payments to government²</i>	€	117,170,004	102,703,726	90,180,251	78,524,074	14%
	% ⁴	3.2	4.9	6.3	5.1	
<i>Contributions to society³</i>	€	2,485,873	2,147,587	2,655,837	1,782,828	16%
	% ⁴	0.1	0.1	0.2	0.1	
Economic value retained	€	61,714,351	80,137,770	61,949,269	56,632,857	-23%
	% ⁴	1.7	3.8	4.3	3.7	

¹ The purchase of energy for trading purposes accounts for about 90% of the operating costs.

² This item includes taxes (IRES, IRAP, IMU, etc.) and other payments (such as water, state and riparian fees; free energy; environmental funds, etc.).

³ This item includes all investments in the community according to the B4SI framework (e.g. costs of sponsorships which are not part of the marketing strategy, financial and in-kind donations, energy-saving campaigns in schools, costs for refugee housing).

⁴ Percentage of direct economic value generated.

⁵ Data have been restated to align them to the new accounting method introduced in 2020.

Table 2: Value for the South Tyrol{GRI 201-1}

	Unit	2022	2021	2020	2019	YtY variation
Employee wages and benefits	€	78,635,568	71,792,398	77,068,468	73,093,184	10%
	%	27.2	26.7	29.2	30.6	
Payments to government* ¹	€	117,170,004	103,920,113	90,951,387	78,524,074	13%
	%	40.5	38.6	34.4	32.8	
Dividends to local governments* ²	€	32,000,000	30,000,000	33,300,000	26,000,000	7%
	%	11.1	11.1	12.6	10.9	
Contributions to society* ³	€	2,485,873	2,147,587	2,655,837	1,782,828	16%
	%	0.9	0.8	1.0	0.7	
Local procurement* ⁴	€	59,079,423	61,415,472	60,286,081	59,833,219	-4%
	%	20.4	22.8	22.8	25.0	
Total value for South Tyrol	€	289,370,867	269,275,570	264,261,774	239,233,306	7%
	%	100.0	100.0	100.0	100.0	

¹ This item includes taxes (IRES, IRAP, IMU, etc.) and other payments (such as water, state and riparian fees; free energy; environmental funds, etc.).

² Alperia's shareholders are: Province of Bolzano, City of Bolzano, City of Merano and Selfin. The proposed and approved dividends for the following year are shown.

³ This item includes all investments in the community according to the B4SI framework (e.g. sponsorship costs that are not part of the marketing strategy, financial and in-kind donations, energy-saving campaigns in schools, refugee housing costs).

⁴ 'Local suppliers' are defined as suppliers located in the same province as the registered office of the company they supply.

Table 3: Value for the territory {GRI 201-1}

	Unit	2022	2021	2020	2019	YtY variation
Employee wages and benefits	€	78,635,568	71,792,398	77,068,468	73,093,184	10%
	%	27.2	26.7	29.2	30.6	
Payments to government* ¹	€	117,170,004	103,920,113	90,951,387	78,524,074	13%
	%	40.5	38.6	34.4	32.8	
Dividends to local governments* ²	€	32,000,000	30,000,000	33,300,000	26,000,000	7%
	%	11.1	11.1	12.6	10.9	
Contributions to society* ³	€	2,485,873	2,147,587	2,655,837	1,782,828	16%
	%	0.9	0.8	1.0	0.7	
Local procurement* ⁴	€	59,079,423	61,415,472	60,286,081	59,833,219	-4%
	%	20.4	22.8	22.8	25.0	
Total value for the territory	€	289,370,867	269,275,570	264,261,774	239,233,306	7%
	%	100.0	100.0	100.0	100.0	

¹ This item includes taxes (IRES, IRAP, IMU, etc.) and other payments (such as water, state and riparian fees; free energy; environmental funds, etc.).

² Alperia's shareholders are: Province of Bolzano, City of Bolzano, City of Merano and Selfin.

³ This item includes all investments in the community according to the B4SI framework (e.g. sponsorship costs that are not part of the marketing strategy, financial and in-kind donations, energy-saving campaigns in schools, refugee housing costs).

⁴ 'Local suppliers' are defined as suppliers located in the same province as the registered office of the company they supply.

Table 4: Investments for the community – form of contribution and issues addressed

	Unit	Money	Work time	Contributions (in-kind)	Total	Percentage
Total	€	1,506,725		44,351	1,551,076	100.0%
of which						
Education	€				34,500	2.2%
Health	€				744,113	48.0%
Economic development	€				27,000	1.7%
Environment	€				9,700	0.6%
Art and culture	€				447,500	28.9%
Social care	€				230,113	14.8%
Emergency aid	€				57,151	3.7%

Table 5: Investments for the community – Contributions to the SDGs

	Unit	Total	Percentage
GOAL 2: Zero Hunger	€	5,000	0.3%
GOAL 3: Good Health and Well-being	€	867,613	55.9%
GOAL 4: Quality Education	€	34,500	2.2%
GOAL 5: Gender Equality	€	1,113	0.1%
GOAL 7: Affordable and Clean Energy	€	2,200	0.1%
GOAL 8: Decent Work and Economic Growth	€	48,000	3.1%
GOAL 10: Reduced Inequality	€	59,500	3.8%
GOAL 11: Sustainable Cities and Communities	€	529,651	34.1%
GOAL 15: Life on Land	€	3,500	0.2%
Total	€	1,551,076	100.0%

Table 6: Infrastructure investments and services supported {GRI 203-1}¹

Type:	Unit	2022	%	2021	2020	2019	YtY variation
Energy distribution	€	50,424,336	30.2%	50,914,000	46,390,000	41,571,000	-1%
Teleheating and services	€	14,769,529	8.9%	12,100,000	11,251,000	13,059,000	22%
Energy production – mandatory	€	64,785,077	38.9%	57,487,751	27,529,000	19,078,000	13%
Energy production – stay in business	€	2,953,198	1.8%	5,679,626	4,804,000	10,777,000	-48%
Smart Region	€	17,394,000	10.4%	27,321,000	14,003,000	9,235,000	-36%
IT infrastructure and digital projects	€	12,781,815	7.7%	21,909,834	20,783,000	7,836,000	-42%
Supply and trading	€	31,000	0.0%	0	1,095,000	1,430,000	/
Facility investments	€	848,774	0.5%	537,736	773,000	588,000	58%
Other investments	€	2,761,120	1.7%	4,419,319	72,000	1,126,000	-38%
Total	€	166,748,849	100%	180,369,266	126,700,000	104,700,000	-8%

¹ The balances shown in this table do not include increases in intangible and tangible assets arising from business combinations.

Supplier management

Table 7: Proportion of expenditure with local suppliers*¹ {GRI 204-1}

	Unit	2022	2021	2020	2019
Percentage of products and services purchased locally (based on spend in euros)	%	40	28	36	35
Percentage of locally purchased jobs spend (based on total jobs spend)	%	78	77	72	42
Percentage of services purchased locally (based on total services spend)	%	23	30	20	39
Percentage of products purchased locally (based on total spend on products)	%	17	5	21	18
Percentage of contracts awarded locally (by number of contracts)	%	60	59	58	62

*¹ As of 2022, the geographical definition of “local” of the organisation has changed to suppliers located in the same province as the headquarters of the legal entity they supply.

Table 8: New suppliers that have been assessed using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2022* ¹	2021	2020	2019
Percentage of new suppliers that were selected based on environmental or social criteria	%	100	100	100	100
Percentage of active suppliers with an environmental or social certification	%	38			

*¹ All suppliers must pass the screening of pre-established requirements (for example, minimum certification requirements such as EMAS, ISO 14001, OHSAS 18001 or ISO 9001).

Governance and Resilience

Security of supply

Table 9: Energy capacity {GRI EU 1; GRI EU 10}

	Unit	2022	2021
Expected energy demand in South Tyrol in 2050 ^{*1}	GWh	3,800	4,261
Electricity produced from renewable sources by Alperia	GWh	3,090	4,084
Hydroelectric capacity ^{*2}	GW	approx. 1.4	approx. 1.4
Capacity under construction ^{*3}	GWh	3	3

*1 Data calculated on the basis of data taken from the "South Tyrol 2050 Climate and Energy Plan" and from "Terna 2019 statistical data".

*2 The number refers only to the total installed hydroelectric capacity of the plants managed by Alperia.

*3 New capacity under construction: in 2022 the new 700 kW MVF Tel plant was completed with a future production capacity of around 3 GWh.

*4 Electricity produced by hydroelectric, photovoltaic and biofuels is included.

Table 10: Net energy output broken down by primary energy source^{*1} {GRI EU 2}

	Unit	2022	% ^{*3}	2021	2020	YtY variation	
Total net produced electric energy	Total net produced electric energy	3,147		4,135	5,108	-24%	
	GWh	2,842	84	3,814	4,772	-25%	
thereof:	Hydro	GWh	0.11	0	8.58	19	-99%
	Photovoltaic	GWh	59	2	51	47	16%
	Cogeneration (gas/gasoline)	GWh	248	7	262	270	-5 %
	Biofuel	GWh					
Total net produced energy for heating ^{*2}	Total net produced energy for heating ^{*2}	234	7	248	222	-6%	
Total net energy output	Total net energy output	3,381		4,383	5,330	-23%	

*1 Net energy output includes energy produced in our consolidated plants (35 hydroelectric plants, 5 heating plants, 3 photovoltaic parks and 7 plants, 1 biofuel plant) at 100%.

*2 Includes thermal energy produced by biomass, gas, gasoline and energy acquired from waste plant.

*3 Percentage of total energy output.

*4 Electricity generated from natural gas (EP Merano + EP BZ + EP Chiusa)

	Unit	2022	2021	2020
Net produced energy from renewable sources	GWh	3,090	4,084	5,061
	%	91%	93%	95%

Table 11: Distribution network¹ {GRI EU4}

Distribution network	Unit	2022				2021				2020			
		Surface	Under-ground	Total	% under-ground	Surface	Under-ground	Total	% under-ground	Surface	Under-ground	Total	% under-ground
Length of the distribution network													
High voltage	km	221	21	242	9%	220	21	241	9%	239	21	260	8%
Medium voltage	km	1,048	2,462	3,510	70%	1,086	2,405	3,491	69%	1,129	2,298	3,427	67%
Low voltage	km	1,031	4,416	5,447	81%	1,068	4,290	5,358	80%	1,097	4,167	5,264	79%
Total	km	2,300	6,899	9,199	75%	2,374	6,716	9,090	74%	2,465	6,486	8,951	72%

^{*1} The distribution network includes the network of Edyna S.r.l., Edyna Transmission S.r.l., the Municipality of Parcines and the Municipality of Laces.

Gas distribution network	Unit	2022	2021	2020	2019
	km	114	114	113	113

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities	Unit	2022	2021	2020	2019
	No. of municipalities	96	96	96	96

Customers connected to the electricity network ^{*2}	Unit	2022	2021	2020	2019	YtY variation
	No. PODs	238,676	237,423	235,585	233,335	1%

^{*2} Only end customers in the years 2017-2019 are included. From 2020 all PODs (including interconnected distributors) and only customers active on 31/12 are included.

Electricity distributed in South Tyrol ^{*3}	Unit	2022	2021	2020	2019	YtY variation
	TWh ^{*3}	2.6	2.6	2.7	2.6	0.4

^{*3} Only the energy distributed to end customers is included in the years 2017-2019. From 2020 all PODs (including interconnected distributors) of customers active as of 31/12 are included.

Substations ^{*4}	Unit	2022	2021	2020	2019	YtY variation
HV/MV primary substations	No.	39	38	37	37	2.6%
MV/ LV secondary substations	No.	4,166	4,156	4,131	4,121	0.2%
MV switching substations	No.	44	44	45	46	0.0%

^{*4} Includes the substations of Edyna S.r.l., Edyna Transmission S.r.l., the Municipality of Parcines and the Municipality of Laces.

Table 12: Average system outage/index of duration and frequency (SAIFI/SAIDI) {GRI EU 28; GRI EU 29}

	Unit	2022	2021	2020	2019	YtY variation
SAIFI (frequency of outages per customer)	No.	1.4	1.68	1.91	1.51	-17%
SAIDI (duration of power outages per customer)	Minutes	17.28	24.56	29.82	28.07	-30%

Asset integrity

Table 13: Energy availability (GRI EU 30)

	Energy availability *1	Unit	2022	2021	2020	2019
Energy source	Hydroelectric	%	84.15	84.49	88.88	86.43
	Photovoltaics	%	not available	not available	not available	not available

Table 14: Environmental incidents

	Unit	2022	2021	2020
Number of environmental incidents	No.	0	2	2
Number of significant environmental incidents	No.	0	0	0
Financial impact of environmental incidents*1	€	0	0	0

*1 Includes paid fines and cleaning costs.

Cyber security

Table 15: Consumer privacy (GRI 418-1)

	Unit	2022	2021	2020	2019	YtY variation
Total number of complaints received about customer privacy breaches	No.	0	0	0	0	0%
i. complaints received from external subjects and confirmed by the organisation	No.	0	0	0	0	0%
ii. complaints from regulatory bodies	No.	0	0	0	0	0%
Total number of identified customer data leaks, thefts, or losses	No.	0	0	0	0	0%

Table 16: Other indicators related to cyber security

	Unit	2022	2021	2020	2019	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
malicious emails	No.	9,400	11,200	2,000	4,000	-16%*1
% of malicious emails out of total email processed	%	24	29	24	-	-5%
malicious connection attempts	No.	2,000	1,500	1,000	6,000	33%
Every month, Alperia identifies and blocks an average of:						
viruses on local devices	No.	22	55	530	2930	-60%*2
spyware on local devices (software that collects information about your online activity)	No.	25	19	27	31	32%
malicious internet activity blocked on local devices	No.	47	74	557	2961	-36%*3
malicious, suspicious or prohibited Internet activity	No.	13,650,000	17,000,000	2,800,000	2,000,000	-20%*4

malicious or unauthorised applications	No.	18,400	270,000	360	200	-93%
malicious internal activity blocked on devices	No.	104,000	84,000	54,000	250,000	56%
Results of the Alperia safety awareness programme by year:						
Security awareness: % user participation rate in safety training	%	88% out of 1,300 users	90% out of 1,159 users			
Security awareness: % overall result of the final test	%	90	80			10%
Phishing simulation: % of links clicked	%	16	20			-4%
Phishing simulation: compromised logins	%	1	7			-6%
Data protection: user participation percentage in privacy training	%	80% out of 200 users	88% out of 1,211 users			
Data protection: % overall result of the final test	%	90	89			

¹ In 2021, malicious email categories in general were added, i.e. not just spam. This decision was made to bring the term “malicious” into line with data from other systems as well.

² Various strategies have been implemented (e.g. moving to the cloud controlled by antivirus systems, raising awareness, increasing measures on the perimeter firewall) which overall have reduced the number of viruses present on local systems (PCs and servers).

^{3/4} Due to the generational change of firewalls, blocking rules have been rewritten, and the level of detection of malicious activity has been increased.

Innovation, Research & Development

Table 17: Innovation, research and development activities and expenses aimed at the supply of reliable electricity and the promotion of sustainable development. {GRI EU 8}

	Unit	2022	2021	2020	2019	YtY variation
Number of employees engaged in R&D projects	People	43	44	110	88	-2 ^{*1}
Total R&D expenditure	€	1,449,636	2,206,119	2,148,484	1,560,934	-34% ^{*2}
of which						
EU projects	€	161,354	143,790	185,223	167,293	12%
Other innovation projects	€	1,288,282	2,062,329	1,963,262	1,393,641	-38% ^{*2}

^{*1} From 2021 onwards, only people who actually logged hours in the innovation project management system were considered.

^{*2} The reduction in spending is due to the reduction of the research and development budget, in addition to the execution of two projects in 2021 which required significant investment.

Green Mission

Water

Table 18: Water {ALP 6; ALP 7}

	Unit	2022	2021	2020	2019	YtY variation
Water released for minimum flow	Litres per second	38,925	38,925	38,919	38,926	0%
Incidents of non-compliance with the requirements of the MVF (Minimum Vital Flow)	No.	0	1	1	0	-100%

Energy

Table 19: Energy consumption within the organisation*1 {GRI 302-1}

	Unit	2022	%	2021	%	2020	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,203	35%	1,266	36%	1,171	33%	-5%
Gasoline	TJ	2.6	0%	3.1	0%	3.1	0%	-16%
Oil		36	1%	32	1%	25	1%	12%
Natural gas	TJ	801	23%	823	23%	738	21%	-3%
Electricity for own consumption (produced and acquired)	TJ	364	11%	408	11%	404	11%	-11%
Total energy consumption within the organisation from renewable sources:	TJ	2,207	65%	2,298	65%	2,478	67%	-4%
Palm oil	TJ	1,905	56%	2,026	57%	2,125	59%	-6%
Wood chips	TJ	193	6%	160	4%	168	5%	21%
Electricity for own consumption (produced and acquired)	TJ	110	3%	112	3%	185	4%	-2%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	
Total energy consumption within the organisation	TJ	3,410	100%	3,564	100%	3,708	100%	-4%

*1From 2022, following a refinement of the calculation methodology, gasoline consumption was included.

Emissions

Table 20: GHG emissions^{*1} {GRI 305}

	Unit	2022	2021	2020	YtY variation
Gross direct (Scope 1) GHG emissions ^{*2}	tCO ₂ e	48,205	50,820	45,483	-5%
Biogenic CO ₂ emissions ^{*2}	tCO ₂ e	10,201	10,922	11,364	-7%
Gross location-based energy indirect (Scope 2) GHG emissions ^{*3}	tCO ₂ e	24,280	25,474	34,878	-5%
Gross market-based energy indirect (Scope 2) GHG emissions ^{*4}	tCO ₂ e	20,605	21,841	25,596	-6%
Gross other indirect (Scope 3) GHG emissions ^{*5}	tCO ₂ e	2,409,840	2,871,885	2,833,961	-16%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	82,685	87,217	91,725	-5%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	79,011	83,583	82,443	-5%
Total GHG emissions location-based	tCO ₂ e	2,492,525	2,959,102	2,925,686	-16%
Total GHG emissions market-based	tCO ₂ e	2,488,851	2,955,469	2,916,404	-16%

^{*1} The main gases included are CO₂, CH₄, N₂O and SF₆.

^{*2} Emission factors used according to DEFRA (car fleet, biogenic emission); data consolidated according to financial control; data aggregated based on the GHG Protocol. Biogenic emission out of wood chip biomass and palm oil are calculated with DEFRA 2022. The increase in emissions is due to an update in the emission factor.

^{*3} Location-based emission factor used for purchased electricity: ISPRA (2020) based on the Italian energy mix; emission factor used for purchased heat.

^{*4} Market-based emission factor used for non-renewable purchased electricity: Italian residual mix; market-based emission factor used for electricity losses (T&D process): Italian energy mix. The accounting method used for market-based emissions in 2020 and 2021 is different from the previous year due to a more detailed analysis regarding the non-renewable electricity sources (split of electricity losses and purchased electricity).

^{*5} Includes rented car fleet and well-to-tank-associated emissions (emissions associated with the extraction, refining and transport of raw fuel material sources such as palm oil or natural gas). Downstream emissions related to the sale of products are included as well: gas methane (968,021 tCO₂e) and non-renewable energy electricity (1,273,461 tCO₂e). Emission factors used: DEFRA and cargo manifest.

Intensity of GHG emissions^{*1} {GRI 305-4}

	Unit	2022	2021	2020	YtY variation
Operational GHG emissions intensity (Scope 1 & 2 – location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.02	0.02	8%
Operational GHG emissions intensity (Scope 1 & 2 – market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.02	0.01	3%
Total GHG emissions intensity (Scope 1, 2 & 3 – location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.74	0.68	0.55	9%
Total GHG emissions intensity (Scope 1, 2 & 3 – market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.74	0.68	0.55	9%

^{*1} Biogenic emissions are included in the ratio.

Proportion of emissions	Unit	2022	2021
Scope 1	%	2%	2%
Scope 2	%	1.0%	0,9%
Scope 3	%	97%	97%

Emissions avoided	Unit	2022	2021
Scope 1 ^{*1}	tCO ₂ e	1,646	1,834
Scope 2 ^{*2}	tCO ₂ e	723	668
Scope 3 ^{*3}	tCO ₂ e	1,204,374	1,689,609
Total avoided emissions ^{*4}	tCO ₂ e	1,206,742	1,692,112

^{*1} Own consumption of energy from renewable sources; use of own electric vehicles instead of fuel-powered vehicles.

^{*2} Emissions reduction activities for office heating; procurement of electricity from renewable sources for offices; projects to reduce network losses in electricity distribution.

^{*3} Sale of electricity from renewable sources (self-generated and purchased); rental of electric cars for own use; sale of electricity and heat with lower emissions impact than separate generation; energy-efficiency projects for third-party customers; electronic billing; use of e-bikes.

^{*4} Compensations are not included.

Customers

Customer satisfaction

Table 21: Number of customer accounts^{*1*2*3} {GRI EU 3}

Type	Unit	2022	2021 ^{*4}	2020 ^{*4}	2019	YtY variation
Electricity customer accounts	No.	305.013	304.273	275.000	261.000	0%
Heating customer accounts	No.	2.117	1.896	1.844	1.772	12%
Gas customer accounts	No.	73.784	69.857	64.000	61.000	6%
Total customer accounts	No.	380.914	376.026	340.844	323.772	1%
<i>Thereof resellers</i>	No.	51.299	60.526	46.510		-15%

^{*1} Customer accounts = active connections to the grid (POD) as per 31 Dec.

^{*2} POD/PDR percentage only includes customers supplied and billed directly by Alperia, including resellers and protected market.

^{*3} Smart Region customer accounts are not included.

^{*4} Data for 2021 and 2020 have been restated to align with the S.I.I. source, which is used as the database from 2022 (Integrated Information System). The changeover to S.I.I. was carried out to allow for greater findability and reliability of the data.

Table 22: Monthly average of calls answered to the freephone number^{*1} {ALP 1}

	Unit	2022 ^{*2}	2021	2020	2019
Monthly average of calls answered to the freephone number	%	85	94	96	97
Total number of calls	No.	205,723	125,765	89,921	0

^{*1} Includes only calls made to the ASS freephone number.

^{*2} In 2022, there was a 64% increase in calls received compared to 2021.

Table 23: Customer complaints^{*1} {ALP 2}

	Unit	2022	2021	2020	2019	YtY variation
Number of complaints in the reference period	No.	426	433	448	403	-2%
i. number of complaints registered in the reference period ^{*2}	No.	417	434	448	402	-4%
ii. number of complaints handled in the reference period ^{*3}	No.	405	433	446	401	-7%
Number of complaints not handled, including previous periods ^{*4}	No.	0	0	0	2	
Resolution rate of customer complaints in the reporting period, addressed within 30 days ^{*5}	%	99.75	99.5	99	100	
Complaint rate (number of complaints per 100 customers)	Rate	0.11	0.12	0.13	0.13	

^{*1} Includes complaints from ASS, Ecoplus, Bartucci.

^{*2} No complaints from 2021 were registered in 2022.

^{*3} Four complaints were registered in 2021 and resolved in 2022.

^{*4} 25 complaints were registered in December 2022 and handled in January 2023.

^{*5} From 2019, response time is 30 days; for 2018, response time was 40 days.

Sustainable products and services

Table 24: Quantity of products provided {GRI 2-6; GRI 302-1}

	Unit	2022	2021	2020	2019	YtY variation
Electricity sold to end customers	GWh	6,854	6,636	5,372	5,423	3%
<i>thereof green-labelled electricity sold to end customers</i>	GWh	2,399	2,482	2,015	1,813	-3%
	%	35	37	38	33	
Trading	GWh	978	1,834	3,166	4,788	-47%
Thermal energy sold to end customers	GWh	234	246	222	217	-5%
Natural gas sold to end customers	MSc	503	450	421	464	12%
<i>thereof green-labelled gas sold to end customers</i>	MSc	25	12	3	1	108%
	%	5	3	1	0	

Table 25: Sustainable products and services^{*1} {ALP 4}

	Unit	2022	2021	2020	2019 ^{*2}
Share of revenues with sustainable products and services	%	45	47	46	42

^{*1} Revenues include production and sale of hydro- and solar energy, biomass and district heating, green gas and services related to energy efficiency and green mobility; data include revenues related to 50% of SFE energy production sold by Alperia Energy; revenues relate to pro-quota energy quantities; revenues of the sale of green-labelled electricity sold to end customers are based on the estimation of average revenues based on cancelled Guarantees of Origin.

^{*2} Data have been restated to align them with the new accounting method introduced in 2020

People

Employee development

Employees^{*1 *2 *3 *4} {GRI 2-7}

Geo-graphic area and gender	Unit	Total number of employees				Work contract								Type of employment							
		2022	2021	2020	2019	Permanent				Fixed				Full-time				Part-time			
					2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019	
Total Group	People	1,211	1,176	1,087	1,017	1,152	1,104	1,023	961	59	72	64	56	1,083	1,052	980	916	128	124	107	101
	%	100	100	100	100	95	94	94	94	5	6	6	6	89	89	90	90	11	11	10	10
Of which women	People	320	294	261	230	303	274	244	211	17	20	17	19	214	193	173	147	106	101	88	83
	%	26	25	24	23	95	93	93	92	5	7	7	8	67	66	66	64	33	34	34	36
Of which men	People	891	882	826	787	849	830	779	750	42	52	47	37	869	859	807	769	22	23	19	18
	%	74	75	76	77	95	94	94	95	5	6	6	5	98	97	98	98	2	3	2	2
South Tyrol	People	1,032				979				53				919				113			
	%	85%				95				5				89				11			
Of which women	People	249				234				15				155				94			
	%	24%				94				6				62				38			
Of which men	People	783				745				38				764				19			
	%	76%				95				5				98				2			
Outside South Tyrol	People	179				173				6				164				15			
	%	15%				97				3				92				8			
Of which women	People	71				69				2				59				12			
	%	40%				97				3				83				17			
Of which men	People	108				104				4				105				3			
	%	60%				96				4				97				3			

^{*1} Alperia Bartucci was not included in the 2018 data. Gruppo Green Power is not included in the 2019 data. Hydropower S.r.l. is not included in the data for 2020.

^{*2} Employees who left the company as of 31/12 are included in the total number of employees as of 31/12.

^{*3} Directors are included in the number of employees.

^{*4} The percentages published in previous editions have been restated to align them with the new calculation methodology, using the total of each row as a denominator instead of the column. By defining percentages based on total employees by gender and geographic area and not by year

		Total number of external collaborators
Unit		2022
Trainees ^{*2}		38
People		13
Women	%	34
People		25
Men	%	64
Temporary		56
People		36
Women	People	

		%	64
	Men	People	20
		%	36
Agents		People	98
	Women	People	13
		%	13
	Men	People	85
		%	87
Total Group		People	192

¹ Total number during the year.

² Not including school placements.

Table 27: New hires and turnover¹ {GRI 401-1}

Hires	Unit	Total					YtY variation	<= 30		31-40		41-50		> 51	
		2022	2021	2020	2019	2022		2021	2022	2021	2022	2021	2022	2021	
Women	People	40	35	26	21	14%	20	13	10	17	7	2	3	3	
	%	35.39	31.53	29.54	28	0%	0	0	0	0	0	0	0	0	
Men	People	73	76	62	54	-4%	32	24	24	28	13	22	4	2	
	%	64.60	68.46	70.45	72	0%	0	0	0	0	0	0	0	0	
Total employee hires	People	113	111	88	75	2%	52	37	34	45	20	24	7	5	
Total number of employees as of 31 Dec.	People	1211	1176	1087	1017	3%	46%	33%	30%	41%	18%	22%	6%	5%	
Hiring rate	%	9.33	9.44	8.10	7.37										

¹ Hydrodata S.r.l. is not included in the 2020 data. Green Power Group, Bluepower Connection S.r.l., Green Energy Group and Unix Group S.r.l. were not included in the 2019 data. The total number of employees of the Alperia Group in 2020 cannot therefore be compared with the total number of employees indicated for 2019 net of employees who left and new hires in 2020. This misalignment is due to a different reporting perimeter for 2020 compared to 2019 (entry of new companies).

Turnover ²	Unit	Total					YtY variation	<= 30		31-40		41-50		> 51	
		2022	2021	2020	2019	2022		2021	2022	2021	2022	2021	2022	2021	
Women	People	14	15	19	7	-7%	3	0	3	7	2	1	6	7	
	%	17.94	25	24.05	11.86		0	0	0	0	0	0	0	0	
Men	People	64	45	60	52	42%	9	7	18	9	9	6	28	23	
	%	82.05	75	75.94	88.13		0	0	0	0	0	0	0	0	
Total employee turnover	People	78	60	79	59	30%	12	7	21	16	11	7	34	30	
of which retired	People	27	24	0	0	13%									
Total number of employees as of 31 Dec.	People	1,211	1,176	1,087	1017	3%	15%	12%	27%	27%	14%	12%	44%	50%	
Turnover rate	%	6.44	5.10	7.27	5.80										

² Employee turnover: employees who leave the organisation voluntarily or through termination, retirement or death in service; turnover as at 31/12; employees who leave the organisation on 31/12 are not included in employee turnover.

Table 28: Average hours of training {GRI 404-1}

Average hours of training per employee by gender						
	Unit	2022	2021	2020	2019	YtY variation
Women	Hours	25.1	28.8	17.1	15.9	-13%
Men	Hours	32.1	25.7	20.4	21.6	25%
Total	Hours	30.3	26.5	19.6	20.3	14%

Average hours of training per employee by employee category						
	Unit	2022	2021	2020	2019	YtY variation
Executives	Hours	48.4	26.7	34.1	28.2	82%
Middle managers	Hours	38.2	38	33.2	25.3	0%
Office workers	Hours	27.0	24.7	16.4	19.2	9%
Workers	Hours	34.9	26.4	0	0	32%

¹ Before 2020 the following breakdown was applied: Top Management (directors + line managers); middle management (level 2+3); employees. As of 2021, the following breakdown applies: executives; middle managers; office workers; workers

Table 29: Percentage of employees receiving regular performance and professional development reviews {GRI 404-3}

Percentage of employees receiving regular performance and professional development reviews by gender

	Unit	2022¹	2021	2020	2019
Women	%	67	2	3	3
Men	%	73	4	2	3
Total	%	76	3	2	3

Percentage of employees receiving regular performance and professional development reviews by employee category²

	Unit	2022	2021	2020	2019
Executives ³	%	110	92	5	19
Middle managers	%	68	2	11	15
Office workers	%	74	2	1	0
Workers	%	62	0	0	0

¹ From 2022, career development assessments, MBO reviews and employee feedback assessments are included in the count, and the percentages are calculated on total employees.

² Before 2020 the following breakdown was applied: Top Management (directors + line managers); middle management (level 2+3); employees.

As of 2021, the following breakdown applies: executives; middle managers; office workers; workers

³ The percentage is greater than 100% because the number of executives assessed during the year is greater than the executives present as of 31 December.

Diversity and equal opportunity

Table 30: Diversity of governance bodies and employees {GRI 405-1}

Diversity of governing bodies* ¹		Total					under 30	31-40	41-50	51+
		Unit	2022	2021	2020	2019	YtY variation	2022	2022	2022
Women	People	4	5	5	4	-20%	0	0	1	3
	%	33	42	42	33		0	0	8	25
Men	People	8	7	7	8	14%	0	1	1	6
	%	67	58	58	67		0	8	8	50
Total	People	12	12	12	12	0%	0	1	2	9
	%	100	100	100	100		0	8	17	75

*¹ Only the governing bodies of the parent company Alperia S.p.A. are included.

Employee diversity		Total					under 30	31-40	41-50	51+
		Unit	2022	2021	2020	2019	YtY variation	2022	2022	2022
Women	People	320	294	261	230	9%	46	110	79	85
	%	26	25	24	23		4	9	7	7
Men	People	891	882	826	787	1%	90	250	227	324
	%	74	75	76	77		7	21	19	27
Employees with disabilities	People	41	34	24	23	21%	1	8	8	21
	%	3	3	2	2		0	1	1	2
Total	People	1,211	1,176	1,087	1,017	3%	136	360	306	409
	%	100	100	100	100	0	11	30	25	34

Table 31: Ratio of basic salary and remuneration of women to men {GRI 405-2}

Ratio of basic salary and remuneration of women to men

	Unit	2022	2021	2020	2019
Executives* ²	Relationship	not representative	not representative	not representative	not representative
Middle managers	Relationship	0.90	0.91	0.90	0.88
Office workers	Relationship	0.93	0.93	0.93	0.96
Workers* ²	Relationship	not representative	not representative	0 women	0.77

Percentage of female employees by category		2022	2021	2020	2019
	Unit				
Executives	%	5%	5%	4%	5%
Middle managers	%	23%	21%	22%	20%

Office workers	%	37%	35%	35%	33%
Workers ²	%	0.3%	0%	0%	0%

Percentage of employees by category based on the total number of employees

	Unit	2022	2021	2020	2019
Executives	%	2%	2%	2%	2%
Middle managers	%	9%	10%	9%	9%
Office workers	%	65%	65%	63%	62%
Workers	%	24%	24%	26%	27%

¹ Data restatement, due to the following changes in the breakdown of employee categories: Top Management (directors + line managers); middle management (levels 2+3); office workers. As of 2021, the following breakdown applies: executives; middle managers; office workers; workers.

² Data relating to directors and workers are not representative, because there is only one woman in each category.

Table 32: Parental leave¹ {GRI 401-3}

	Unit	Men				Women			
		2022	2021	2020	2019	2022	2021	2020	2019
Total number of employees who were entitled to parental leave ²	People	19	20	30	25	7	10	11	12
Total number of employees who took parental leave ³	People	17	19	19	21	7	10	11	12
	%	89	95	63	84	100	100	100	100
Total number of employees who planned to return to work in the reporting period (2022) after the end of parental leave	People	17	19	17	21	5	5	3	6
Total number of employees who returned to work in the reporting period (2022) after the end of parental leave	People	17	19	17	21	5	4	2	2
Return-to-work rate ⁴	%	100	100	100	100	100	80	67	33
Total number of employees who returned to work in 2021 after the end of parental leave and who were still employed 12 months (reference period 2022) after their return to work.	People	19	17	19	14	3	2	3	6
Retention rate ⁵	%	100	100	90	100	75	100	150	100

¹ Based on beneficiaries with an effective date after 1/1/2022.

² Based on total entitlements known to employer with start date after 1/1/2022.

³ Includes compulsory leave and voluntary leave.

⁴ Total number of employees who returned to work after parental leave/ total number of employees who have to return to work after parental leave * 100.

⁵ Retention rate = total number of employees still employed 12 months after returning to work after a period of parental leave/total number of employees returning from parental leave in the previous reference period or periods * 100. In 2020 the percentage was greater than 100% due to the fact that an employee of an acquired company was included in 2020 and not in 2019.

	Average weeks of voluntary parental leave per employee		
	Unit	2022	2021
Average weeks per female employee who took (voluntary) parental leave	Weeks	15.5	10.1
Average number of weeks per male employee who took (voluntary) parental leave	Weeks	6.4	3.0

Occupational health and safety

Table 33: Accidents at work {GRI 403-9}

Employees ^{*1}	Unit	2022	2021	2020	2019	2018	YtY variation
Fatal injuries	No.	0	0	0	0	0	/
High-severity occupational injuries (excluding fatal injuries) ^{*2}	No.	0	0	0	0	0	/
Accidents resulting in days off work	No.	12	21	14	14	13	-43%
Accidents resulting in work limitations or transfer to other duties	No.	N/A	N/A	N/A	N/A	N/A	/
Injuries requiring medical treatment ^{*3}	No.	1	0	0	0	0	+100%
Other significant injuries diagnosed by a licensed healthcare professional ^{*4}	No.	0	0	0	0	0	/
Hours worked	No.	1,902,443	1,891,290	1,721,452	1,613,516	1,454,474	1%
Days of work lost ^{*5}	No.	242	472	320	427	293	-49%
Rate of deaths following an accident at work (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0.0	/
Rate of high-severity workplace injuries (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0.0	/
Recordable work accident rate (per 1,000,000 hours)	Rate	6.31	11.10	8.13	8.68	8.94	-38%
Lost-days rate (per 1,000 hours)	Rate	0.13	0.25	0.19	0.26	0.20	-49%

Contractors ^{*1}	Unit	2022	2021	2020	2019	2018	YtY variation
Fatal injuries	No.	0	0	0	0	0	0%
High-severity occupational injuries (excluding fatal injuries) ^{*2}	No.	0	0	0	0	0	0%
Accidents resulting in days off work	No.	4	2	16	2	1	0%
Accidents resulting in work limitations or transfer to other duties	No.	N/A	N/A	N/A	N/A	N/A	0%
Injuries requiring medical treatment ^{*3}	No.	0	0	0	0	0	0%
Other significant injuries diagnosed by a licensed healthcare professional ^{*4}	No.	0	0	0	0	0	0%
Hours worked	No.	627,904	731,328	770,223	656,616	584,353	-14%
Days of work lost ^{*5}	No.	0	57	73	86	13	-100%
Rate of deaths following an accident at work (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0	0%
Rate of high-severity workplace injuries (per 1,000,000 hours)	Rate	0.0	0.0	0.0	0.0	0	0%
Recordable work accident rate (per 1,000,000 hours)	Rate	6.37	2.73	20.77	3.00	2	133%
Lost-days rate (per 1,000 hours)	Rate	0.00	0.08	0.09	0.13	0	-100%

*1 Accidents in transit have only been included if the transport was organised by the organisation.

*2 Work-related injury involving an injury from which the worker cannot, fails, or is not expected to fully recover to their pre-injury state of health within 6 months.

*3 Other than first aid or loss of consciousness.

*4 Does not involve death, days off work, job restrictions or job transfers, medical treatment beyond first aid, or loss of consciousness.

*5 When calculating "days lost", "days" means "calendar days"; the "lost days" count begins the day after the injury.

Table 34: Health at work {GRI 403-10}

Employees	Unit	2022	2021	2020	2019	2018
Deaths due to work-related illnesses	No.	0	0	0	0	0
Work-related illnesses resulting in days off work	No.	0	0	0	0	0
Days of work lost due to absences of all kinds ^{*1}	No.	13,600	12,566	16,698	11,729	10,033
Work-related illnesses resulting in work limitations or transfer to other duties	No.	0	0	0	0	0
Work-related illnesses requiring medical treatment ^{*2}	No.	0	0	0	0	0
Other work-related illnesses diagnosed by a licensed healthcare professional	No.	0	0	0	0	0
Cases of recordable work-related illnesses	No.	0	0	0	0	0
Hours worked	No.	1,902,443	1,891,289	1,721,452	1,613,516	1,454,474
Expected working hours	No.	2,329,755	2,243,027	2,086,963	1,950,015	1,822,584
Absence rate (days of absence per 1,000 hours worked) ^{*3}	Rate	5.8	5.6	8.0	6.0	5.5

^{*1} The "lost days" count begins the day after the injury.

^{*2} Other than first aid or loss of consciousness.

^{*3} Excludes permitted absences such as holidays, study leave, maternity or paternity leave and medical leave.

11.4 INDEPENDENT AUDITORS' REPORT



ALPERIA SPA

INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10, OF LEGISLATIVE DECREE NO. 254/2016 AND ARTICLE 5 OF CONSOB REGULATION NO. 20267 OF JANUARY 2018

YEAR ENDED 31 DECEMBER 2022

Independent auditor's report on the consolidated non-financial statement

pursuant to article 3, paragraph 10, of Legislative Decree no. 254/2016 and article 5 of CONSOB regulation no. 20267, January 2018

To the directors of Alperia SpA

Pursuant to article 3, paragraph 10, of Legislative Decree No. 254 of 30 December 2016 (the "Decree") and article 5 of CONSOB Regulation No. 20267/2018, we have undertaken a limited assurance engagement on the consolidated non-financial statement of Alperia SpA and its subsidiaries (the "Group") for the year ended 31 December 2022 prepared in accordance with article 4 of the Decree, and approved by the Management Board on 31 March 2023 (hereafter the "NFS").

Our review does not extend to the information set out in the "EU Taxonomy" paragraph of the NFS, required by article 8 of European Regulation 2020/852.

Responsibilities of the directors and of the Supervisory Board for the NFS

The directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree, with the "Global Reporting Initiative Sustainability Reporting Standards" defined in 2016, and updated to 2021, by the GRI - Global Reporting Initiative (hereafter the "GRI Standards") and with the "G4 Sector Disclosure - Electric

Utilities" defined in 2013 (hereafter the "G4 Sector Disclosure"), identified by them as the reporting standards.

The directors are also responsible, in the terms prescribed by law, for such internal control as they determine is necessary to enable the preparation of a NFS that is free from material misstatement, whether due to fraud or error.

Moreover, the directors are responsible for identifying the content of the NFS, within the matters mentioned in article 3, paragraph 1, of the Decree, considering the activities and characteristics of the Group and to the extent necessary to ensure an understanding of the group's activities, its performance, its results and related impacts.

Finally, the directors are responsible for defining the business and organisational model of the Group and, with reference to the matters identified and reported in the NFS, for the policies adopted by the Group and for the identification and management of risks generated or faced by the Group.

The Supervisory Board is responsible for overseeing, in the terms prescribed by law, compliance with the Decree.

Auditor's Independence and Quality Control

We are independent in accordance with the principles of ethics and independence set out in the *Code of Ethics for Professional Accountants published by the International Ethics Standards Board for Accountants*, which are based on the fundamental principles of integrity, objectivity, competence and professional diligence, confidentiality and professional behaviour. Our audit firm adopts International

Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains an overall quality control system which includes processes and procedures for compliance with ethical and professional principles and with applicable laws and regulations.

Auditor's responsibilities

We are responsible for expressing a conclusion, on the basis of the work performed, regarding the compliance of the NFS with the Decree, with the GRI Standards and with the G4 Sector Disclosure. We conducted our work in accordance with *International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000 Revised")*, issued by the *International Auditing and Assurance Standards Board (IAASB)* for limited assurance engagements. The standard requires that we plan and apply procedures in order to obtain limited assurance that the NFS is free of material misstatement. The procedures performed in a limited assurance engagement are less in scope than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not provide us with a sufficient level of assurance that we have become aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

The procedures performed on the NFS were based on our professional judgement and consisted in interviews, primarily of company personnel responsible for the preparation of the information presented in the NFS, analyses of documents, recalculations and other procedures designed to obtain evidence considered useful.

In detail, we performed the following procedures:

1. Analysis of the relevant matters reported in the NFS relating to the activities and characteristics of the Group, in order to assess the reasonableness of the selection process used, in accordance with article 3 of the Decree and with the reporting standard adopted;
2. Analysis and assessment of the criteria used to identify the consolidation area, in order to assess their compliance with the Decree;
3. Comparison of the financial information reported in the NFS with the information reported in the Group's consolidated financial statements;
4. Understanding of the following matters:
 - a. business and organisational model of the Group with reference to the management of the matters specified by article 3 of the Decree;
 - b. policies adopted by the Group with reference to the matters specified in article 3 of the Decree, actual results and related key performance indicators;
 - c. key risks generated and/or faced by the Group with reference to the matters specified in article 3 of the Decree.With reference to those matters, we compared the information obtained with the information presented in the NFS and carried out the procedures described under point 5 a) below;
5. Understanding of the processes underlying the preparation, collection and management of the significant qualitative and quantitative information included in the NFS.

In detail, we held meetings and interviews with the management of Alperia SpA and with the personnel of Edyna Srl and Alperia Green Future Srl and we performed limited analyses of documentary evidence, to gather information about the processes and procedures for the

collection, consolidation, processing and submission of the non-financial information to the function responsible for the preparation of the NFS.

Moreover, for material information, considering the activities and characteristics of the Group:

- at holding level,
 - a) with reference to the qualitative information included in the NFS, and in particular to the business model, the policies adopted and the main risks, we carried out interviews and acquired supporting documentation to verify its consistency with available evidence;
 - b) with reference to quantitative information, we performed analytical procedures as well as limited tests, in order to assess, on a sample basis, the accuracy of consolidation of the information. A specific analysis was performed on the energy sources on which the greenhouse gas emission indicators are based;
- for the following companies Alperia SpA, Edyna Srl and Alperia Green Future Srl

which were selected on the basis of their activities, their contribution to the performance indicators at a consolidated level and their location, we carried out meetings and interviews during which we met local management and gathered supporting documentation regarding the correct application of the procedures and calculation methods used for the key performance indicators.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of Alperia Group for the year ended 31 December 2022 is not prepared, in all material respects, in accordance with articles 3 and 4 of the Decree, with the GRI Standards and with the G4 Sector Disclosure.

Our conclusions on the NFS of Alperia Group do not extend to the information set out in the “EU Taxonomy” paragraph of the NSF, required by article 8 of European Regulation 2020/852.

Trento, 21 April 2023

PricewaterhouseCoopers SpA

Signed by

Alberto Michelotti
(Partner)
signatory)

Paolo Bersani
(Authorised

This report has been translated from the Italian original solely for the convenience of international readers. We have not performed any controls of the English translation of the NFS 2022 of Alperia Group.

11.5 EU TAXONOMY

The European Taxonomy

As of 1 January 2022, companies that are required to publish a consolidated non-financial statement (NFS) must disclose the share of their revenues, capital expenditure (CapEx) and operating expenditure (OpEx) for economic activities that qualify as environmentally sustainable (eligible) for the Taxonomy. As of January 2023, in addition to eligibility under the Taxonomy Regulation, the share of revenues, capital expenditure (CapEx) and operating expenditure (OpEx) for economic activities that qualify as aligned with the provisions of the Technical Annexes to the Taxonomy will have to be reported. EU Regulation 2020/852 introduced the Taxonomy of **Eco-Friendly Economic Activities** into the European regulatory system. The Taxonomy is a classification of activities that can be considered sustainable on the basis of their **alignment with EU environmental objectives**. In relation to the three pillars of ESG (Environmental, Social, Governance) sustainability, the Taxonomy currently focuses on pillar E (environmental). The European Taxonomy defines six environmental objectives to identify environmentally sustainable economic activities:

1. Climate change mitigation
2. Adaptation to climate change
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection of ecosystems and biodiversity

A series of delegated acts, drafted with the advice of the Platform on Sustainable Finance, detail the technical criteria for establishing the conditions under which each economic activity makes a substantial contribution to at least one of the six identified environmental objectives, without causing significant harm to any of the other five (Do No Significant Harm – DNSH clause), while respecting minimum safeguards (Art. 18).

The Taxonomy is a guide:

- for companies: to assess their own activities, to define corporate policies aimed at greater environmental sustainability and to report to stakeholders in a more comprehensive and comparable way;
- for investors: to integrate sustainability issues into their investment policies and to understand the environmental impact of the economic activities in which they invest or may invest;
- for public institutions: which can use the Taxonomy to define and improve their ecological transition policies.

According to Art. 8 of the EU Taxonomy Regulation 2020/852 (TR), organisations subject to the Non-Financial Reporting Directive (NFRD) and, subsequently, to the new Corporate Sustainability Reporting Directive (CSRD) will be required to disclose information on alignment with the Taxonomy using certain indicators: Turnover, Capital Expenditure and Operating Expenses. In particular, non-financial corporations must publish information on:

- share of turnover from products or services associated with economic activities aligned to the Taxonomy;
- share of capital expenditure (CapEx);
- share of operating expenses (OpEx) related to assets or processes associated with economic activities aligned to the Taxonomy.

The Alperia Group business

Alperia S.p.A. is South Tyrol's leading energy service provider, the fifth-largest multi-utility in Italy in terms of turnover and one of the most important sustainable-energy companies in Italy. It is a joint-stock parent company created on 1 January 2016 from the merger of the two largest energy companies in the Province of Bolzano. It is a publicly owned company, whose shares are held by the Autonomous Province of Bolzano, the Municipality of Bolzano, the Municipality of Merano and Selfin S.r.l., which groups together municipalities and district communities in South Tyrol. The headquarters is in Bolzano, and there are other operational offices in South Tyrol and elsewhere in Italy. In its role as Parent Company, it exercises the function of directing and defining the strategic choices of the companies in which it has a stake and sets the guidelines and operating procedures with which the subsidiaries must comply.

Production and management of hydroelectric energy

Within the Alperia Group, the production and management of hydroelectric power, as a renewable and sustainable energy source, is entrusted to Alperia Greenpower and Alperia Vipower.

Alperia Greenpower manages the production of hydroelectric energy through 35 hydroelectric power plants of different types: river, reservoir and tank. The hydroelectric plants are all located in South Tyrol. Alperia Greenpower is committed to preventing and reducing environmental impacts and risks during the management of its plants, also through the voluntary adoption of Environmental Management Systems certified in accordance with ISO UNI 14001 and EMAS (Eco-Management and Audit Scheme) Registration, a Community eco-management and audit scheme that companies and organisations that wish to engage in assessing and improving their environmental efficiency can voluntarily join. The company is also certified according to UNI ISO 9001:2015 and UNI ISO 45001:2018 and adopts an Integrated Management System that also includes the design, development and management of physical fibre optic telecommunications networks, following the merger of Alperia Fiber into Alperia Greenpower. In addition, in 2022 it obtained the UNI ISO 50001 certification for the Ponte Gardena plant.

The energy produced by Alperia Greenpower and Alperia Vipower (which runs the two hydroelectric plants in Glorenza and Castelbello, which are also certified according to UNI ISO 9001:2015, UNI ISO 45001:2018 and UNI ISO 14001:2015 and EMAS) is sold to Alperia Trading, which carries out wholesale energy sales in the energy markets and, to a minority share, to other interlocutors (institutional operators such as the GSE or consortia).

Photovoltaic solar energy production

Solar energy is one of the main sources of renewable energy. The installation of photovoltaic systems not only benefits the environment by producing sustainable, non-polluting energy that does not cause long-term damage to the ecosystem, but also brings economic advantages: a plant autonomously producing the energy it needs reduces the costs associated with electricity.

Since 2022, Solar Total Italia, a company active in the supply of turnkey photovoltaic systems for private and corporate users, has also been part of Alperia Green Future, with specific expertise in the development of photovoltaic expansion projects and energy communities. In particular, Solar Total's know-how will be instrumental in supporting the growth of Alperia MyHome, a product dedicated to domestic photovoltaics which is much in demand on the market.

Confirming the Alperia Group's commitment to generating electricity from renewable sources, **Alperia Greenpower** is also the owner of a number of photovoltaic plants installed on public and Alperia buildings in the city of Bolzano

Electricity distribution

In relation to electricity distribution, Edyna manages the electricity network that connects Terna and end users and also handles the distribution of natural gas in four municipalities. The grid is more than 9,100 kilometres long (high, medium and low voltage) distributing more than 2.7 TWh of electricity in South Tyrol. Above all, the company is committed to guaranteeing security of supply and maintaining an efficient and modern network, with full and constant respect for environmental and nature conservation requirements.

Edyna has been working since 2019 to rationalise its medium-voltage network with the goal of achieving 20 kV voltage unification by 2026. The voltage unification project will lead to a reduction in grid losses and will increase transport capacity. For the 2022-2024 two-year period, the company will support some important investments. These include the European "FlexiGrid" project, which aims to make the operation of the distribution network more flexible and cost-efficient through the development of hardware and software solutions – a single open-source platform that integrates the various solutions and makes them interoperable with the IT systems used by energy players. In 2020, Edyna started installing Smart Meters, the latest generation of meters. These are smart meters that increase the efficiency and quality of the service offered to customers, allow more precise monitoring of energy consumption and lay the foundations for the development of new technological solutions for home automation and energy saving. At the same time, Edyna has invested in ensuring the resilience of the grid and increasing the quality and continuity of the electricity service. It has continued to replace transformers in secondary substations and PTP (pole-mounted transformer station) substations, using vegetable oil transformers, installed low-noise transformers for the primary substations, and carried out aerial inspections involving tree

cutting and burying of power cables, which is safer in the case of extreme weather events, although more difficult to manage in the event of malfunctions.

Edyna Transmission S.r.l. deals with the transmission of electricity. In particular, it is responsible for managing the high-voltage grids and for operating and maintaining the section of the grid for which it is responsible on the basis of Terna S.p.A.'s instructions.

Production and distribution of electricity and thermal energy

The Alperia Group entrusts **Alperia Ecoplus** and **Biopower Sardegna** with the production and distribution of electricity and thermal energy.

Alperia Ecoplus S.r.l. is the Group company that deals with the construction, production, distribution and maintenance of district heating. The business is focused on the production and transport of heat below 95°C and the production of electricity by means of cogeneration plants, which, at the Bolzano, Merano and Chiusa sites, is carried out with high-efficiency gas cogenerators and a gas turbine, while in Silandro, ORC (Organic Rankine Cycle) technology is used to produce electricity from biomass. With regard to the generation and distribution of thermal energy, the company operates six plants – Bolzano, Merano, Sesto, Verano, Chiusa and Lazfons– and had 2,629 exchangers in the year 2022. In Merano, steam is also produced and distributed for a food factory. The heat flows from the production plant directly into homes via an underground network of pipes. The emission savings are due to the type of fuel used: to produce thermal energy, Alperia Ecoplus uses biomass (60% local) as well as natural gas and heat from the Bolzano municipal waste incinerator. Alperia Ecoplus is the fifth national operator with approximately 234 GWh produced and sold to end customers in the course of 2022. More than €14.8 m were invested in this sector in 2022, primarily in the expansion and maintenance of the district heating network as well as maintenance and innovation projects in the plants. The Alperia Ecoplus Integrated Management System is certified according to the UNI ISO 9001:2015, UNI ISO 14001:2015, UNI ISO 45001:2018. In addition, the company is EMAS registered and ISO 50001 certified for the Bolzano site.

The company also manages the Silandro district heating plant and is also the sole director of the company Biopower Sardegna S.r.l.

Biopower Sardegna produces electricity from vegetable oils, specifically palm oil, by means of endothermic engines, whose process heat is recovered by a steam turbine and converted into more electricity. It is only sourced through ISCC-EU-certified suppliers. This certification guarantees the sustainability of the entire supply chain, from cultivation to the mill, from storage to transport. The quality of CPO (Crude Palm Oil) is chemically analysed by third-party companies to ensure that it fully complies with the limits set out in the Environmental Impact Authorisation (AIA), which is monitored by Arpas Nuoro. In addition, it should be noted that in recent years there has been a focus on reducing the use of fossil fuels (indispensable in the frequent startup and shutdown phases of plants), limiting their use incrementally until reaching use levels around 0.2% lower than the authorised limit of 5%, so much so that in 2020, the Ministry of the Environment recognised the achievement of zero greenhouse gas emissions.

Energy efficiency of buildings, businesses and public administration

The Alperia Group firmly believes that the next few years will be crucial in changing energy consumption habits, which can also be achieved by leveraging the significant levels of funds allocated by the European Commission and the national government. The projects will be implemented thanks to the know-how of Alperia Green Future S.r.l., a company resulting from the merger of Alperia Bartucci S.r.l., Gruppo Green Power and Solar Total, which was recently acquired.

The company, founded in 2022, is the promoter of a series of high-tech initiatives for cities and citizens, reinforcing its position on apartment blocks, public administration, healthcare and smart services for citizens and cities. Interesting initiatives are being developed for an offer at the cutting edge of market trends. The activities of Alperia Green Future are mainly related to: energy upgrading of buildings, operating as a general contractor in the development of energy-efficiency projects for buildings, acquiring the tax credit accrued by the end customer through government incentives (e.g. Ecobonus and Superbonus 110%); strategic consultancy for companies (high-level aimed at defining a decarbonisation strategy for companies or public bodies); Energy Performance Contracts in which Alperia Green Future supports the investment of an energy-efficiency and/or decarbonisation project, sharing the benefits obtained with the end customer, and, finally, artificial intelligence solutions that optimise complex production processes and building climate control systems. Alperia Green Future S.r.l., as ESCO, can apply for Energy Efficiency Certificates.

EfficienteRete is a company set up for the Superbonus 110%, which deals mainly with energy upgrading of buildings: replacement of windows and doors, frames and thermal cladding; insulation of the exterior; installation of photovoltaic panels; installation of condensing boilers. It provides specialised consultancy and cutting-edge technological solutions by taking on the financial commitment of projects, thanks to its ability to absorb the tax credits. In detail, work focuses on building systems, both replacement (e.g. replacement of boilers with condensation, heat pump or photovoltaic systems) and new installations. Together with Alperia Green Future, it is working on an artificial intelligence system to manage and optimise building consumption through an electronic remote management system. Coordination and planning activities are carried out by Alperia Green Future staff. The company also deals with completion works that are not covered by Superbonus 110%, such as, for example, the Bonus Facciate (exterior areas not affected by energy efficiency).

Consulting and R&D

Hydrodata: is a leading Italian engineering company that operates through four Divisions – Engineering, Applied Research, Laboratory and Technical-Economic Consulting – offering services and developing advanced and innovative design

solutions, aimed at the efficient management of water resources and inspired by the principles of environmental sustainability and the most effective business logic. Hydrodata's main activities include engineering, technical and scientific research applied to hydraulics and hydrogeology, consultancy and field monitoring.

Alperia Innoveering:

is the company through which Hydrodata offers the Alperia Group its engineering and consulting services aimed at the maintenance and modernisation of hydroelectric plant assets according to the highest standards of energy efficiency, eco-sustainability and safety.

Sale and trading

Alperia is enabling new business models to communicate with its customers through digital channels and is revisiting the role of physical channels. The Group companies involved in sales and trading are listed below.

Alperia Trading: carries out the activities of purchase, sale, exchange and marketing of electricity, natural gas and any other type of energy product, energy commodities, as well as green certificates, energy efficiency certificates, carbon dioxide emission quotas and any environmental security and manages and optimises renewable energy plants.

Alperia Smart Services:

The company Alperia Smart Services was founded in 2019 with the aim of becoming the point of reference for the sale of all products and services of the Alperia Group. The company's mission is to ensure a customer-centred sales experience by providing a wide range of innovative and sustainable energy solutions in order to achieve the Group's business objectives and margins as set out in the business plan. As the Group's sales company, Alperia Smart Services aims to become a one-stop shop for all customer segments, from private customers to SMEs, large industrial companies and public administration. The company offers a wide range of products, including electricity, natural gas, district heating, energy efficiency, smart sensors and e-mobility, to meet specific customer needs. Alperia Smart Services is committed to providing excellent customer service, ongoing support and customised solutions to build a successful long-term relationship with customers. The company is dedicated to promoting a sustainable energy future for all of its customers and stakeholders. The year 2022 was unprecedented both in terms of international political-economic tensions and in terms of the digital transition to a new IT system. Alperia Smart Services did its part by ensuring the continuity of all key processes, coping with the volume of calls and requests that were generated and implementing measures to support its customers. Also in 2022, Alperia Sum S.r.l. was merged by incorporation into Alperia Smart Services S.r.l. to concentrate the Group's sales activities in one company.

The role and commitment of Alperia in the introduction of the Taxonomy of environmentally sustainable activities

The Alperia Group has welcomed the provisions of the EU Taxonomy Regulation 2020/852, which has the ambitious aim of supporting the European Union's economic activities to adopt a common ESG language and to promote the decarbonisation of the European economy by 2050.

The Alperia Group is committed to adopting the provisions of the Taxonomy and has introduced and will continue to introduce all necessary actions to comply with the Taxonomy's disclosure obligations and develop a transparent process for mapping its activities according to the provisions of the Taxonomy.

After the first reporting step addressed in the year 2021, where the economic KPIs of eligible activities were published, for 2022, Alperia developed a process to address the second step: the reporting of the economic KPIs of the eligible activities aligned with at least one of the six environmental objectives.

The EU Taxonomy process of environmentally sustainable activities in Alperia

The process developed by Alperia took place on the basis of the following stages:



- **STAGE 1** – Identification of eligible activities listed in Annexes I and II of the European Taxonomy Regulation present in the Alperia Group's scope of action.

Starting from the analysis carried out in 2021, a further screening of eligible activities and the activities carried out by Alperia was carried out, with the aim of:

- including the companies and plants acquired during 2022 in the perimeter;
- integrating the activities related to natural gas and nuclear present in the Complementary Delegated Act of August 2022.

The work was carried out by conducting further interviews with the technicians and operators of the various Business Units and companies of the Alperia Group.

This stage led to:

- inclusion among the eligible activities of the group of activities related to natural gas such as high-efficiency cogeneration and the production of heat for district heating;
 - exclusion from the scope of eligible activities of cogeneration starting from bioenergy included in 2021 as they are not part of the activities of the Group companies;
 - inclusion among the eligible activities of the Group of activities such as the production of heat/cold from bioenergy and the installation, maintenance and repair of renewable energy technologies.
- **STAGE 2 – Preliminary analysis of the Technical Alignment Criteria reported in Annexes I and II for the eligible activities of the Group.**

Before proceeding with the verification of compliance with the Technical Screening Criteria for each single eligible activity identified, an analysis was made of the technical criteria required for Objective 1 of Climate Change Mitigation and for Objective 2 of Adaptation to Climate Change.

Based on the results of the analysis, Alperia has decided to proceed only with verifying compliance with the Technical Screening Criteria for Objective 1: Climate Change Mitigation.

As regards Objective 2: Adaptation to Climate Change, starting from 2022, Alperia has undertaken a Climate Change Risk Analysis project aimed at estimating the risks associated with climate change, their identification and assessment as well as identifying the actions undertaken and to be undertaken to mitigate these risks. This analysis is in line with the EU Taxonomy, TCFD and involved the research centre of Bolzano Eurac for the definition of future environmental scenarios. The scenarios used were based on European standards (such as RCP45 and 85). However, since the project was carried out in parallel with the taxonomy analysis, Alperia decided, as a precautionary measure, to regard it in this first year of disclosure of eligible and aligned activities only for compliance with the DNSH of Objective 2, but not for the technical screening criteria.

- **STAGE 3 – Verification with the technicians of the various Business Units and companies of the Alperia Group of compliance with the Technical Screening Criteria and DNSHs indicated in Annex I for the sole objective of Climate Change Mitigation.**

The Technical Screening Criteria were analysed for each macro-activity and, if necessary, for each plant through detailed interviews with technicians, data collection and documentation.

Alperia has always used a conservative approach to determine whether or not an activity was aligned with the Technical Screening Criteria. For compliance with the DNSH of Objective 2, in this first year of obligation to report on eligible and aligned activities, reference was made to the work carried out within the Climate Change Risk Analysis project, with the intention of making the analysis more in-depth and structured in future years.

The analysis carried out led to the following activities being considered eligible and aligned:

- the production of electricity from hydroelectric plants: except for two plants. The remaining hydroelectric production park is aligned with Objective 1 of Climate Change Mitigation;
- the generation of electricity using photovoltaic technology;
- the transmission and distribution of electricity with the exception of new connections and the expansion of direct connections;
- the distribution of district heating with the exception of the recently acquired Verano district heating plant network;
- in the construction sector, the installation, maintenance and repair of energy-efficiency devices for measuring and controlling the energy performance of buildings, renewable energy technologies and charging stations for electric vehicles;
- professional services related to the energy performance of buildings.

Alperia maintained a conservative approach in the analysis, which led to some exclusions from eligible and aligned activities, for example of:

- the economic activities concerning two hydropower plants, as it was not possible to rigorously and unequivocally define the power density, and they do not have a certified carbon footprint to date;

- all transmission and distribution of electricity. In detail, transmission and distribution infrastructure and equipment are located within the interconnected European electricity system, and metering infrastructure meets the requirements of smart metering systems. However, since there is no carbon footprint available to determine whether the greenhouse gas intensity of the infrastructure used to create a direct connection or to expand an existing direct connection between a substation or grid and a power plant is greater than 100 gCO_{2e}/kWh, and since it is not possible to single out the investments related to these infrastructures, Alperia has conservatively decided to consider all activities related to electricity transmission and distribution as eligible but not aligned;
- the production of electricity from bioenergy, since although the biofuel is ISCC-certified and therefore in line with the Technical Screening Criteria required for the fuel and in conformity with the energy-efficiency levels present in the BAT-AEELs for the type of plant, the energy-efficiency levels relating to the type of plant with associated biofuel were not present in the BAT-AEEL reference legislation.
- **STAGE 4** – *Check with Corporate Finance and the controllers of the availability and granularity of the economic data required for construction of the economic KPIs.*
- **STAGE 5** – *Verification of compliance with the minimum guarantees of social protection.*

In this stage, Alperia referred to what was reported in the EU Final Report on Minimum Safeguards for the four fields of application: Human Rights, Corruption, Taxation and Free Competition. It should be noted that compliance with the conditions set out in the alignment criteria was verified at the company level and not at the individual activity level.

Alperia is convinced that core values such as respect for dignity, equality and freedom are fundamental to building a valuable, open and welcoming working environment. Respect for human rights underpins all Alperia's activities, both internally and externally. Alperia has also included a specific clause requiring compliance with these values in its choice of suppliers, in its purchasing contracts and in its Group-wide General Terms and Conditions.

All of Alperia's suppliers must accept the principles of the Group's Code of Ethics and uphold them, starting with the respect for and protection of human rights (included in all tenders and purchase orders managed by Procurement. From 2019, in particular, all new significant contracts, i.e. contracts managed centrally at Group level by the Procurement function and exceeding a value of €100,000, include this clause), occupational health and safety and respect for the environment and sustainability. Alperia has an organisational system to keep track of the information requested and received from suppliers. It includes the 231 Model, registration on the White List according to the provisions of the Anti-Mafia Code and other certifications held.

It should also be noted that Alperia does not currently carry out a structured due diligence on its entire supply chain due to the variety and size of its suppliers and the nature of service companies and not of Alperia products itself. In Vision 2031, however, Alperia has set itself the ambitious goal of carrying out an ESG rating of 100% of its significant suppliers and starting the Supplier Engagement process for SBTi.

Alperia is committed to preventing the commission of any offence under Italian Legislative Decree 231/2001 through the adoption and implementation of Organisation, Management and Control Models pursuant to Italian Legislative Decree 231/2001 (hereinafter referred to as 231 Model(s)) for all the major companies belonging to the corporate Group. The adoption by the corporate Group of ethical principles relevant to the transparency and fairness of the company's activities and useful for the prevention of offences pursuant to Italian Legislative Decree 231/2001 is an essential element of the preventive control system. These principles are included in the Group's Code of Ethics, which is an integral part of the individual 231 Models, containing the set of rights, duties and ethical principles adopted by the entity towards "stakeholders" (employees, PA, shareholders, third parties). It aims to recommend, promote or prohibit certain behaviours, beyond and independently of what is provided for by the law, by defining the principles of the "company ethics" that it recognises as its own and on which it calls for the observance of all addressees.

- **STAGE 6** – *Calculation and Quantification of economic KPIs.*

Alperia, for the calculation and quantification of economic KPIs linked to each individual activity defined as eligible and aligned below, has defined an internal process for collecting the necessary data and drafted operating instructions in order to make data collection and KPI calculation traceable and transparent:

- **Revenue KPI:** given by the portion of net revenue from products or services, including intangible products or services, associated with economic activities aligned with the Taxonomy (numerator), divided by net revenue (denominator) in accordance with Article 2.5 of Directive 2013/34/EU. Turnover was determined from revenue recognised in accordance with International Accounting Standard (IAS) No. 1, item 82 (a);
- **CapEx KPI:** for the calculation of the share of capital expenditures, the denominator was considered to be the additions to tangible and intangible assets during the year considered before depreciation, amortisation, impairment and any revaluation, including those arising from restatements and reductions in

value for the year in question and excluding changes in fair value, also including additions to tangible and intangible assets arising from business combinations. In detail, capital expenditures were determined by applying International Accounting Standards AS 16 "Property, Plant and Equipment", paragraph 73 (e), sub-paragraphs (i) and (iii); IAS 38 "Intangible Assets", paragraph 118 (e), sub-paragraph (i); (c) IAS 40 Investment Property, paragraph 76(a) and (b) (for the fair value model); IAS 40 Investment Property, paragraph 79(d)(i) and (ii) (for the cost model); IAS 41 Agriculture, paragraph 50(b) and (f) IFRS 16 Leases, paragraph 53(h).

In the numerator, the parts of capital expenditures included in the denominator and related to assets or processes associated with Taxonomy-aligned economic activities or forming part of a plan to expand Taxonomy-aligned economic activities or to enable Taxonomy-aligned economic activities to align with the Taxonomy (CapEx plan) or related to the purchase of products from Taxonomy-aligned economic activities and to individual measures that enable the target activities to achieve low carbon emissions or greenhouse gas reductions were considered.

The calculation was carried out bearing in mind that the numerator should include the part of the capital expenditure for the adaptation of economic activities to climate change in accordance with Annex II of the Climate Act.

- **OpEx KPI** given by the ratio between operating expenses relating to activities or processes associated with eligible and aligned economic activities, part of the CapEx plan, and the sum of non-capitalised direct costs.

In detail, according to the terms of the Delegated Act, the denominator includes non-capitalised direct costs related to research and development, building renovation measures, short-term rental, maintenance and repair as well as any other direct expenditure related to the day-to-day maintenance of property, plant and equipment, either by the company or by third parties to whom such tasks are outsourced, necessary to ensure the continuous and effective operation of such assets.

While the numerator corresponds to the portion of operating expenses included in the denominator that fulfil one of the following conditions: they are related to assets or processes associated with economic activities aligned with the Taxonomy, including training and other human resource adaptation needs, as well as non-capitalised direct costs of research and development, or they are part of the CapEx plan, or they are related to the purchase of products from economic activities aligned with the Taxonomy and to individual measures that enable the target activities to achieve low carbon emissions or greenhouse gas reductions.

The calculation was carried out bearing in mind that the numerator must also include the part of operational expenditure allocated to the adaptation of economic activities to climate change in accordance with Annex II of the Delegated Climate Act.

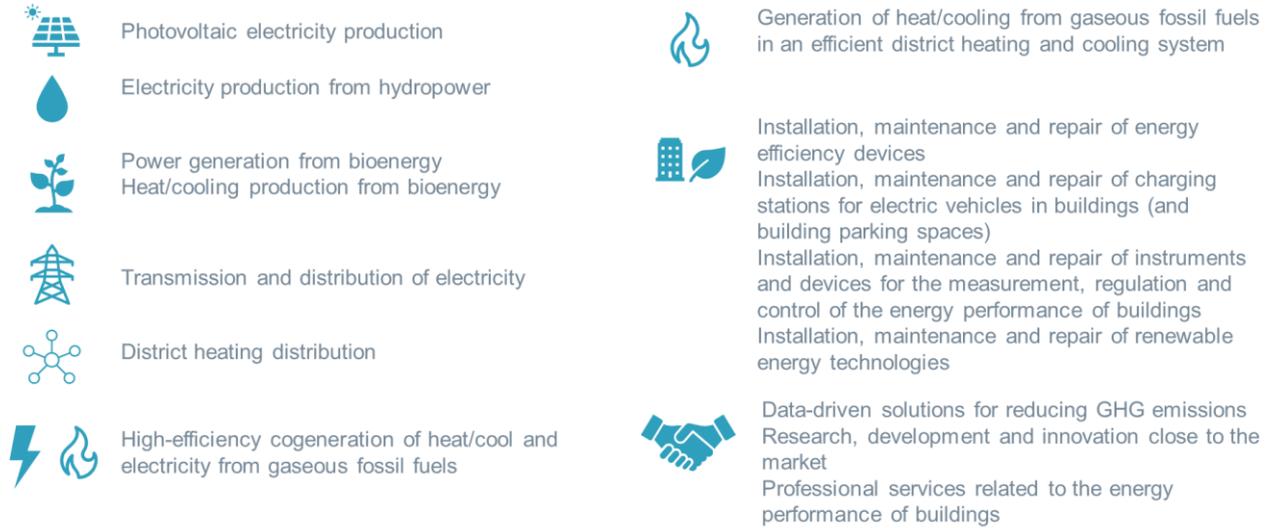
The mapping of Alperia Group activities

STAGE 1 of the Alperia process made it possible to classify the Group's activities into two categories:

ELIGIBLE: any economic activity described by the Taxonomy Regulation, in the Delegated Acts, and for which Technical Screening Criteria are available to verify its substantial contribution to the achievement of at least one of the European Union's environmental objectives; Objective 1: Climate Change Mitigation and Objective 2: Adaptation to Climate Change. Among the eligible activities Alperia has recognised:

- **4.1 Electricity generation using solar photovoltaic technology** : which involves the construction and operation of photovoltaic panels for the development of green and sustainable electricity from renewable sources. The advantages of this type of energy production are firstly environmental, as it involves the use of a non-polluting source, and, secondly, economic, as there is a significant reduction in costs. Alperia Greenpower and, to a lesser extent Fintel Energia Group S.p.A., operate in this sector.
- **4.5 Electricity generation from hydropower:** based on the construction and operation of plants using a renewable and sustainable energy source. Within the Group, this activity is carried out by Alperia Greenpower and Alperia Vipower.
- **4.8 Electricity generation from bioenergy:** based on the construction and operation of ad-hoc plants for the development of electricity from biogas, biomass and bioliquids, not mixed with other renewable fuels. Within the Group, Biopower Sardegna is responsible for this type of production.
- **4.9 Transmission and distribution of electricity:** the construction and operation of networks for the transport of electricity throughout the territory by means of low-, medium-, high- and extra-high-voltage systems. Within the Group, distribution and transmission operations are entrusted to Edyna and Edyna Transmission.
- **4.10 Storage of electricity:** intended exclusively as the accumulation of hydroelectric energy by pumping. In fact, there are two plants of this type within the Alperia Greenpower hydroelectric plant park.
- **4.15 District heating/cooling distribution:** through the construction, upgrading and operation of pipelines and associated infrastructure for the distribution of heating ending at the substation or heat exchanger. Thermal energy activities are managed by Alperia Ecoplus S.r.l.
- **4.24 Production of heat/cold from bioenergy:** based on the construction and operation of ad hoc plants for the development of thermal energy from biogas, biomass and bioliquids, not mixed with other renewable fuels. Within the Group, Alperia Ecoplus deals with this type of production.
- **4.30 High-efficiency cogeneration of heat/cold and electricity starting from gaseous fossil fuels:** understood as the construction, requalification and management of combined heat/cold and electricity generation plants that use gaseous fossil fuels. Within the Group, this activity is supported by Alperia Ecoplus and Alperia Green Future.
- **4.31 Production of heat/cold from fossil gaseous fuels in an efficient district heating and cooling system:** means the construction, upgrading and operation of heat production plants that produce heat/cold using fossil gaseous fuels and are connected to an efficient district heating and cooling system. Within the Group, this activity is entrusted to Alperia Ecoplus.
- **7.3 Installation, maintenance and repair of energy-efficiency devices:** carried out by Alperia Green Future through renovations that include new installations, maintenance and repairs of devices with the ethical objective of increasing the energy efficiency of buildings.
- **7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in the parking spaces belonging to the buildings):** this activity is carried out within the Group by the company Fintel Energia Group S.p.A.
- **7.5 Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy performance of buildings:** activities in which Alperia Green Future and Solar Total Italia S.r.l. are engaged
- **7.6 Installation, maintenance and repair of renewable energy technologies:** activities in which Alperia Green Future, Solar Total Italia and Fintel Energia Group are engaged.
- **8.2 Data-driven solutions for reducing GHG emissions:** which take the form of developing and using ICT solutions for data collection, transmission and storage. They also provide for modelling and use where activities are planned to provide and analyse data to reduce greenhouse gas emissions. This type of ICT solutions can include the use of the Internet of Things, 5G, the use of decentralised technologies and artificial intelligence. This type of service is managed within the Group by Alperia Green Future.
- **9.1 Close-to-market research, development and innovation:** involving applied research and experimental development of technologies, business models, processes, solutions and other products with the ambitious objective of reducing, preventing or eliminating greenhouse gas emissions by demonstrating the results in a relevant environment and corresponding to the Technology Readiness Level (TRL). The Group companies involved in this area are Alperia Green Future and Hydrodata.
- **9.3 Professional services related to the energy performance of buildings:** responsibility of Alperia Green Future.

ELIGIBLE

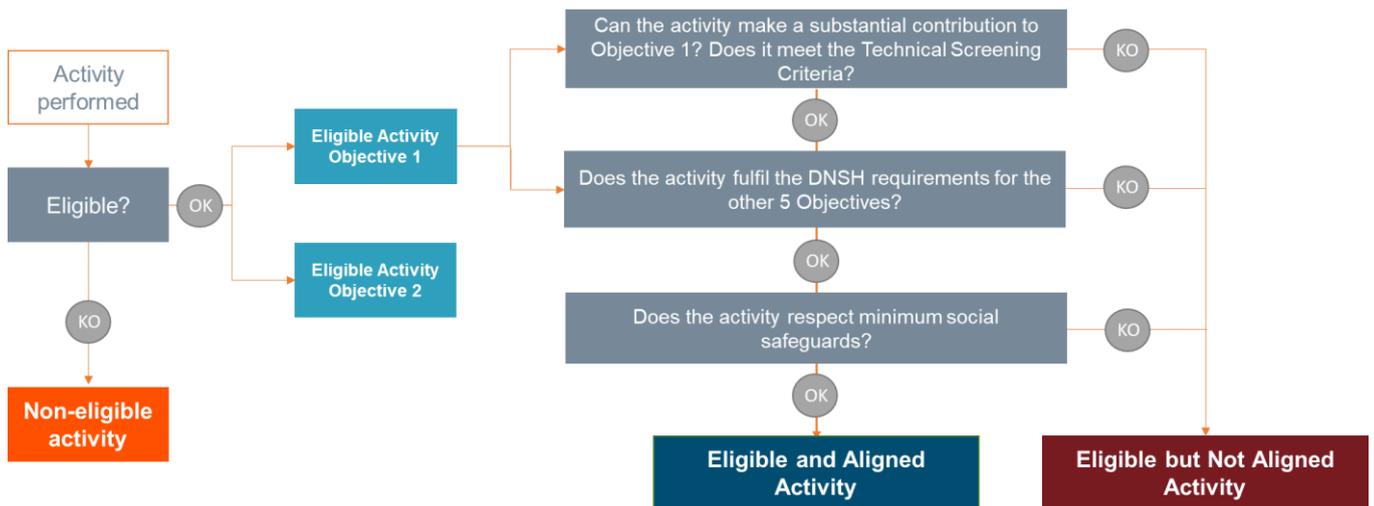


NOT ELIGIBLE: any economic activity described by the Taxonomy Regulation and for which Technical Screening Criteria are not available to verify its substantial contribution to the achievement of at least one of the European Union's environmental objectives, Objective 1: Climate Change Mitigation and Objective 2: Adaptation to Climate Change.

NOT ELIGIBLE



At this point, through the process described above and outlined in the figure below,



the ELIGIBLE activities were further classified in two categories:

ELIGIBLE-ALIGNED: including all ELIGIBLE activities, which:

- meet the Technical Screening Criteria of Objective 1 Climate Change Mitigation;
- meet the DNSH requirements for the other 5 Objectives;
- respect the minimum guarantees of social protection.

ELIGIBLE-NOT ALIGNED: all eligible activities that do not meet at least one of the following conditions:

- meet the Technical Screening Criteria of Objective 1 Climate Change Mitigation;
- meet the DNSH requirements for the other 5 Objectives;
- respect the minimum guarantees of social protection.

The **ELIGIBLE-ALIGNED** activities of the Alperia Group are:

ELIGIBLE-ALIGNED

	Photovoltaic electricity production		Installation, maintenance and repair of energy efficiency devices
	Electricity production from hydropower with the exception of 2 hydroelectric plants		Installation, maintenance and repair of charging stations for electric vehicles in buildings (and building parking spaces)
	District Heating Distribution with the exception of the Verano TLR plant		Installation, maintenance and repair of instruments and devices for the measurement, regulation and control of the energy performance of buildings
	Professional services related to the energy performance of buildings		Installation, maintenance and repair of renewable energy technologies

The **ELIGIBLE-NOT ALIGNED** activities of the Alperia Group are:

ELIGIBLE-NOT ALIGNED

	Electricity production from hydropower from 2 hydroelectric plants		High-efficiency cogeneration of heat/cool and electricity from gaseous fossil fuels
	Power generation from bioenergy Heat/cooling production from bioenergy		Generation of heat/cooling from gaseous fossil fuels in an efficient district heating and cooling system
	Transmission and distribution of electricity		Data-driven solutions for reducing GHG emissions Research, development and innovation close to the market
	District heating distribution of the Verano TLR plant		

Alperia has always been committed to respecting the environment and set itself the goal of achieving **net zero by 2040**. Furthermore, it has concluded the process of implementing the European Taxonomy for eco-sustainable activities and has carried out a gap analysis in order to first identify and then implement the actions necessary to increase the share of **ELIGIBLE-ALIGNED** activities.

Results of the economic activities of the Group based on the Taxonomy

The results related to the eligibility and alignment percentages of the Alperia Group's economic activities to the Taxonomy are shown in the tables below in line with the disclosure requirements:

Table 1 – Share of Alperia Group's 2022 turnover associated with eligible economic activities aligned to the Taxonomy

Economic activities (1)	Codes (2)	Absolute Capex (3)	Share of Capex (4)	Substantial contribution						DNSH						Minimum safeguards (17)	Share of Capex aligned with taxonomy (18)	Share of Capex aligned with taxonomy n- 1 (19)	Category - enabling activities (20)	Category - transitional activities (21)
				Climate change mitigation (5)	Climate change adaptation (6)	Sustainable use and protection of water and marine resources (7)	The transition to a circular economy (8)	Pollution prevention and control (9)	The protection and restoration of biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	The sustainable use and protection of water and marine resources (13)	The transition to a circular economy (14)	Pollution prevention and control (15)	The protection and restoration of biodiversity and ecosystems (16)					
U.M.		k€	%	%	%	%	%	%	%	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	%	%	A	T
A. Turnover of eligible economic activities																				
A.1. Eligible and aligned activities																				
4.1 Electricity generation from solar and photovoltaic technology	4.1	178	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	YES	YES	0,00%	N/A	-	-
4.5 Electricity generation from hydropower	4.5	1.005.000	27,63%	27,63%	-	-	-	-	-	YES	YES	YES	N/A	N/A	YES	YES	27,63%	N/A	-	-
4.8 Electricity generation from bioenergy	4.8	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-
4.9 Transmission and distribution of electricity	4.9	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	YES	YES	YES	0,00%	N/A	-	-
4.10 Storage of electricity	4.10	6.928	0,19%	0,19%	-	-	-	-	-	YES	YES	YES	YES	N/A	YES	YES	0,19%	N/A	-	-
4.15 District heating/cooling distribution	4.15	1.022	0,03%	0,03%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,03%	N/A	-	-
4.24 Production of heat/cool from bioenergy	4.24	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	75.490	2,08%	2,08%	-	-	-	-	-	YES	YES	N/A	N/A	YES	N/A	YES	2,08%	N/A	-	-
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	655	0,02%	0,02%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,02%	N/A	-	-
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	25.057	0,69%	0,69%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,69%	N/A	-	-
8.2 Data-driven solutions for GHG emissions reductions	8.2	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	N/A	YES	0,00%	N/A	-	-
9.1 Close to the market research, development and innovation	9.1	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	YES	YES	YES	YES	0,00%	N/A	-	-
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-
A.1. Total Turnover from eligible and aligned activities		1.114.330	30,63%	30,63%	-	-	-	-	-								30,63%			

A.2. Eligible but not aligned activities			
4.1 Electricity generation from solar and photovoltaic technology	4.1	-	0,00%
4.5 Electricity generation from hydropower	4.5	31.017	0,85%
4.8 Electricity generation from bioenergy	4.8	85.044	2,34%
4.9 Transmission and distribution of electricity	4.9	53.033	1,46%
4.10 Storage of electricity	4.10	-	0,00%
4.15 District heating/cooling distribution	4.15	53	0,00%
4.24 Production of heat/cool from bioenergy	4.24	4.930	0,14%
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	31.482	0,87%
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	5.478	0,15%
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	-	0,00%
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	-	0,00%
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	-	0,00%
8.2 Data-driven solutions for GHG emissions reductions	8.2	1.007	0,03%
9.1 Close to the market research, development and innovation	9.1	-	0,00%
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%
A.2. Total turnover from eligible but not aligned activities		212.045	5,83%
Total (A.1. + A.2)		1.326.375	36,46%
B. Non-eligible activities			
B.1 Total turnover from non eligible activities		2.311.522	63,54%
Total (A+B)		3.637.898	100,00%

Table 2 – Share of Alperia Group's CapEx 2022 associated with eligible economic activities and aligned to the Taxonomy

Economic activities (1)	Codes (2)	Absolute Capex (3)	Share of Capex (4)	Substantial contribution						DNSH						Minimum safeguards (17)	Share of Capex aligned with taxonomy (18)	Share of Capex aligned with taxonomy n. 1 (1.9)	Category - enabling activities (20)	Category- transitional activities (21)	
				Climate change mitigation (5)	Climate change adaptation (6)	Sustainable use and protection of water and marine resources (7)	The transition to a circular economy (8)	Pollution prevention and control (9)	The protection and restoration of biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	The sustainable use and protection of water and marine resources (13)	The transition to a circular economy (14)	Pollution prevention and control (15)	The protection and restoration of biodiversity and ecosystems (16)						YES/No
U.M.		k€	%	%	%	%	%	%	%	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	%	%	A	T
A. CapEx of eligible economic activities																					
A.1. Eligible and aligned activities																					
4.1 Electricity generation from solar and photovoltaic technology	4.1	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	YES	YES	0,00%	N/A	-	-	
4.5 Electricity generation from hydropower	4.5	65.869	34,36%	34,36%	-	-	-	-	-	YES	YES	YES	N/A	N/A	YES	YES	34,36%	N/A	-	-	
4.8 Electricity generation from bioenergy	4.8	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.9 Transmission and distribution of electricity	4.9	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	YES	YES	YES	0,00%	N/A	-	-	
4.10 Storage of electricity	4.10	770	0,40%	0,40%	-	-	-	-	-	YES	YES	YES	YES	N/A	YES	YES	0,40%	N/A	-	-	
4.15 District heating/cooling distribution	4.15	9.230	4,81%	4,81%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	4,81%	N/A	-	-	
4.24 Production of heat/cool from bioenergy	4.24	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	330	0,17%	0,17%	-	-	-	-	-	YES	YES	N/A	N/A	YES	N/A	YES	0,17%	N/A	-	-	
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	6.311	3,29%	3,29%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	3,29%	N/A	-	-	
8.2 Data-driven solutions for GHG emissions reductions	8.2	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	N/A	YES	0,00%	N/A	-	-	
9.1 Close to the market research, development and innovation	9.1	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	YES	YES	YES	YES	0,00%	N/A	-	-	
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
A.1. Total Capex from eligible and aligned activities		82.511	43,04%	43,04%	-	-	-	-	-								43,04%				

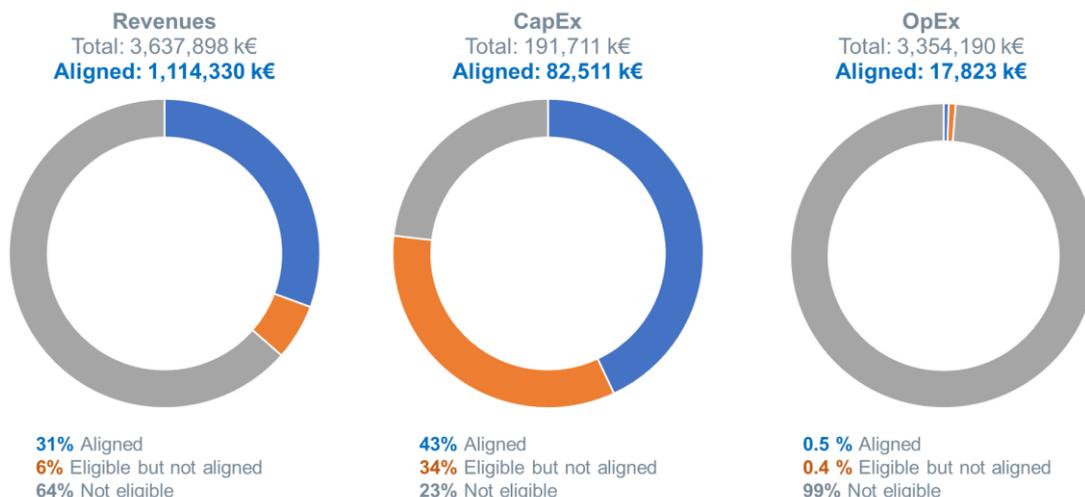
A.2. Eligible but not aligned activities			
4.1 Electricity generation from solar and photovoltaic technology	4.1	-	0,00%
4.5 Electricity generation from hydropower	4.5	117	0,06%
4.8 Electricity generation from bioenergy	4.8	69	0,04%
4.9 Transmission and distribution of electricity	4.9	49.680	25,91%
4.10 Storage of electricity	4.10	-	0,00%
4.15 District heating/cooling distribution	4.15	218	0,11%
4.24 Production of heat/cool from bioenergy	4.24	3.542	1,85%
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	9.744	5,08%
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	759	0,40%
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	-	0,00%
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	-	0,00%
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	-	0,00%
8.2 Data-driven solutions for GHG emissions reductions	8.2	592	0,31%
9.1 Close to the market research, development and innovation	9.1	98	0,05%
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%
A.2. Total CapEx from eligible but not aligned activities		64.819	33,81%
Total (A.1. + A.2)		147.330	76,85%
B. Non-eligible activities			
B.1 Total CapEx from non eligible activities		44.380	23,15%
Total (A+B)		191.711	100,00%

Table 3 – Share of Alperia Group's OpEx 2022 associated with eligible economic activities and aligned to the Taxonomy

Economic activities (1)	Codes (2)	Absolute Opex (3)	Share of Opex (4)	Substantial contribution						DNSH						Minimum safeguards (17)	Share of Opex aligned with taxonomy (18)	Share of Opex aligned with taxonomy n-1 (19)	Category - enabling activities (20)	Category - transitional activities (21)	
				Climate change mitigation (5)	Climate change adaptation (6)	Sustainable use and protection of water and marine resources (7)	The transition to a circular economy (8)	Pollution prevention and control (9)	The protection and restoration of biodiversity and ecosystems (10)	Climate change mitigation (11)	Climate change adaptation (12)	The sustainable use and protection of water and marine resources (13)	The transition to a circular economy (14)	Pollution prevention and control (15)	The protection and restoration of biodiversity and ecosystems (16)						
U.M.		k€	%	%	%	%	%	%	%	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	YES/No	%	%	A	T
A. Opex of eligible economic activities																					
A.1. Eligible and aligned activities																					
4.1 Electricity generation from solar and photovoltaic technology	4.1	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	YES	YES	0,00%	N/A	-	-	
4.5 Electricity generation from hydropower	4.5	15.704	0,47%	0,47%	-	-	-	-	-	YES	YES	YES	N/A	N/A	YES	YES	0,47%	N/A	-	-	
4.8 Electricity generation from bioenergy	4.8	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.9 Transmission and distribution of electricity	4.9	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	YES	YES	YES	0,00%	N/A	-	-	
4.10 Storage of electricity	4.10	1.027	0,03%	0,03%	-	-	-	-	-	YES	YES	YES	YES	N/A	YES	YES	0,03%	N/A	-	-	
4.15 District heating/cooling distribution	4.15	583	0,02%	0,02%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,02%	N/A	-	-	
4.24 Production of heat/cool from bioenergy	4.24	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	N/A	YES	YES	YES	0,00%	N/A	-	-	
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	74	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	YES	N/A	YES	0,00%	N/A	-	-	
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	11	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	424	0,01%	0,01%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,01%	N/A	-	-	
8.2 Data-driven solutions for GHG emissions reductions	8.2	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	YES	N/A	N/A	YES	0,00%	N/A	-	-	
9.1 Close to the market research, development and innovation	9.1	-	0,00%	0,00%	-	-	-	-	-	YES	YES	YES	YES	YES	YES	YES	0,00%	N/A	-	-	
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%	0,00%	-	-	-	-	-	YES	YES	N/A	N/A	N/A	N/A	YES	0,00%	N/A	-	-	
A.1. Total Opex from eligible and aligned activities		17.823	0,53%	0,53%	-	-	-	-	-								0,53%				

A.2. Eligible but not aligned activities			
4.1 Electricity generation from solar and photovoltaic technology	4.1	-	0,00%
4.5 Electricity generation from hydropower	4.5	3.794	0,11%
4.8 Electricity generation from bioenergy	4.8	4.178	0,12%
4.9 Transmission and distribution of electricity	4.9	3.265	0,10%
4.10 Storage of electricity	4.10	-	0,00%
4.15 District heating/cooling distribution	4.15	53	0,00%
4.24 Production of heat/cool from bioenergy	4.24	421	0,01%
4.30 High-efficiency combined heat/cool and power generation from gaseous fossil fuels	4.30	952	0,03%
4.31 High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	4.31	134	0,00%
7.3 Installation, maintenance and repair of energy efficiency equipment	7.3	-	0,00%
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	-	0,00%
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0,00%
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	-	0,00%
8.2 Data-driven solutions for GHG emissions reductions	8.2	1	0,00%
9.1 Close to the market research, development and innovation	9.1	129	0,00%
9.3 Professional services related to energy performance of buildings	9.3	-	0,00%
A.2. Total Opex from eligible but not aligned activities		12.928	0,39%
Total (A.1. + A.2)		30.751	0,92%
B. Non-eligible activities			
B.1 Total Opex from non eligible activities		3.323.439	99,08%
Total (A+B)		3.354.190	100,00%

In the graphs below, Alperia reports a summary of the entire economic analysis carried out, showing the economic KPIs calculated for the Taxonomy divided by revenues, CapEx and OpEx in the form of percentage shares of alignment, eligibility and non-eligibility:



Alperia, as can be seen from the tables above, has among its eligible activities two of the six activities listed among those regulated by the Complementary Delegated Act relating to the production of energy from nuclear and fossil fuels:

- Activity 4.30 "High-efficiency cogeneration of heat/cool and electricity from gaseous fossil fuels";
- Activity 4.31 "High-efficiency cogeneration of heat/cool from gaseous fossil fuels in an efficient district heating and cooling system.

The activities listed above, as described in the previous paragraphs, were found to be eligible but not aligned; for this reason a table in line – but simplified – with the requirements of Annex 3 "ANNEX XII Standard templates for public disclosure of information referred to in Article 8, Paragraphs 6 and 7" of the Delegated Act:

Table 4 – Eligible but not Taxonomy-aligned economic activities related to energy production from nuclear power and gas

	Economic activities	Amount and share					
		CCM + CCA		Climate Change Mitigation (CCM)		Climate Change Adaptation(CCA)	
		Amount [k€]	%	Amount [k€]	%	Amount [k€]	%
Turnover							
5	Amount and share of economic activity eligible for the Taxonomy but not aligned to the Taxonomy in section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 in the denominator of the applicable KPI	31.482	14,85%	31.482	14,85%	0	0
6	Amount and share of the economic activity eligible for the Taxonomy but not aligned with the Taxonomy set out in Section 4.31 of Annexes I and II of Delegated Regulation (EU) 2021/2139 to the denominator of the applicable KPI	5.478	2,58%	5.478	2,58%	0	0
7	Amount and share of other economic activities eligible for the Taxonomy but not aligned to the Taxonomy not included in rows 1 to 6 to the denominator of the applicable KPI	175.084	82,57%	175.084	82,57%	0	0
8	Total amount and share of economic activities eligible for the Taxonomy but not aligned with the Taxonomy to the denominator of the applicable KPI	212.045	100,00%	212.045	100,00%	0	0
CapEx							
5	Amount and share of economic activity eligible for the Taxonomy but not aligned to the Taxonomy in section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 to the denominator of the applicable KPI	9.744	15,03%	9.744	15,03%	0	0
6	Amount and share of the economic activity eligible for the Taxonomy but not aligned to the Taxonomy set out in section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 to the denominator of the applicable KPI	759	1,17%	759	1,17%	0	0
7	Amount and share of other economic activities eligible for the Taxonomy but not aligned to the Taxonomy not included in rows 1 to 6 to the denominator of the applicable KPI	54.317	83,80%	54.317	83,80%	0	0
8	Total amount and share of economic activities eligible for the Taxonomy but not aligned with the Taxonomy to the denominator of the applicable KPI	64.819	100,00%	64.819	100,00%	0	0
OpEx							
5	Amount and share of economic activity eligible for the Taxonomy but not aligned to the Taxonomy in section 4.30 of Annexes I and II to Delegated Regulation (EU) 2021/2139 to the denominator of the applicable KPI	952	7,37%	952	7,37%	0	0
6	Amount and share of the economic activity eligible for the Taxonomy but not aligned to the Taxonomy set out in section 4.31 of Annexes I and II to Delegated Regulation (EU) 2021/2139 to the denominator of the applicable KPI	134	1,04%	134	1,04%	0	0
7	Amount and share of other economic activities eligible for the Taxonomy but not aligned to the Taxonomy not included in rows 1 to 6 to the denominator of the applicable KPI	11.841	91,59%	11.841	91,59%	0	0
8	Total amount and share of economic activities eligible for the Taxonomy but not aligned with the Taxonomy to the denominator of the applicable KPI	12.928	100,00%	12.928	100,00%	0	0

Description of the KPI extraction method

The scope of the analysis and economic KPIs shown in the previous section *Results of the Group's economic activities on the Taxonomy* relates to the fully consolidated companies as for the consolidated financial statements.

The source of the data used to determine KPIs is primarily represented by accounting data taken from the Enterprise Resource Planning (ERP) accounting module used by the Alperia Group, appropriately input into an ad-hoc tool implemented for the aggregation of information and the construction of KPIs. This tool has been properly configured to ensure no double counting or other types of possible errors/inconsistencies.

The approach that was chosen to feed the tool – with the aim of guaranteeing the maximum adherence of the information used for the construction of the KPIs to the consolidated financial statements – was to refer, in the first instance and where possible, directly to the balances of the accounting accounts present in the accounts of the individual companies subject to full consolidation in the aforesaid financial statements. This working method subsequently made it possible to identify the “eligible” or “non-eligible”, “eligible-aligned”, “eligible but not aligned” amounts with greater precision on the basis of the information received from the technical working group and the entries for the elimination of intragroup balances and those for consolidation.

The categorisation of the amounts of individual accounts into “eligible” or “non-eligible”, “eligible-aligned”, “eligible but not aligned” and – in the case of those referring to operating expenses, the related further classification between different types of costs (e.g. research and development or maintenance and repair) – was done primarily by reference to the description of the same accounts using the prevalence criterion. In situations where this basic approach was not considered optimal, the necessary information was extracted by referring alternatively to:

- cost accounting items implemented at ERP level (e.g. the “Work Breakdown Structure”);
- items implemented at ERP level for the preparation of separate annual accounts in relation to the Group companies required to comply with the sector regulations (so-called “unbundling accounting”).

To guarantee the completeness of the information used to determine the KPIs, an overall reconciliation was carried out of the database extracted and reported in the KPI construction tool with the consolidated profit-and-loss account relating to turnover and operating expenses and of the tables in the consolidated explanatory notes relating to capital expenditure (the latter taken from the depreciable asset books of the individual Group companies – again fed by the data in the Group ERP accounting module).

11.6 METHODOLOGICAL NOTE

This Sustainability Report is a consolidated non-financial report as defined in Italian Legislative Decree No. 254/2016 and examines the activities and indicative figures of the Alperia Group according to the reporting limits and reporting period of the 2022 consolidated financial statements. Deviations with reference to the perimeter are indicated next to the data in question with footnotes. As far as Fintel is concerned, since this is the first year of reporting, the company is only included in the financial and sales data, unless otherwise specified.

List of companies consolidated under the 2022 Consolidated Financial Statements

Business Unit	Company	Investment (%)	Plants (No.)
Parent company	Alperia S.p.A.		
Energy production	Alperia Greenpower S.r.l.	100	33 hydroelectric plants; 7 photovoltaic systems (Bolzano)
	Alperia Vipower S.p.A.	76.1	
Sales and trading	Alperia Trading S.r.l.	100	
	Alperia Smart Services S.r.l.	100	
	Fintel Gas e Luce S.r.l.	90	
Networks	Edyna S.r.l.	100	
	Edyna Transmission S.r.l.	100	
Heat and services	Alperia Ecoplus S.r.l.	100	7 district heating plants 1 biofuel power plant
	Biopower Sardegna S.r.l.	100	
Smart Region	Alperia Green Future S.p.A.	100	
	Hydrodata S.p.A.	100	
	Alperia Innoveering S.r.l.	50.51	
	Bluepower Connection S.r.l.	51	
		100	

In 2022, Alperia S.p.A. acquired Solar Total Italia S.r.l. and Solart S.r.l., subsequently merged into Solar Total Italia S.r.l., as well as Fintel Gas e Luce S.r.l. and Fintel Reti S.r.l., subsequently merged into Fintel Gas e Luce S.r.l.

Also during the year, Alperia Bartucci S.r.l., Alperia Fiber S.r.l. and Gruppo Green Power S.r.l. were merged into Alperia Green Future S.p.A., and Alperia Sum S.p.A. was incorporated into Alperia Smart Services S.r.l.

In order to advance the concentration of the Alperia Group's sales activities in a single company, with effect from 1 August 2022, Alperia Sum S.r.l. was merged by incorporation into Alperia Smart Services S.r.l.

Finally, Alperia Greenpower S.r.l., in execution of existing agreements, transferred shares representing a total of 0.9% of the share capital of Alperia Vipower S.p.A. to the three Venosta municipalities of Curon Venosta, Malles Venosta and Glorenza.

The Alperia Sustainability Report is published annually. This report has been prepared in accordance with the GRI Standards 2021: in accordance option.

11.7 CONTACTS

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