



alperia

A green world is no longer just a dream

Sustainability Report 2021

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

***energizing
south tyrol***

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LETTER TO THE STAKEHOLDERS

Dear Reader,

The year 2021 was one that once again tested our ability to resist, react and revive, putting the values in which we have always recognised ourselves at the centre of everything we do. And one thing is certain: never before have we learned as much as we have in recent years.

We have learned not to take anything for granted, but rather to choose and value **our mission** on a daily basis. By recognising and reaffirming the importance of what we do, above all to ourselves, we have found a new determination to act and overcome any difficulties. We did this in the knowledge that everything comes from nature and eventually returns to it. We take our energy from nature and we want to give back to nature through innovation and projects focused on **sustainability**. In 2021, our first five-year sustainability plan came to an end and we achieved results of which we are very proud. In five years, we have created an added value of more than €1 billion for South Tyrol. We have integrated sustainability into our corporate strategy in line with the UN SDGs, making CSR increasingly strategic for our Group, and we have also integrated it into our Enterprise Risk Management. We have produced five sustainability reports, structured the reporting procedure, included sustainability objectives in remuneration and implemented succession and diversity plans. We have developed new 100% Green DNA business activities, to such an extent that since 2017, we have been the leading certified Italian supplier offering green gas. We have reduced emissions in the heat and services sector through the use of ecological and cutting-edge technologies. We have invested in improving the performance of our plants in terms of availability, reliability and efficiency, and we have worked to reduce the impact that our hydroelectric plants have on nature. As of 2020, we are the leading carbon-neutral utility company in Italy and we have already begun work on the next five-year plan, involving our stakeholders with five roundtables.

But that's not all. We have continued to work on **energy efficiency** projects for large industrial and commercial groups, as well as for apartment blocks and individual homes, under the 110% Superbonus. And we have made the same commitment to the development of **green mobility**. Neogy, our joint venture with Gruppo Dolomiti Energia, has been recognised as one of the 100 Italian Excellencies, commended for having made a "valuable contribution to the growth of the country". This is an award that we are very proud to receive because it touches on one of the great development paths of the future. Moreover, also thanks to the work of Neogy, Trentino Alto Adige has become one of the best equipped green-mobility areas in Italy and in Europe. And our employees experience this every day, thanks to the **company's sustainable mobility** project, where we promote the use of environmentally-friendly transport through specific incentives and provide them with full electric or hybrid vehicles – a project for which we won the 2021 Sustainable Mobility Award.

But our commitment to sustainability does not stop at local projects. Alperia has signed **Amazon's Climate Pledge**, a document in which we commit to achieving zero CO₂ emissions ten years ahead of the targets set by the Paris Agreement. We know that we have a limited window of opportunity to take action to limit global warming to 1.5 degrees Celsius by 2050, and we want to play our part responsibly and reliably. In the same spirit, we have signed up to the **Science Based Targets Initiative**, promoted by the Carbon Disclosure Project, UN Global Compact, World Resource Institute and WWF, with the aim of promoting the reduction of greenhouse gases on the basis of scientifically calculated targets. Therefore, as defined in the One Vision business plan update, after achieving Carbon Neutrality for operational emissions (Scope 1 and 2) in 2020, we intend to further improve our Scope 3 emissions by accelerating the path to **Net Zero**.

Again, we have learned from the pandemic emergency to create new synergies, strengthening our sense of cohesion and our desire to help shape a more sustainable, equitable and inclusive future. These are the pillars on which the **strategic plan** that will guide us until 2024 is based, underpinned by an integrated vision in which sustainability and innovation play a central role. Innovation means the ability to develop advanced systems and technologies that enable us to do business efficiently and sustainably. All the innovation initiatives we undertake – from **Alperia Startup Factory**, the startup accelerator created to promote innovation in the field of renewable energy and the Green Economy, now in its fourth year, to the **Open Innovation** projects in which we are involved both locally and internationally – help us to make our activities increasingly modern, efficient and responsible, guaranteeing the safest and greenest possible supply to our customers, with the lowest possible environmental impact.

And in this field, too, we can say that we have learned a lot in recent years. We have learned to acquire new skills and accept new challenges. We have learned to highlight new opportunities and equip ourselves with the right tools to seize them. We have learned to act early to prevent certain needs becoming emergencies. This is the case, for example, for **digitisation**. This is a transformation process that we have been engaged in for some time and which has enabled us to respond promptly to the introduction of smart working, a practice that has become structural in 2021 with a hybrid system. And being aware that working with new organisational methods does not only mean being able to manage technologies and processes in an innovative way, but also, and above all, being able to feel part of a common project, we have committed ourselves to developing cross-cutting skills built on empathy, resilience and trust. **Training**, which was already a priority, has become even more extensive and focused, with programmes aimed at adapting skills and developing new capabilities that saw each of our people engaged for an average of 26 hours. A large share of these activities was dedicated to leadership development – including for women – as well as cyber security and data protection. Data, and its functional use

in the definition of predictive analyses, are in fact at the heart of our **Innovation Manifesto**, featuring the major themes of artificial intelligence and blockchain. In addition, training measures include those specifically dedicated to sustainability. After having launched a training course on CSR Management, GRI Standards and SDGs for some employees of the Group's BUs, we are already planning a dedicated ESG course for 2022.

Finally, perhaps most importantly, we have learned to rediscover ourselves as individuals, as a group and as a community. We have done this by strengthening our social responsibility action with a spirit that has always set Alperia apart and will continue to represent us in the future. In the last 5 years we have created added value for South Tyrol of more than €1 billion, through taxes, environmental funds, concession fees and electricity provided free of charge to the Province, salaries and social security contributions, sponsorships and donations. With bonuses and payment holidays, we have helped families to contain the economic effects of the pandemic and energy price hikes. We have supported organisations such as the South Tyrol Red Cross by donating a mobile multi-specialist clinic. We have installed new public access defibrillator columns in busy areas, optimising emergency assistance in the event of cardiac arrest. We have continued to support associations, donating – among others – €100,000 to the association of retirement homes in South Tyrol and supporting the Association of South Tyrolean Sports Clubs with a contribution of €80,000. In addition, there are many other donations, with which we have reaffirmed our responsibility to our communities. We will gradually increase our involvement in the new areas in which we operate, driven by the desire to generate a positive and sustainable long-term impact.



Mauro Marchi



Flora Kröss



Johann Wohlfarter

2021 HIGHLIGHTS

BUSINESS

In 2021 we updated the objectives of the **One Vision** strategic plan that will guide the Alperia Group until 2024, combining sustainability and growth. Among the measures, we have earmarked a total of €1 billion in investments from 2022 to 2024 with a focus on environmental, economic and social impact in the region, and more than €300 million in energy updating measures for buildings.

During 2021, we also concluded several corporate transactions, such as the sale by Alperia S.p.A. of its shares in the share capital of PVB Power Bulgaria AD (21.13%), the acquisition of the remaining 40% of the share capital of Alperia Bartucci S.r.l., the sale by Alperia Greenpower S.r.l. of its stake in Ottana Solar Power S.r.l., the acquisition by Gruppo Green Power S.r.l. of the entire share capital of Solar Total S.r.l. and Solart S.r.l. and the acquisition by Alperia S.p.A. of 90% of the share capital of the Fintel Gas e Luce S.r.l. and Fintel Reti S.r.l., companies active in the sale of electricity and gas. In addition, we worked on the reorganisation of the Smart Region Business Unit, which from 1 January 2022 will see the activities of Alperia Fiber S.r.l. and Alperia Bartucci S.r.l. merged into Gruppo Green Power S.r.l., whose name will become Alperia Green Future S.r.l.

STRATEGY AND GOVERNANCE

We have concluded our first sustainability plan and have already begun working on the new plan. We have achieved a host of significant results that demonstrate that a company can do a lot in terms of sustainability with a structured and participative plan. In 2021 we achieved 88.2% of the targets set out in the 2017-2021 Sustainability Plan for the year. In order to carry out a new materiality analysis – which we will begin using from 2022, we involved our main internal and external stakeholders, with five **roundtables** (two in Veneto and three in South Tyrol). This method has enabled us to identify the priority issues for work over the next five years. In particular, the new materiality matrix is based on a two-pronged approach to 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 addition, we have integrated the UN SDGs into the new 2020-2024 Strategic Plan, with which we have committed to dedicate 80% of planned investments to the achievement of ten UN SDGs and have improved **the Integrated Governance Index** by nine points in three years. Sustainability is also increasingly integrated into risk management, the definition of policies and procedures, reporting and performance and, in general, into corporate culture. We have also implemented a proactive **Stakeholder Management** programme and linked the production bonuses of employees and Management by Objectives (MBO) of senior management to the achievement of sustainability goals.

COVID-19 PREVENTION MEASURES

In 2021, Alperia renewed the safety measures defined in the previous year to manage the COVID-19 pandemic, with some adjustments. The Emergency Board continued to meet periodically as required. In addition to applying the provisions of national and provincial legislation, Alperia also adopted additional safety measures, organising operational shifts as necessary so as to avoid the crossover of groups as far as possible, maintaining fixed teams which are more easily traceable in the event of infection, and ensuring workstations were disinfected between shifts. For each of the Group's offices, managers have been identified to check Green Passes. Wherever possible, Alperia has reintroduced a minimum of two days' presence in offices (with special measures such as the use of masks when sharing spaces), recognising the importance of sharing a common environment both for team spirit and for individual mental and physical health. Every employee had the opportunity to take compulsory online training with a final test dedicated to conduct to be adopted to avoid spreading the infection. In addition, body temperature measuring devices were installed at the main sites, while smaller sites were equipped with infrared thermometers. Special mask-disposal systems have also been introduced to raise awareness of environmental sustainability. Alperia's employees were also given the opportunity to have their flu vaccination in the office.

EMPLOYEES

In 2021, smart working was consolidated, with employees being present on company premises at least two days a week. We offered a **training course** for managers to better supervise employees remotely and to explore the critical issues that can arise in agile working. The **Talent** projects continued and the Team Alperia 2021 project was relaunched to boost **team spirit**. Alperia has also continued to organise workshops with managers throughout the Group with the aim of creating a shared leadership culture, and paths have also been developed specifically dedicated to **female leadership**. New career development plans have been implemented and 31,109 hours of training have been carried out. In the course of 2021, the HR department also launched a Taxonomy of Processes project for the Alperia, Alperia Greenpower, Alperia Trading and Edyna companies. We have also introduced a **diversity manager** who will be responsible for developing D&I activities.

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. We deployed the Civil Protection's **TETRA system** to enable radio communication in the event of emergencies and faults. Edyna – the company that distributes electricity – met with the municipalities of South Tyrol, defining an emergencies and priorities programme, and carried out the installation of smart meters, installing almost 99% of those planned for this year, i.e., about 50,000 units. Our **dams** are also subject to constant maintenance. In 2021, the cellars of some buildings in the village of Curon Venosta were flooded: with no dangers for the local population. Alperia Vipower worked with the municipality of Curon Venosta and the local volunteer fire brigade to address the situation and carried out safety work amounting to €10 million in the St. Valentin tunnel that will continue into 2022.

ADDED ECONOMIC VALUE

In 2021, we **created over €260 million** of added value for South Tyrol (257 million in 2020), through payments to public bodies, staff salaries and benefits, contracts for local companies (reaching a 59% share), sponsorships, donations and dividends to local shareholders. In addition, we also supported the territory in relation to COVID-19, by launching significant **social responsibility activities** and **payment moratoria** for certain categories. In addition to this, we have taken steps to **contain tariffs** as a result of rising energy costs.

SUSTAINABLE PRODUCTS AND SERVICES

In 2021, 47% of Alperia's revenues were generated by sustainable products and services. The objective, in line with the next business plan, is to significantly increase this share, investing increasingly in **green gas, green energy, district heating, energy efficiency and electric mobility**. Currently, 100% of the energy sold 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. We also signed an agreement with the Südtiroler Wirtschaftsring, the association that brings together the six most representative business associations in South Tyrol, so that all member SMEs can use green gas. In 2021, with the targeted work of our agents, we also strengthened our presence among SMEs based outside South Tyrol encouraging them to adopt green energy and green gas. Alperia also signed its first **Power Purchase Agreement** with Barilla, which will buy 100% green energy from the Resia power plant for three years. In addition, we have a focus on the encouragement of energy communities and the development of technological solutions that can offer energy products and services with a lower environmental impact. The new **MyHome** product for domestic photovoltaics is a good example of this.

CUSTOMER SATISFACTION

In 2021 Alperia supplied electricity, natural gas and district heating heat to **369,406 customers**. We want to have a local presence, which is why, after opening three **Energy Corners** in shopping centres in Venice, Padua and Treviso, with the addition of the Energy Point in Vicenza, in 2021 we opened a new store and two new **Energy Points** in Verona, with the aim of opening more in 2022. In addition, we recruited and trained around **70 agents** in 2021, creating a nationwide network. In 2021, we also carried out a survey on Alperia's **Brand Awareness** in Veneto and Piedmont. The customer satisfaction survey, planned for 2021, has been postponed because we believe it is more appropriate to carry it out when the pandemic is behind us, so that it can be compared with the survey carried out before the health emergency began.

EMISSIONS

After carrying out an analysis in 2020 to understand the volume of emissions are generated and where they derive from, further improving the process already started in previous years, Alperia has started to define an internal process for the management of this information in which we will consider: the actions taken to reduce Edyna's losses, the start-up of the biomass power plant replacing the use of natural gas in Merano's district heating and the use of SF6 gas. Alperia also signed **Amazon's Climate Pledge** and signed on to the **Science Based Target Initiative**. Furthermore, as defined in the business-plan update, after achieving carbon neutrality for operational emissions (Scope 1 and 2) in 2020, the Group intends to further improve its Scope 3 emissions to accelerate the path to **Net Zero**. We have also put in place high-impact strategic and operational measures, such as paperless billing, smart working, green mobility for our employees and electrification of our entire car fleet. All this allows Alperia to contribute to the province's Climate Plan 2050 by reducing its emissions. The main impacts measurable at the end of the plan will include the avoidance of over 303 kilotons of CO₂ emissions and provision of more than 85% of the retail customer base with green products (both electricity and gas).

RESEARCH AND DEVELOPMENT

In 2021 we continued to invest in innovation. All investments are subject to a specific internal procedure coordinated by the **Innovation Board**. After having equipped itself with a **Trend Manager** tool, the team is defining its own **Trend Radar**. The experience of Alperia Startup Factory, the startup accelerator created to promote innovation in the field of renewable energy and the Green Economy, continued in 2021. For the future, Alperia is considering the launch of a Venture Capital activity to further support the growth of startups. In addition, Alperia continues to work with local and international partners from science and industry following an open innovation principle. Also in 2021, Alperia participated in **Mission Innovation 2.0: Green Powered Future Mission**, a global initiative focused on energy transition. We also took part in the **Verbund Accelerator (VXA)**, an Austrian innovation programme in which we were the only Italian partner. 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.

DIGITISATION

In 2021, Alperia's digital transformation process entered an increasingly advanced phase, as demonstrated by the **Innovation Manifesto** whose main headings are artificial intelligence and blockchain. A **Digital Lab** was set up to check the feasibility of innovative ideas arriving internally (from the BUs) and externally, accompanying the most promising ones into the Digital Factory, i.e., the production phase. This initiative, which started in 2021, is based on the implementation of the Agile methodology. In the certainty that AI is the future for companies like Alperia, we also worked to manage data in an increasingly business-aligned way, with the creation of a **data platform**. The year 2021 was also focused on consolidating Alperia's **Data Protection & Security** structure. The unit operates with an innovative **Security and Privacy by Design** approach. Our **ISO 27001** certification was renewed during the course of the year, and an **automated training** platform was introduced to provide e-learning courses for all employees on cyber security and data protection.

SUSTAINABILITY FIGURES

	2021	2020
TERRITORY		
Value generated for South Tyrol	260,098,138 €	257,457,761 €
Total investments	180,369,266 €	126,700,000 €
Net energy produced from renewable sources	93 %	95%
Underground lines	74%	72%
Average number of power-supply interruptions per customer	1.68	1.91
Average duration of interruption per customer (min)	24.56	29.82
Energy availability index (hydro plants)	84.49%	88.88%
Percentage of contracts awarded locally (based on number of contracts)	59%	58%
GREEN MISSION		
Percentage of energy consumption from renewable sources within the company	65 %	68%
Market-based operational GHG emission – Scope 1 and 2 – intensity (tCO ₂ e /Mwh of produced energy (gross))	0.02	0.01
Total market-based operational GHG emissions – Scope 1 & 2 (tCO ₂ e)	83,583	82,443
Total avoided emissions (tCO ₂ e)	1,692,112	2,162,148
CUSTOMERS		
Percentage of calls to the free customer service line answered	94%	96%
Number of complaints per 100 clients	0.12	0.13
EMPLOYEES*		
Number of employees	1,176 people	1,089 people
New employee hires	9%	8%
Turnover of personnel	5%	7%
Average training hours per employee	26.5 h	19.6 h
Percentage of female employees	25%	24%
Percentage of women in middle management	21%	18%
Average pay gap between men and women in the category white-collar workers	7%	8%
Percentage of fathers who took parental leave	95%	63%
Return-to-work rate (women)	100%	67%
Rate of absence from work (days of absence per 1,000 hours worked)	5.6	8
Accident rate (per 1,000,000 hours worked)	11.10	8.13
Accident severity rate (per 1,000 hours worked)	0.25	0.19
*data without Hydrodata S.p.A.		
RESEARCH AND INNOVATION		
Investment in research and innovation	€2,206,119	€2,148,484
Percentage of employees involved in research and innovation projects	4%	10%
Percentage of revenues from sustainable products and services	47%	46%

1. WHO WE ARE {GRI 102-1, 102-3, 102-4, 102-5, 102-6, 102-7, 102-16}

We produce energy from nature

Alperia is South Tyrol's leading energy-service provider, the **fifth-largest multi-utility** in Italy in terms of turnover and the second-largest producer of hydroelectric power in Italy.¹ We are involved in energy sales and distribution, district heating systems, energy efficiency and the development of electric mobility. All our efforts are focused on creating a **more sustainable future, both environmentally and socially**. To this end, we develop innovative technological solutions that enable better management of resources and work with full respect for territories and communities.

Nature is the main source of our energy. We produce renewable energy with 34 hydroelectric power plants, 7 photovoltaic plants, 5 district heating plants and 1 biomass plant in Ottana, Sardinia. In total, we manage a network of 9,090 km.

Alperia S.p.A. is a joint-stock parent company created on 1 January 2016 by 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, holding 11.62%; the municipalities of Bolzano and Merano each hold 21% of the shares. The head office 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 {GRI 102-7}

Revenues	€2,082,824,896 (+45% compared to 2020: 1.4 billion)
Net energy produced	4.4 TWh (2020: 5.3 TWh)
Workforce	1,176 people
Net financial position	-746,900,000 (2020: -373 mln)
Electricity sold to end customers	6,636 GWh (2020: 5,4 TWh)
Natural gas sold to end customers	450 MSmc (2020: 421 MSm3)
Electricity trading	1,834 GWh (2020: 3,2 TWh)
Heat distributed	246 (2020: 222 GWh)
Hydroelectric production	3,813 GWh (2020: 4,772 GWh)
Availability index hydroelectric plants	84.49% (2020: 88.88%)

1.2 Our corporate structure

Alperia S.p.A. is structured into **five Business Units**: Generation, Sales & Trading, Networks, Heat & Services and Smart Region. There are 31 companies associated with the BUs, either controlled or participated in, directly or indirectly, by Alperia S.p.A. (as of 31 December 2021). The year 2021 focused on stabilisation of the corporate operations planned in previous years, with general growth in business volume spread across the various business units.

During 2021, Alperia Group companies concluded the following corporate transactions:

¹ Source: Ranking from ARERA Report 2021 with 2020 data

- sale by Alperia S.p.A. (together with Dolomiti Energia Holding S.p.A. and Finest S.p.A.) of its shares in the share capital of PVB Power Bulgaria AD (21.13%), which owns five hydroelectric plants in Bulgaria, through its subsidiaries;
- acquisition by Alperia S.p.A. of the remaining 40% of the share capital of Alperia Bartucci S.r.l., thus becoming the sole shareholder of this company;
- sale by Alperia Greenpower S.r.l. of its stake in Ottana Solar Power S.r.l., a company that owns a photovoltaic plant in Sardinia;
- acquisition by Gruppo Green Power S.r.l. of the entire share capital of Solar Total S.r.l. and Solart S.r.l., companies active in the design, installation, management and maintenance of photovoltaic systems (particularly domestic photovoltaic systems);
- acquisition by Alperia S.p.A. of 90% of the share capital of each of Fintel Gas e Luce S.r.l. and Fintel Reti S.r.l., companies active in the sale of electricity and gas.

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 energy efficiency, with effect from 1 January 2022 were merged into Gruppo Green Power S.r.l., which took on the new name Alperia Green Future S.r.l.

1.3 Selected external initiatives {GRI 102-12}

- **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 all those 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, Johann Wohlfarter, 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.
- **COP26:** Alperia participated in the UN Climate Change Conference in Glasgow. Together with the Green Powered Future Mission initiative, Alperia signed Amazon and Global Optimism's Climate Pledge to achieve carbon neutrality by 2040, ten years ahead of the target agreed in the Paris Climate Agreement. Alperia has also signed up to the Science Based Targets Initiative (SBTi), which promotes the reduction of greenhouse gases on the basis of scientifically calculated targets.
- **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 fifth edition, it 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 event entitled Clean Up, to clean up the banks of the Talvera and Isarco rivers, in connection with SDG 7, Affordable and Clean Energy. Bolzano's district heating system mainly uses heat from the waste incinerator to provide heating and hot water to the city, thus significantly reducing the consumption of traditional sources to supply heat to citizens.
- **New Normal - Old Challenges:** at the New Normal and Old Challenges conference, the President of Alperia SpA, Flora Kröss, spoke about her journey, and role as a woman at the head of our energy company, actively engaged in issues such as digitalisation, climate change, social justice – as well as the role of women in society generally.
- **Roundtables:** with the aim of involving its internal and external stakeholders to generate new shared value from the exchange of opinions and visions, Alperia organised five roundtables in June. Such events are also important for developing more sustainable growth strategies, with a view to improving the environment, services and our services. In the five roundtable discussions, we analysed different issues and talked to more than 100 stakeholders. Two workshops were held in Veneto, and three in South Tyrol. Based on the workshops, a sustainability survey was organised in October.

1.4 Associations {GRI 102-13}

- **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, as well as the Sustainable Finance working group. In 2021, Alperia also made its contribution in relation to the use of NRRP funds, in the area of sustainability and energy. 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 in accordance with 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:** Italian Association of Energy Service Companies, of which Alperia Bartucci, an Alperia company specialising in energy efficiency, is a member. Bartucci 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 its director Johann Wohlfarter has been part of the Strategic Committee since 2019. 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** is the national association bringing 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.
- **CESEF - Centre for the Study of Energy Efficiency Economics and Management:** Alperia Bartucci collaborates with CESEF of Bocconi University with which it is working to support the Ministry of Ecological Transition in the redefinition of the Minimum Environmental Criteria of energy services for the public administration.

1.5 Awards won by the Alperia Group

- **100 Italian Excellence:** Neogy, a joint venture of Alperia and Gruppo Dolomiti Energia, one of the most important companies in the electric mobility sector at national level, received the 100 Italian Excellence Award, recognised for its "contribution to the growth of the country." Neogy, in fact, was created with the aim of promoting a new sustainable mobility by offering services and charging solutions for electric cars. Neogy's infrastructure now has more than 800 public charging points throughout Italy, which stand out for their green energy supply and advanced technology, as well as the high output of the stations, which guarantees fast charging times for owners of electric cars. The award, collected at the Campidoglio in Rome by the company's CEO, Sergio Marchiori, is an important recognition of the fundamental contribution Neogy has made to the acceleration of a new sector such as electric mobility and its focus on sustainability.
- **Enterprise Award for Innovation:** Alperia was a finalist in the Enterprise Award for Innovation, given by Confindustria at Connex 2021 to twelve companies that have successfully invested in R&I. The ability to translate the results of research and development into innovative products, processes and services, creating added value for the companies themselves and for the country, is essential for future growth. The award, which is sponsored by Confindustria, is the first in Europe to have adopted the parameters of the European Foundation for Quality Management (EFQM) and has been realised in collaboration with the Giuseppina Mai Foundation and Audi, with the contribution of Prima Sole Components and Warrant Hub and with the technical support of the Associazione Premio Qualità Italia (APQI). The Enterprise Award for Innovation is in the Industry and Services category of the Premio dei Premi (Prize of Prizes) set up by the Presidency of the Council of Ministers on behalf of the President of the Republic. The award ceremony will be held in 2022.
- **Ottone Nigro Award:** The Association of Civilian Invalids (ANMIC South Tyrol) awarded Alperia the Ottone Nigro Award. The award recognises those people, organisations and companies that have supported South Tyrol's civilian disabled. Alperia is acknowledged for its remarkable inclusion work as, in proportion to the number of

employees, it employs the largest number of civilian disabled and handicapped people in South Tyrol. This fulfils a fundamental social function, benefiting all those involved and creating a supportive and productive working environment.

- **Global District Energy Climate Award:** As the best project in the Modernisation category, the Bolzano district heating system won the Global District Energy Climate Award. The jury recognised the quality of the proposal presented by Alperia, and the level of commitment and organisation. The award serves to provide a global benchmark for environmental excellence. Launched in 2009, the Global District Energy Climate Award recognises systems and projects that illustrate the global importance of providing sustainable energy solutions through district heating and cooling. The initiative takes place under the supervision of the International Energy Agency (IEA) and is supported by the United Nations Environment Programme, the European district heating and cooling association Euroheat&Power and the International District Energy Association (IDEA); this year, it took place virtually on 11 November in Bangkok, Thailand. In all, more than 100 applications were received. Bolzano and Alperia are strongly committed to climate protection and actively support the Kyoto and Paris targets, which is why the district heating system plays a crucial role in the city's climate strategy. Since its launch in 1986, the district heating system operated by Alperia has developed considerably. In 2016, Alperia modernised the district heating plant in Bolzano by building a pumping station and a storage tank with a volume of 5,600 m³ of hot water. After the new incineration plant was integrated, 60% of heating demand could be covered; after integration of the storage tank, the coverage even reached peaks of 95%. This resulted in a significant reduction in CO₂ emissions. Alperia also launched a project to extend the network to bring district heating to as many buildings as possible. The valorisation of the heat recovered from the Bolzano incineration 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 of Bolzano, with winter pollution from nitrogen oxides and smoke from individual heating systems decreasing significantly.
- **Altroconsumo**, a magazine published by Italy's leading consumer association, recognised Alperia S.p.A. as the best gas supply operator, after an in-depth investigation and monitoring, which was carried out in accordance with its strict criteria. Alperia S.p.A. also ranks second in the electricity category. The survey carried out by *Altroconsumo* monitored the top twenty providers by market share with which it is possible to change supplier, at advantageous conditions for our members, through the online comparison tool. The criteria used in the survey include contracts and general conditions of supply, customer satisfaction, monitoring of the complaints area and company management. The summary of the ranking provides a measure of the overall quality of the service offered by category: only electricity, only gas, as well as electricity and gas combined. Alperia took first place in the gas supplier category and second place in the electricity supplier category with the highest scores on handling complaints and online enquiries, as well as overall service satisfaction. The other indicators concerning call-centre services and bill transparency are also above average.
- **South Tyrol Mobility Award 2021:** Alperia climbed onto the podium of the South Tyrol Mobility Award 2021 with its Alperia for Sustainable Mobility project, which plans measures to avoid creating traffic (e.g. smart working option for up to twelve days per month), to shift traffic to sustainable transport means (with e-bike rental, shuttle bus from Bolzano station to Edyna's premises) and to improve traffic (increase of electric vehicles in the vehicle fleet, installation of charging stations, etc.). Alperia won €6,000, which were donated to the non-profit organisation Independent L. from Merano, which, as a non-profit centre of expertise for people with disabilities, develops sustainable projects in the field of barrier-free mobility for all.
- **Business efficiency:** Redevelopment bonuses and the 110% Superbonus recognise leading energy-efficiency companies that have continued to invest in research. In South Tyrol, Alperia Bartucci, an Alperia Group company active in the design and implementation of energy-efficiency measures, received an award. The Verona-based company's 2021 turnover amounted to €65 million, with growth driven mainly by the implementation of energy-efficiency subsidies introduced in recent years through various measures, including the Superbonus provided by the Relaunch decree. The credits will be used by Alperia Bartucci and the parent company Alperia, which generates €1.7 billion in revenues.

1.6 Value Chain {GRI 102-9}

Local, sustainable, tracked resources

Renewable, tracked and, wherever possible, local. These are the characteristics of Alperia's supply sources. As defined by the materiality analysis survey, we want to create a responsible and safe relationship with communities, involving our suppliers in this process as well. Our aim is to create **shared value** in the medium and long term, which is why we only choose materials that comply with a defined value chain. Specifically:

Water:



- we only take water from South Tyrol, which we return in the form of sustainable energy products and services;

Biomass:



- we mainly use local biomass or biomass from the Alps within 200 km and from border areas;

Natural gas:



- is purchased in Italy and is a mix between domestically extracted gas and that extracted abroad. Gas imports in Italy amount to over 90% (compared to an EU average of around 70%). Natural gas is brought to Italy through gas pipelines with 50% coming from Russia, followed by Algeria, Libya, the Netherlands 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:



- 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:



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

2. CORPORATE STRATEGY

2.1 Integrated strategy

Progress on the One Vision strategic plan

Sustainability and corporate responsibility are central to Alperia. From 2020, we have integrated the UN Sustainable Development Goals (SDGs) into our new Business Plan, making sustainability central to everything we do. The One Vision strategic plan, which will guide us until 2024, has the clear intention of combining sustainability and growth objectives for each individual BU; the activity carried out in 2021 confirms this. Having achieved Carbon Neutrality for operational emissions, we are committed to accelerating the path to NET ZERO by continuing to work on the internal energy transition.

There are two trends in particular Alperia is working on:

- **Customer focus:** COVID-19 accelerated the change already underway in the way we contact our customer base, reinforcing our emphasis on a two-pronged approach: digital channel and physical channel. For this reason, Alperia – which has proven resilient to the impact of the pandemic – is enabling new business models to work with customers through new digital channels. In total, the funds for innovation, digitisation and business development for all the Group's BUs exceed €600 million. In particular, the digitisation plan, which will absorb over €90 million of investment, includes the total migration of all corporate data centres to the cloud and the digitisation of all processes. This unique offer will become a key factor in winning over and retaining customers outside the region, with a clear objective of reaching the target of more than half a million customers by 2024. Still in the field of innovation, the Alperia Startup Factory initiatives – already in its fourth year – will continue and the launch of a Corporate Venture Capital activity to further support the growth of startups will also be assessed. Finally, in the hydropower sector, innovation activity will also be developed through the Alperia Innoveering joint venture, which will enable the introduction of new solutions related to IoT, artificial intelligence, blockchain, Industry 4.0, etc., in the Group's hydropower plants;
- **Energy transition:** Alperia is a central partner for South Tyrol in advancing the energy transition, an issue made even more urgent by COVID-19 and supported by NRRP funds. For this reason, we have decided to allocate 80% of the investments under the Plan to meet at least 10 UN sustainability targets, accelerating the process to bring Alperia – already Carbon Neutral for Scope 1 and 2 operational emissions from 2020 – to NET Zero. This will make a significant contribution to the objectives of the South Tyrol 2050 Climate-Energy Plan and save over 303 kton of avoided CO₂ equivalent emissions. These objectives will be achieved with the following strategic steps to 2024:
 - reduction of Alperia's emissions, to be achieved by:
 - the implementation of new technologies (such as the conversion of some existing plants to biomass; the new Merano headquarters, which will be built to the highest ecological standards; and the development of energy-efficiency projects within Alperia);
 - offsetting the remaining operational emissions (Scopes 1 and 2) with climate-protection projects.
 - sale of green products and services:
 - 86% of our private customers are supplied with green electricity and 45% with green gas²;
 - our new private customers are supplied with 100% green electricity and gas;
 - ~100MW of new thermal power connected to our district heating network;
 - Alperia MYHome: a domestic photovoltaic system that helps optimise consumption and enables energy from the sun to be converted into electricity.
 - expansion of the Smart Region through:
 - promoting the development of electric mobility and green hydrogen on the national territory. For hydrogen, in particular, the intention is to build a green hydrogen power plant from a hydroelectric power plant;
 - installing more energy-efficient technologies for our customers (building efficiency, photovoltaic systems and sensor technology in agriculture). All the Group's Business Units continue to generate tangible results for the region. The main impacts, measurable at the end of the plan, will be: over 280 kton of CO₂ emissions avoided; over 85% of the customer base served with green products (both electricity and gas); and savings of over 22 million cubic metres of water (equivalent to the annual consumption of 100,000 households).

² Gas whose emissions are offset by a certified climate-protection project.

Over the next three years, we also intend to: define a Diversity Policy, include ESG issues in mandatory training programmes for board members and employees, introduce long-term performance targets for managers and consolidate the Net Zero Roadmap for the Group.

“Alperia should be more involved in the area of hydrogen.”

Comments from research and education institutions; 2021 Stakeholder Survey

Alperia replied: *Alperia has already been active for some years in promoting the development of the hydrogen sector in the Province of Bolzano. In particular, the Group’s efforts focus on producing hydrogen from sustainable sources, as the process is currently considered energy-intensive and the environmental benefits of hydrogen are significantly reduced. To address this issue, a technical and economic feasibility study for the production of green hydrogen at the Group’s hydroelectric plants was conducted in 2021 through the newly acquired company Hydrodata. Alperia supplies only renewable energy to the H2 Centre by IIT and plans to build several recharging points in South Tyrol to facilitate the spread of hydrogen vehicles, as foreseen in the Business Plan.*

3. INTEGRATED GOVERNANCE

3.1. Corporate Governance {GRI 102-16, 102-18; GRI 405-1}

Stable, effective and balanced management

The parent company Alperia S.p.A. adopts the **dual system**³ which provides for administration and control to be exercised by a [management board](#) and a [supervisory board](#). In Alperia, both the Management Board and the Supervisory Board consist of six members: three members of the Supervisory Board were appointed, jointly, by the Autonomous Province of Bolzano and Selfin S.r.l. and three, jointly, by the municipalities of Bolzano and Merano. Neither gender accounts for less than one third of the membership of both bodies. There is absolute gender parity in the Management Board with three female and three male members; overall, in the two senior bodies of the Company, women represent 50% of the ten so-called external members. The Board Chair is Flora Emma Kröss and the Deputy Chair is Renate König. The other members of the Management Board are Helmuth Konrad Moroder, Daniela Vicidomini, General Manager Johann Wohlfarter and Deputy General Manager Paolo Acuti. The Management Board has sole responsibility for the broadest administration and management of the Company and, among other things, for implementing the general planning and strategic policies and the business and/or financial plans of the Company and the Group approved by the Supervisory Board.

The Supervisory Board is made up of Mauro Marchi (Chairman), Wolfram Sparber (Deputy Chairman), Paula Aspmair, Manfred Mayr, Maurizio Peluso and Luitgard Spögler. Meanwhile 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.

Operational control of the company rests with management, which is made up of General Manager Johann Wohlfarter, 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 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.

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 all corporate functions and departments, systems, processes, directives, procedures and practices adopted by them, the parent company and the companies belonging to the Group. Pursuant to Italian Legislative Decree 231/2001, a staff member of the Internal Audit team performs the function of internal member on all Supervisory Boards of ALPERIA Group companies.

An important aid to make Internal Audit controls faster and more effective is provided by the new data analysis tools, which make it possible to automate information flows, without directly involving the audited subjects. Among the activities carried out in 2021, mention should be made of those dedicated to the reorganisation of the Smart Region Business Unit, to the implementation of operations linked to the 110% Superbonus and, more generally, to corporate changes/agreements undertaken by the Group's various BUs. In addition, checks on purchases and direct awards have been facilitated by the use of increasingly advanced digital applications by Procurement. From 2022, SAP Process Control, a software that will enable the management of information flows to the supervisory bodies of all companies, will also come into operation, simplifying the department's activities. In the future, controls will increasingly be carried out both remotely and in presence. Also in 2021, the activity of managing the crisis from COVID-19 attributed to the Emergency Board created by Alperia at the outbreak of the pandemic in 2020 continued, involving the directors of the individual Business Units to decide on the implementation of the safety measures envisaged by the Group.

Finally, a crucial aspect was the assessment of the integration of sustainability into governance through the Integrated Governance Index (IGI). Indeed, integrated governance is emerging as a crucial variable for companies committed to redesigning their models with a view to future sustainability. Alperia took part in the IGI survey in 2021 and, on the basis of a questionnaire, clearly and concisely assessed its positioning in relation to key sustainability aspects.

Legality, transparency, fairness. The pillars on which our work is based. To ensure that they are applied, we deploy both the governance tools provided by national legislation for the proper management of internal and external activities, and additional tools specifically designed by the Group to monitor our activities even more thoroughly.

³ pursuant to Art. 2409 octies of the Italian Civil Code

3.2. Governance tools {GRI 102-18}

Our tools for fair and transparent management

3.2.1 Anti-corruption measures

We are 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 (that is, 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.

3.2.2 The 231 Organisation, management and control model

Following the change in the reference regulatory framework which introduced new types of offences relevant pursuant to Italian Legislative Decree 231/2001, as well as in consideration of the internal organisational changes that have involved changes to some processes and operations on 28 January 2021, the Management Board of Alperia SpA approved the update of its 231 Model, the respective prevention protocols envisaged therein and the Code of Ethics, also in order to improve the Group's internal-control system. To this end, the risk assessment was updated following the changes introduced by the legislator and in particular in relation to the offences of racism and xenophobia, the crime of trafficking in unlawful influence, urgent provisions on the perimeter of national cyber security, fraud in sporting competitions, some of the tax offences indicated in Italian Legislative Decree 74/2000 (TUIR) and offences relating to the implementation of the so-called PIF Directive. The 231 Models of the following subsidiaries or investee companies were also updated: Alperia Ecoplus S.r.l., Alperia Greenpower S.r.l., Alperia Vipower S.p.A., Edyna S.r.l., Teleriscaldamento di Silandro S.r.l., Biopower Sardegna S.r.l. and SF Energy S.r.l. For Neogy S.r.l., on the other hand, the Organisational Model was drawn up from scratch.

Activities to update 231 Models are carried out and managed by the Compliance area, under the Legal and Corporate Affairs department of the parent company. In addition, the Compliance department informs the relevant stakeholders about new legislation and/or regulations and publishes a monthly Compliance Report on the myAlperia portal. The monthly reports are also shared with the Enterprise Risk Management area and the regulatory functions of Alperia Smart Services S.r.l., Edyna S.r.l. and Alperia Ecoplus S.r.l.

In 2021, in Group companies, no infringements of the 231 Model were detected, nor any significant events with respect to Italian Legislative Decree 231/01.

3.2.3 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 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 website⁴.

⁴ https://www.alperigroup.eu/public/user_upload/chi_siamo/mog/2021_01_28_alperia_-_codice_etico_def.pdf

3.2.4 Golden Rules and the Disciplinary Code {GRI 102-16}

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 are 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.

3.2.5 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 in Alperia can be received via the e-whistle platform. The tool is managed in such a way that communications can only be confidential and handled by the appropriate bodies. In 2021, two reports of minor business significance came to light, which were promptly handled, analysed and resolved. The objective for the coming years is to increase awareness of this tool so that employees can make better use of it.

3.3. Sustainability Governance

Sustainability is a core value for Alperia, as well as a driver of its activities, as highlighted in the One Vision plan. These activities are coordinated by CSR Management within the Brand & Communication department. Specifically, CSR Management has a range of responsibilities including preparing a sustainability plan and report, assisting technical services in the implementation of the projects, submitting recommendations relating to actions to be developed with the governance bodies, auditing the annual non-financial reporting and collaborating with the CSR Steering Committee. This body is an interface between the Group's employees and CSR Management. It is responsible for providing information on current activities, assessing CSR performance, making proposals for improvements, monitoring objectives and measures to be achieved and encouraging greater awareness of sustainability issues. The CSR Steering Committee is made up of CSR Management and the department heads or employees of the Human Resources (HR), Health Safety & Environment (HSE), Procurement, Enterprise Risk Management (ERM), Corporate Strategy, Engineering, Controlling, Accounting, Information Technology (IT), Communication, Marketing, Production, Sales & Trading, Grids, Heat & Services and Smart Region sectors.

In 2021, the Group focused on defining its new sustainability plan, which will be in place for five years starting in 2022. To define the new objectives, Alperia organised **five roundtables** (two in Veneto and three in South Tyrol) involving its main stakeholders, both internal and external to the Group. The aim of the roundtables was to start a debate on the needs, objectives, critical issues and new measures to be implemented in this area. The roundtables were attended by more than 100 stakeholders with very diverse perspectives (customers, interest groups, mayors, provincial representatives, etc.) and all provided useful feedback for planning the coming five-year period.

Also in 2021, Alperia signed the Commitment Letter for the **Climate Pledge**, Amazon's initiative to achieve zero CO₂ emissions by 2040, ten years ahead of the targets set by the Paris Agreement. With the same objective, Alperia has also joined the **Science Based Target**, a pathway to sustainable growth in the private sector, giving companies clear targets for reducing emissions. The initiative is promoted by the Carbon Disclosure Project (CDP), the UN Global Compact (UNGC), the World Resource Institute (WRI) and the WWF and is based on sound science. Furthermore, in 2021, Alperia participated for the third time (first time in 2019) in the **IGI – Integrated Governance Index Performance** – questionnaire, assessing its positioning in relation to 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. Alperia achieved a score of 43% compared to the first place and improved its ranking by climbing nine places thanks to the measures dedicated to governance.

Another important project was carried out in 2021 related to the **EU Taxonomy**, that is, the classification of economic activities that can be defined as sustainable, so as to guide the choice of investors towards companies that are truly sustainable. The Taxonomy for Sustainable Finance regulation has been in force since 13 July 2020, following the publication of Regulation (EU) 2020/852 in the European Official Journal on 22 June. In order to be defined as sustainable, an activity must contribute positively to at least one of the following six objectives identified as priorities, not produce negative impacts on any other objective and be carried out in compliance with minimum social guarantees. A detailed report on Alperia and the taxonomy is available in the annex.



CSR Management seeks to involve and spread the culture of sustainability among all Alperia Group people both through the integration of sustainability in the remuneration system (MBO) and through external initiatives (e.g., Urban Play Agenda 2030), as well as with training aimed at acquiring specific information and skills on sustainability. In particular, a video was made for new employees presenting Alperia's commitment to sustainability. Various workshops have also been organised on the subject, and after having launched a training course on CSR Management, GRI Standards and SDGs for 22 employees of the Group's BUs, a new course on ESG is planned for 2022.

We also want to formalise the CSR Management procedure and evaluate IT-supported data collection with the aim of further anchoring ecological, social and economic sustainability in our governance and management processes, in order to build an integrated governance model.

3.3.1. Sustainability Policy

Alperia defined its Sustainability Policy in 2019, which is still valid with respect to the external context and has not changed in recent years. The policy identifies the activity areas where Alperia intends to take action to comprehensively address sustainability issues, namely:

- **Territory:** Alperia is an important social actor, able to create added value at the local level, also in terms of jobs, taxes, supply contracts and social commitment. It is crucial that this impact on the territory is based on the principles of transparency and fairness, which is why we apply appropriate control and compliance tools. Each operation is carried out with a focus on the technical safety and robustness of the systems, and the reliability and availability of the energy supply. The supply chain is managed in a sustainable way, with minimum ecological and social requirements defined in tenders, supplier selection, supplier assessments and audits. Primary energy sources are identified locally, where possible, and are predominantly renewable. In addition, in 2021 we involved stakeholders in 5 roundtables and a survey with which we created awareness of the strategic objectives related to sustainability and identified measures for the new plan.
- **Development and innovation:** We continue to develop new technology to offer energy products and services that have the lowest possible environmental impact and ensure a reliable and sustainable supply. Both the new MyHome product for domestic photovoltaics and the commitment to the proliferation of energy communities are aimed at this.
- **Green Mission:** We keep environmental impact to a minimum and promote low-emission energy production, the implementation of programmes for protecting biodiversity, the prevention of contamination and the proper disposal of waste produced. We strive to use water resources rationally and sustainably to manage the risks associated with water scarcity. All energy is used in a responsible manner, supporting measures designed to save energy and ensure that resources are used efficiently. Thanks to the projects developed, we have already achieved carbon neutrality for operational emissions.
- **Customers:** We are convinced that our relationship with our customers must be built on values of trust and transparency, offering them personalised, competitive and sustainable products and services. During the pandemic period, we have modified some of our tools and adapted them to the context, and we have worked with our customers through communication and marketing activities that increasingly take into account social and ecological aspects. Comprehensive personal data protection and compliance with current privacy and security regulations are guaranteed at all times.

- **Personnel:** We focus on the safety and training of our employees, offer career development programmes and foster an inclusive and equal working environment. We also do this by promoting new organisational methods, such as smart working, with transparent and open communication.

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

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2021 Value	Status
Introduction of an incentive policy for management to achieve sustainability objectives (e.g., through the inclusion of CSR objectives in personal targets and as remuneration assessment criteria)	<ul style="list-style-type: none"> * Inclusion of one sustainability objective into Management by Objectives for the Group's senior management * The degree to which objectives are achieved affects the company bonus: at least 60% of the operational targets, with a 2021 deadline, of the Sustainability Plan 2017-2021 are met 	2021	-	-	-	✓
Inclusion of ESG targets for middle management		2024	-	-	-	Ongoing
Increasing training on non-financial standards (GRI, GHG Protocol), legislation and the data collection process	Holding three internal training courses on non-financial standards, regulations and the data collection process	2021				✓
Development of a CSR Management Procedure to formalise ESG Governance	* Launched a CSR Management Procedure to formalise ESG Governance, approval planned for 2022	2021	-	-	-	✓
Definition and formalisation of the CSR/sustainability/ESG governance structure	<ul style="list-style-type: none"> * Launched the development of a CSR Management Procedure to formalise the governance structure for sustainability management, to be approved in 2022 * Definition of the governance process and presentation and discussion of the results of the adoption of the Code of Corporate Governance 	2021	-	-	-	✓
Raising awareness on ESG issues and creating a culture of sustainability and corporate social responsibility among our management and employees	Recording of a video in which the HR manager introduces the topic of sustainability to new recruits	2021	-	-	-	✓

3.3.2. Materiality Matrix {GRI 102-46, 102-47}

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 2021 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:

- 1. **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; thereby, 28 topics were identified;
- 2. **DEFINITION OF THE IMPACTS GENERATED ON STAKEHOLDERS:** We 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;
- 3. **DEFINITION OF IMPACTS EXPERIENCED BY THE GROUP:** We performed an internal assessment of the impacts experienced by Alperia through the following factors: i) assessment of the original, ESG and reputational risks associated with the topics with the involvement of Enterprise Risk Management ii) assessment of the impact of the topics on Alperia’s business model through a workshop with Senior Management, iii) 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;
- 4. **PREPARATION OF THE MATERIALITY MATRIX:** We 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 10 impacts generated;
- it is among the top 10 significant impacts and/or;
- it 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.

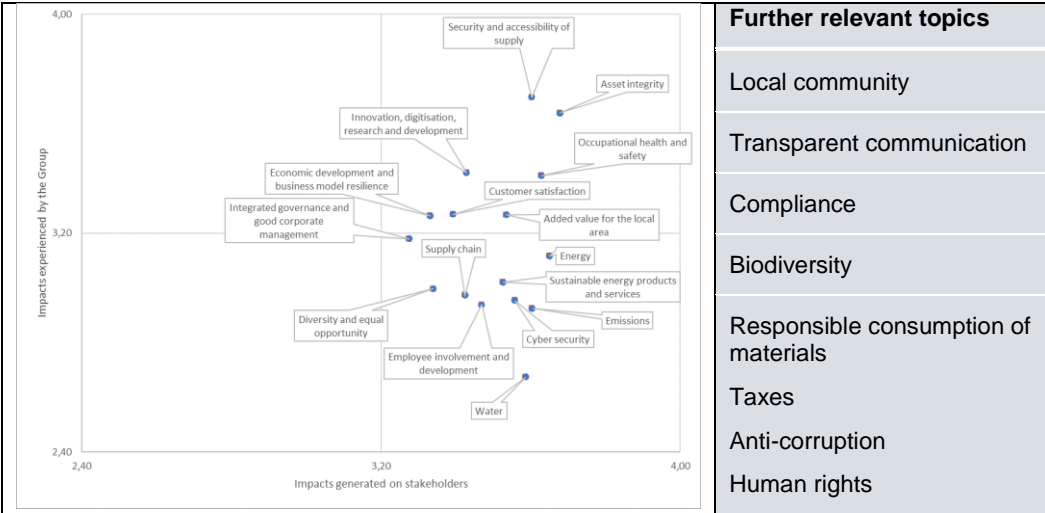


Figure 1: Alperia Group materiality matrix (source: Alperia)

Compared to the topics presented in the 2020 Sustainability Report, the topic “Transparent communication” is not considered a core topic for Alperia this year. Meanwhile, the theme “Added value for the local area” has acquired relevance, being one of the 16 topics reported in the materiality matrix. The theme “Integrated governance and good corporate management” was integrated in comparison to the previous analysis; this was essential for the assessment of the impacts generated and experienced by Alperia.

LIST OF MATERIAL TOPICS		
1	Asset integrity	
2	Security and accessibility of supply	
3	Occupational health and safety	
4	Innovation, digitisation, research and development	
5	Added value for the local area	
6	Energy	
7	Customer satisfaction	
8	Economic development and business model resilience	
9	Sustainable energy products and services	
10	Emissions	
11	Cyber security	
12	Integrated governance and good corporate management	
13	Employee involvement and development	
14	Supply chain	
15	Diversity and equal opportunity	
16	Water	

	Business & Governance
	Environmental
	Social

3.3.3. One Vision Business Plan

One Vision, is Alperia's strategic plan that will guide the Group until 2024, combining sustainability objectives with significant growth in all Business Units. Approved in 2020, its objectives were updated in 2021. In particular, the objectives relating to:

- €1 billion in total investment from 2022 to 2024 with a focus on environmental, economic and social territorial impacts;
- EBITDA up to over €260 million in 2024;
- investment of more than €300 million in energy refurbishment of buildings;
- 80% of investments directed towards at least ten of the UN sustainability goals (UN SDGs);
- €540 million of investment from 2022 to 2024 in hydroelectric generation, distribution and district heating;
- NRRP investments in smart grids, district heating, green communities and hydrogen;
- financial discipline with a net debt guidance of no more than 2.5x EBITDA at the end of 2024

In addition, Alperia undertakes to:

- invest in talent management and generational turnover to accompany growth and develop internal staff;
- focus on a further push towards digitisation across the Group;

- improve its Scope 3 emissions – having already achieved carbon neutrality in 2020 – to accelerate the path to Net Zero.

The three-year period from 2022 to 2024 will be greatly affected by the volatility of energy prices and the impact of energy-efficiency incentives. These impacts will be significant in terms of economic margins, with strong growth in EBITDA for Generation BU, but there will also be a change in the capital structure with the need for greater sources of financing for working capital.

In detail, the following growth priorities and initiatives are expected for the individual BUs:

Generation BU

This is the Group's leading business unit in terms of margins and invested capital and represents the strength of the current business portfolio. Alperia is Italy's third-largest hydroelectric producer with 34 hydroelectric plants subject to management and coordination (and five plants that are not majority-owned by Alperia and which are not subject to Alperia's management and coordination) with a capacity of 1,300 MW. The strategic priorities are:

- task force for the renewal of the eight expiring concessions;
- investment in the reconstruction of the Lasa and S. Pancrazio penstocks;
- the refurbishment of the power stations in Cardano, Bressanone, Lasa and Lana;
- confirmation of the Capacity Market, also for 2024;
- growth for new hydropower plants following the new tenders for the large derivation concession in 2024;
- investments totalling €270 million from 2022 to 2024.

Networks BU

Alperia's electricity distribution grid is distributed over 8,700 km (high, medium and low voltage) for over 2.5 TWh. Edyna, the Group's distribution company, is Italy's fifth national distributor, and one of the four operators that will first introduce the new generation meter in Italy. In particular, the One Vision update for the BU confirms:

- installation of more than 260,000 new-generation smart meters, including 20,000 for other local distributors;
- investment drive to ensure network resilience and increase the quality and continuity of the electricity service;
- expansion and integration of the Bolzano and Merano networks;
- construction of new primary plants and new medium-voltage grid backbones;
- growth in gas networks;
- growth in services to other network operators in the area;
- investments of more than €230 million from 2022 to 2024.

Sales and Trading BU

Alperia is enabling new business models to communicate with customers through digital channels, and revisiting the role of physical channels. In particular, the following are confirmed:

- a significant growth in the customer base, both through organic means and through acquisitions;
- the development of an omnichannel network, continuing the territorial reinforcement;
- a new fully digital initiative with challenging new customer-acquisition targets;
- the development of the asset-management portfolio for non-owned plants;
- the development of additional trading and demand response services;
- investments of more than €70 million from 2022 to 2024.

Heat and Services BU

Alperia operates six district-heating plants in South Tyrol, including plants in the cities of Bolzano and Merano. The development of a network of more than 125 km guarantees the supply of a quarter of the thermal energy produced in South Tyrol. Alperia Ecoplus is the fifth-largest national operator, with approximately 217 GWh produced and distributed. The One Vision update confirms the following strategic priorities for the BU:

- extension of the Bolzano district heating network;
- improving Merano's energy mix;
- construction of three new cogeneration plants in Bolzano;
- consolidation of other district heating plant operators;

- construction of a cooling plant in Bolzano/Bozen;
- investments of more than €40 million from 2022 to 2024.

BU Smart Region

Smart Region is the promoter of a series of high-tech initiatives for cities and citizens, reinforcing its position on condominiums, public administration, healthcare and smart services for citizens and cities. A reorganisation and rationalisation of the BU is underway in order to better provide innovative solutions for the energy transition. The role of Neogy, the third-largest national operator in electric mobility in terms of public charging-points, is also important. In particular, the BU will continue to focus on the following initiatives:

- building efficiency improvements (including thermal insulation);
- development of domestic photovoltaics;
- innovative energy-efficiency solutions based on algorithms, data analysis and artificial intelligence;
- continuing the development of Smart Health, Smart Land and Smart City solutions;
- development of energy-efficiency and facility-management solutions also for public administration and health, including through strategic partnerships;
- development of sustainable mobility (electric and hydrogen) both in terms of infrastructure and innovative commercial solutions;
- investments totalling over €380 million.

One Vision confirms major resources and R&D capabilities to tackle the new wave of innovations that the energy transition requires. The Alperia Startup Factory initiative, which puts the Group in contact with hundreds of startups all over the world, is now in its fourth edition and will continue. For the future, Alperia is also considering the launch of a Corporate Venture Capital activity to further support the growth of startups.

Alperia also received a BBB rating with a “Stable” outlook from the Fitch agency. The confirmation of the rating took into account the One Vision 2020-24 business plan, a healthy capital structure, expected good performance, and a business mix that will be boosted by the strong push towards energy transition as a driving trend in the sector, albeit in an uncertain economic context. Alperia was rated on a “Standalone” basis, but the presence of the key shareholder, the Autonomous Province of Bolzano/Bozen, was considered positive for the company’s overall business profile.

Strategic Objective: We aim to integrate sustainability into our business strategy in a structured way.

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2020 Value	Status
Integration of the sustainability strategy in the 2017–2021 Strategic Plan	* Publication of the new 2020-2024 Business Plan with sustainability integrated in a structured way	2021	-	-	-	✓
Allocate 80% of the investments envisaged in the 2020-2024 Business Plan to work towards at least ten UN sustainability targets		2020-2024	% of investment aligned with SDGs	80		Ongoing

3.3.4. Remuneration Linked to Sustainability Targets

We are convinced that having a high level of engagement and involving everyone who works at Alperia in achieving the goals set is one of the keys to the company's success. This is why in 2020, we linked the employee production bonus and the Management by Objectives (MBO) of the company's senior management to the achievement of sustainability goals.

- **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):** our senior management must include at least one sustainability objective in its MBO.

3.3.5. Stakeholder Management {GRI 102-40, 102-42, 102-43, 102-44}

Communicating and sharing

We believe that dialogue and involving the various actors in the corporate ecosystem is decisive for the growth and sustainable development of the Alperia Group. To achieve this, we carried out a structured stakeholder management process in 2021. Initially, an activity was carried out which involved building a map of stakeholder categories and their level of priority. In concrete terms, business units and staff functions were involved through **dedicated workshops**.

- A stakeholder tree was also created, through the identification of categories and sub-categories of the company's stakeholders. The final categories of Alperia's stakeholders are shown in the image below:



- The prioritisation of stakeholders, through the calculation of Stakeholder Relevance for each category, based on dependency, influence and networking parameters, in line with the AccountAbility standard (AA1000SES). The order of the stakeholder categories in terms of relevance that emerged from the assessments is shown here.

Stakeholder Category

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

To consider the relevance of stakeholders from a timing perspective, these categories were also assessed in terms of urgency. Customers are the category that needs the most immediate attention from the Alperia Group, followed by employees and interest groups.

Subsequently, we organised five **roundtables** (two in Veneto and three in South Tyrol) to begin constructive discussion with our stakeholders, namely: employees, customers, mayors of municipalities, interest groups, the province and region. These meetings helped us to validate the strategic objectives to be included in the new five-year sustainability plan. At the end of the meetings, questions were formulated based on the results of the roundtables for an **online survey**, to which more than 790 people responded. The result of the questionnaire enabled the definition of the materiality matrix, a fundamental input for the next sustainability plan. In a fully inclusive way, the conditions were created to think about future challenges, noting strengths and weaknesses and identifying possible solutions and feedback for continuous improvement.

SURVEY RESULTS: STAKEHOLDER PRIORITIES



The main engagement initiatives and the ways we engage with our stakeholders are outlined below.

- **Employees:** During 2021, Alperia carried out a survey of employees, relating to the Group's values and technical aspects. Feedback came on branding, communication and training. The most recognised values are ethics, green energy and training (including technical training). Alperia's concern for the environment is one of the key factors on which employees focus most. It also emerged that in the relationship with the customer, proximity is essential, as is empathy. Communication materials, such as brochures and gadgets, were then assessed and found to be useful and well-made, although in some cases rather wasteful. The positive business climate and good organisation allow efficiency and speed in handling paperwork. On the MyAlperia portal, a 10-module course has been developed with a psychologist, who has drawn up useful advice on work-life balance when smart working. With the same objective of promoting employee involvement and cohesion, Alperia launched the Team Alperia 2021 to enhance team spirit and allow employees to get to know each other better through activities with colleagues in a different environment from the workplace. In addition, at the beginning of 2021, Alperia's management met digitally with employees to present the new One Vision plan and to discuss objectives in a transparent manner.

- **Customers:** Two new Energy Points in Verona opened in 2021, as well as a new store. In 2021, we also carried out a survey on Alperia's Brand Awareness in Veneto and Piedmont. From these surveys it emerged that we need to build a stronger link with these areas to raise awareness of the Alperia Group and to highlight the value generated including outside South Tyrol. This is a commitment that we will pursue with determination. Alperia was recognised by Altroconsumo as the best gas supplier and took second place in the electricity supplier category. Through Neogy, it was recognised as one of the 100 Italian Excellencies, commended for its significant contribution to the development of electric mobility in Italy. Both Smart Land and MyHome arrived on the market and Edyna continued the installation of Smart Meters, the latest generation of meters, accompanied by information evenings to explain their advantages and how they work. The customer satisfaction survey, on the other hand, was postponed because the health emergency could have had an impact on the opinions of respondents, making the results incomparable with the previous survey.
- **Suppliers:** Again in 2021, 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 criteria for sustainability and wellbeing. In addition, we organised meetings with local enterprises, looking at various topics, from the presentation of the supplier list to the description of the awarding procedures, with subsequent discussions.
- **Owners and investors:** Alperia's sustainability report is presented at the Shareholders' Meeting. Regular meetings are held with the Supervisory Board to outline and discuss key aspects of sustainability. In 2021, in particular, we presented our One Vision business plan online to various bodies/associations, to the Gemeindeverband, an association that brings together all the municipalities in South Tyrol, and to the SWR (Südtiroler Wirtschaftsring), an association that brings together local enterprises, industrialists and farmers.
- **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.
- **Citizens:** Alperia involved the population in an awareness-raising event organised at the Urban Play Agenda 2030, as part of the Asvis National Festival of Sustainable Development framework in Bolzano, Alperia. In connection with SDG 7 (Affordable and clean energy), it organised the Clean Up waste-collection event, aimed at cleaning the banks of the Talvera and Isarco rivers, underlining the importance of waste for the generation of new energy through district heating.
- **Research institutes:** Alperia invests in research and innovation by joining forces with some of the most important research institutes in the Alps, including the Free University of Bolzano, with which it shares the winning project of the Fusion Grant for more sustainable management of river sediments, and Eurac Research, with which it is 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 heat sources (10-40°C) available within the urban circle can be integrated.
- **Community:** Since the beginning of the pandemic, the Alperia Group has launched initiatives to support the territory. These were renewed in 2021, when it donated €289,000,000 to local associations (e.g., youth amateur sports, facilities for the elderly). Following a rotation principle for the first time, it recommitted to its sponsorships, targeting both small and large entities. Among the initiatives was the donation of €80,000 to the Association of South Tyrolean Sports Clubs (VSS) for the purchase of nasal tests for children and young people between the ages of 12 and 18. This measure allowed the children to continue playing and taking part in sports in complete safety. But there were also many other initiatives to support the community, such as the payment holiday granted to South Tyrolean SMEs for electricity and gas bills for the first three months of 2021 and the measures taken against the high cost of energy. Alperia also organised several information events in the riparian municipalities on safety and maintenance issues. In addition to these meetings, there are also meetings regarding the management of environmental funds with the Hydroelectric Plant Council, a body that brings together representatives of the Autonomous Province of Bolzano, the municipality concerned and the concession holder (approximately EUR 19 million allocated during 2021).

3.3.6. 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
- **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**

4. THE SUSTAINABILITY CONTEXT

4.1. The Impact of COVID-19

The COVID-19 pandemic has had very serious repercussions in economic, social and environmental terms. The third Sustainable Development in Europe Report, prepared in 2021 by Sustainable Development Solutions Network (SDSN), SDSN Europe and Institute for European Environmental Policy (IEEP), revealed that for the first time since the adoption of the Sustainable Development Goals (SDGs) by the UN in 2015, the average score of the EU SDG Index has not increased. It has, in fact, decreased slightly, mainly due to the negative impact of the virus on life expectancy, poverty and unemployment. By November 2021, for example, 65% of people in high-income countries (almost 70% in the EU27) were vaccinated, compared to only 2% in low-income countries. Indeed, the pandemic has highlighted the serious inadequacy of preparedness for global health emergencies and the profound inequalities in response capacity. Europe must therefore continue to work with the UN, the G20, G7 and other key partners to accelerate vaccine uptake and support emergency spending and recovery plans, including in low- and middle-income countries.

Although the pandemic has set back the progress of the UN's 2030 Agenda, the SDGs remain an essential reference point for the future of the planet, to be pursued with determination. Achieving climate and biodiversity targets must increasingly go hand in hand with social and solidarity policies. The most vulnerable groups – such as the poor, women and migrants – have been particularly affected by the health and socio-economic impacts of the pandemic, in Europe and across the world. This is why it is essential to provide targeted support measures (hence Alperia's support in terms of donations and financial support for disadvantaged groups). International indicators show that the countries furthest ahead in the SDG index (Finland, Sweden and Denmark), are also at the top of the Leave No One Behind (LNOB) index. Sustainable development and the reduction of inequalities are therefore mutually reinforcing objectives. The COP26 in Glasgow also stressed that climate action must be accompanied by international social policies to support vulnerable countries and populations.

It will also be increasingly important to assess the external effects of certain actions. The International Spillover Index, for example, shows that European countries generate significant negative spillover outside their borders, with serious environmental and socio-economic consequences for the rest of the world. Think of imports of clothing, textiles and leather products into the EU, which are linked to 375 workplace fatalities and 21,000 non-fatal accidents each year. Or how, through imports of cement, steel and fossil fuels, Europe generates CO₂ emissions in other parts of the world, including Africa, Asia-Pacific and Latin America. While internal EU CO₂ emissions have decreased since 2015 – despite significant differences between Member States – “imported” emissions increased by around 3.5% (in 2018). Added to this are food supply chains, resulting in threats to biodiversity and land use.

In this context, the pandemic is an excellent opportunity to reverse the trend and get back on track with sustainability goals, through the funds allocated to finance recovery and resilience plans. Now, businesses, governments and citizens have the opportunity to guide the transformation towards more sustainable and digital business models, while improving productivity. The Next Generation EU recovery fund itself will provide Italy with an exceptional opportunity to restart the economy and modernise the economic fabric. The ambition is to introduce measures that can look beyond the crisis and lay a solid foundation for future generations. These must be based on a paradigm shift in the energy and health sectors. Indeed, the plan calls for action to promote the green economy, digital transformation and health. Operators like Alperia will therefore have to rethink their strategy by focusing on sustainability, digitisation and customer focus, three areas that we have made central to our Business Plan, in the certainty that we can actively contribute to building this new era. Greener, more responsible, more inclusive.

4.2. Climate change

In November 2021, the **COP26** climate conference, organised annually by the United Nations as part of the Framework Conference on Climate Change (UNFCCC), was held in Glasgow. The main objectives of COP26 were:

1. **Mitigation:** Zero net emissions by 2050 and to limit the temperature increase to no more than 1.5 degrees by accelerating the phase-out of coal, reducing deforestation and increasing the use of renewable energy;
2. **Adaptation:** Supporting the most vulnerable countries in mitigating the impacts of climate change, to protect communities and natural habitats;
3. **Climate finance:** Mobilising funding for developing countries, reaching the target of \$100 billion per year;
4. **Finalising the Paris Rulebook:** Making the Paris Agreement operational.

After more than two weeks of negotiations, an agreement was reached and signed by almost two hundred countries, which explicitly mentions the need to limit the use of fossil fuels for the first time. Added to this is the agreement to regulate the international market for emission credits (sketched out in 2015 in Art. 6 of the Paris Agreement), removing the main “escape routes” that risked making this instrument of little use. Several separate agreements were also announced on the sidelines

of the summit, such as the agreement to reduce methane emissions by 30% by 2030, signed by over a hundred countries; the agreement to stop deforestation by the same date; and the agreement to abandon coal, signed by 40 countries: not to mention the commitment expressed by the two countries with the world's largest greenhouse gas emissions, China and the United States, to cooperate in the fight against climate change. A change of pace is increasingly urgent. As noted by the European Union's Copernicus Climate Change Service⁵, 2021 was the fifth warmest year ever recorded, with average temperatures between 1.1°C and 1.2°C higher than in the pre-industrial era (1850-1900). In particular, Mediterranean countries experienced a very intense heat wave during July and part of August, with record temperatures (think of the European record of 48.8°C in Sicily). Also in 2021, there were bouts of very heavy rainfall in Central-Western Europe, causing severe flooding in several countries such as Germany, Belgium, Luxembourg and the Netherlands. Some of these phenomena also affected South Tyrol. But that's not all. Preliminary analysis of satellite data indicates that greenhouse gas concentrations in the atmosphere continued to increase during 2021, leading to a global annual average CO₂ concentration record of around 414.3 parts per million (ppm) and with methane (CH₄) reaching an annual record of around 1,876 ppb. These greenhouse gases are the main culprits of climate change, which can only be contained by an immediate, rapid and large-scale reversal.

The World Economic Forum's 17th Global Risk Report also points out that the economic weight of the COVID-19 crisis and the weakening of social cohesion, in both advanced and developing economies, may further limit the financial and political capital available for more intense climate action. At the same time, climate change continues to be perceived as the greatest threat to humanity. GRPS respondents rank "failure to act on climate action" as the risk potentially causing the most damage on a global scale over the next decade. If there is no return to accelerating the energy transition and combating climate change, it will be too late. Losses are estimated at between 4% and 18% of global GDP with differing impacts in individual states. In 2021, economic recovery in many areas generated a new increase in greenhouse gas emissions, demonstrating that the global economy is still heavily dependent on fossil fuels.

Climate change could have a significant impact on Alperia's business. This is also why sustainability is at the heart of our work and strategic in our programmes. We are pursuing specific measures that will enable us to reduce the negative impact of our activities and to diversify the business towards sustainable services and products.

Mission 2 of the NRRP

The green revolution and the ecological transition are also central to the NRRP – the National Recovery and Resilience Plan – that Italy has adopted to design the post-COVID-19 path. There are four parts to 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

In particular, the mission is to achieve improved 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 the strengthening of the 110% Superbonus and 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.

⁵ <https://climate.copernicus.eu>

4.3. Digitisation

Digital technologies are changing people's lives, from the way they communicate to the way they work. In the wake of the pandemic, digitisation has become an even more essential component of both economic recovery and the resilience of certain sectors. Cloud computing, big data, artificial intelligence, IoT, cyber security will be the main technology drivers in the 2022-2024 three-year period, reinforcing a trend already evident in recent years. Growth is therefore expected to bring the digital market to a value of €79.2 billion (+5.1%) in 2022, and then to €87.3 billion (+4.9%) in 2024.

The digital transition is one of the axes on which the National Recovery and Resilience Plan will also be developed, with €40 billion earmarked for this mission (21% of the NRRP total). The aim is to have a simpler public administration, a more competitive production sector and more investment in tourism and culture.

The European Union has also equipped itself with a strategic programme with which it has set targets to digitise its member countries by 2030. Central aspects include: the digital transition of enterprises and the security of user browsing. This last point is also crucial for a company like Alperia. According to the latest Clusit report, in the first six months of 2021 alone, there were 1,053 serious attacks globally. This is 24% higher than in the same period in 2020, with a monthly average of 170, compared to 156 in 2020. Experts are now calling it a "global emergency". Estimated losses due to cyber security flaws are \$6 trillion by 2021. This is another reason why companies are investing more in protection systems and strategies, spending around €1.39 billion (+12.4% compared to 2020)⁶.

4.4. 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.

4.4.1. Italy and the SDGs

According to the annual ASVIS Report⁷, progress towards achieving the goals has been put at serious risk with signs of improvement for only three goals, relating to the Energy System (Goal 7), Combating Climate Change (Goal 13) and Justice and Sound Institutions (Goal 16). Three other goals remained stable: Sustainable Food and Agriculture (Goal 2), Water (Goal 6) and Innovation (Goal 9). While indicators for nine goals deteriorated: Poverty (Goal 1), Health (Goal 3), Education (Goal 4), Gender Equality (Goal 5), Economic and Employment Status (Goal 8), Inequalities (Goal 10), Urban Conditions (Goal 11), the Earth's Ecosystem (Goal 15) and International Cooperation (Goal 17). A lack of information on 2020 prevented a full assessment of goals 12 and 14. In comparison with other EU countries, Italy's situation remains critical, falling below the European average for 10 of the 16 indicators analysed. The adoption of the NRRP could be an important tool to reverse this trend.

6 Anitec-Assinform

7 https://asvis.it/public/asvis2/files/Rapporto_ASviS/Rapporto_2021/Rapporto_ASviS_2021.pdf

ISTAT has also monitored the progress of the implementation of the SDGs in Italy. The regional map of sustainable development shows a consolidated advantage of the North-East over the South and the Islands, with the Autonomous Provinces of Bolzano and Trento proving to be the most successful.



4.4.2. South Tyrol and the SDGs

Sustainable development is a cross-cutting issue and requires policy action in several areas. South Tyrol has set up a platform⁸ where it reports its contribution to achieving the UN sustainability goals. The main source of data is the data provided by the National Institute of Statistics (ISTAT) on the UN sustainability targets for Italy and individual Italian regions. These data, where comparable and available, are supplemented with data from regions in neighbouring countries. In this way, it is possible to measure the degree of achievement of various global indicators of the Sustainable Development Goals.

South Tyrol Climate Plan

Each inhabitant of South Tyrol produces approximately 7.37 tonnes of CO₂ equivalent per year, which is equivalent to 7 cubes of 8x8 m. The three largest sources of emissions in South Tyrol are transport, heat production (building sector) and agriculture. Approximately half of the emissions are attributable to traffic, more than a third depend on thermal energy production (most buildings in South Tyrol are energy inefficient, with high heat loss), while agriculture is in third place with 18% of the emissions, mainly methane and nitrous oxide. In contrast, industrial areas consuming fossil fuels are limited. Renewable energy sources, mainly hydropower and biomass, are widespread, allowing electricity consumption demand to be met with virtually no emissions, reducing environmental impact. But that is not enough. This is why in 2011, South Tyrol adopted the South Tyrol 2050 Climate and Energy Plan. This is a strategic tool, with which South Tyrol intends to become an internationally recognised KlimaLand, adopting a sustainable approach to the energy issue. The Plan – which is updated every five years – aims to increase energy efficiency and limit greenhouse gas emissions by increasing the production of renewable energy, which already accounts for around 70% of local energy needs. Specifically, the priority objectives of the plan are:

- limit energy consumption per inhabitant (excluding grey energy) to less than 2,200 watts per year by 2050;
- reduce CO₂ emissions to less than 1.5t per year, by 2050 at the latest;
- to increase the percentage of energy needs met by renewable energy up to at least over 90% by 2050.

In relation to the last target, the demand coverage with energy produced from renewable sources was already close to 70% in 2014 but has since fallen. This fluctuation also depends on the availability of renewable resources (sun and water) throughout the year and fluctuations in the annual water balance due to the high dependence on hydropower. In any event, South Tyrol ranks second in Italy and is one of Europe's leaders in the coverage of energy needs from renewable sources.

Alperia, through its activities, also contributes to the realisation of the plan and the study of new measures to be implemented. One example is photovoltaics, which is seen as a central feature of the strategy to increase electricity

⁸ <https://astat.provinz.bz.it/barometro/upload/sdg/html/it/index.html>

production from renewable sources. It is a key technology in South Tyrol for meeting the climate challenge, having become competitive cost-wise and lending itself to being widely rolled out also with the direct help of families. In 2021, a provincial working group on photovoltaics met for the first time and Alperia took part. The aim is to build a winning strategy that will bring solid results in increasing the production of renewable electricity, also thanks to the increasingly widespread use of photovoltaics.

Another example of how we contribute to the implementation of the Climate Plan is the Alperia for Sustainable Mobility project, with which we won the 2021 South Tyrol Mobility Award.

In addition, anyone wishing to follow the progress and the definition of new measures can visit the Klimaland platform: <https://www.klimaland.bz/it/>.

The Energy Policy Master Plan

To promote sustainable development, the Bolzano province government has approved a master plan on energy and mobility policies. The plan aims to store sustainably green hydrogen produced electricity for use in green mobility and energy efficiency. Alperia also contributed to the definition of the H2 plan, collaborating with the Department of Mobility and Environment, the IIT Hydrogen Centre, the Autostrada del Brennero A22 company, Eurac Research and Euregio. The aim is to prevent motorised private transport as much as possible, to reduce emissions from road transport along the Brenner axis and to support emission-free electric mobility with hydrogen which, if generated from sustainably produced electricity, could become an ideal energy source. Local passenger transport buses will therefore gradually be converted into environmentally friendly vehicles. Despite the fact that there are few fossil fuel industries in South Tyrol and that renewables are widespread, almost 5.3 tonnes of CO₂ equivalent are produced per year per capita. Transport alone emits 44% of total greenhouse gases, which is higher than the national average. This is followed by the production of thermal energy, with the heating of a pool of non-energy-efficient buildings having an impact of 36%. The agricultural sector ranks third, with our 18% of mainly methane and nitrous oxide emissions being higher than the national average.

South Tyrol also contributed to the implementation of the EU Clean Vehicle Directive, which sets minimum standards for public procurement of environmentally friendly and energy-efficient road vehicles. The plan therefore aims to significantly improve South Tyrol's CO₂ footprint. By 2030, we aim to reduce fossil fuel imports by around €550 million per year, reducing CO₂ emissions by 45%, a significant contribution to protecting the climate, people and nature.

4.4.3. 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. To this end, it has integrated the SDGs into its 2020-2024 Business Plan, directing 80% of its investments towards at least ten UN Sustainability Goals. In particular, we are working on:

SDG 3 – ENSURING GOOD HEALTH AND WELLBEING

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 saving 303kt of additional avoided CO₂e emissions. We have already achieved Carbon Neutrality for operational emissions and want to accelerate the achievement of Net Zero.

SDG 5 – ACHIEVING GENDER EQUALITY

We strive 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 working hours, work/life balance measures and remote 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 50% women. We have also started to develop leadership plans specifically for women. Currently, 25% of Alperia workers are women and the gender pay gap is 7% for female white-collar 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.

- **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 93% 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 My Home; 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 Green Power 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 Talents 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 37 people under 30 and 45 under 40 in 2021. We support their development and training with special programmes.
- **Target 8.8: Protect labour rights and promote safe and secure working environments for all employees: 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. To protect employees against COVID-19 infection, we set up an Emergency Board which implemented all measures required by law and other measures deemed appropriate to minimise risks. We have also given our employees the opportunity to get their flu vaccine on site.

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. We have initiated specific Smart City and e-Mobility plans and are building new offices in Via Claudia Augusta in Bolzano.
- **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 (amounting to over €380 million until 2024, of which around €250 million for the Superbonus) 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 My Home 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 that came to market in 2021; 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 Policy⁹, we have integrated at least one sustainability objective into the Management by Objectives (MBO) scheme for group executives and we have put sustainability at the heart of the new Business Plan, linking it to the UN SDGs. 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 Bartucci, we promote more efficient and sustainable consumption with ad hoc advice and activities. Through targeted marketing measures and information 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), which promotes the reduction of greenhouse gases on the basis of scientifically calculated targets. 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

⁹ <https://sostenibilita.alperia.eu/alperia-si-presenta/corporate-governance/sustainability-policy>

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.

4.5. Human rights

People are our strength

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 our activities, both internally and externally. We also include 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, we have identified the following human rights as pillars of the sustainability activities described in the report, linking them to the core topics of the 2017–2021 Sustainability Plan. 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. We have developed women's leadership programmes, encouraging the empowerment of women and their full fulfilment in our Group. In 2021, 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.
- **Development of employee(s) – 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 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, including remote working, and support activities organised by the employees' recreational club, CRAL. Finally, we highlight that 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 wellbeing 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.

5. RISKS AND OPPORTUNITIES {GRI 102-11, 102-15}

Risk monitoring, management and control

Alperia's risk management system is an essential part of the Group's decision-making processes. After integrating the non-financial risks in relation to the area of action envisaged in the Sustainability Report (Employees, Green Mission, Community, Customers, Development and Innovation) and the objectives identified, each risk was classified by type and assessed for 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). The analysis revealed 95 risks with a potential reputational factor and 9 new risks. 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.



Figure: Risk factors (source: Alperia)

RISK FACTORS

ECONOMIC

Operational evaluation in terms of EBITDA (quantitative or qualitative).

FINANCIAL

Operational evaluation in terms of NFP (quantitative or qualitative).

REPUTATIONAL

Operational assessment in terms of reputation (qualitative/quantitative).

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. This analysis will begin in 2022 and continue in the years to come. As has been extensively discussed, 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. Another category to be aware of is **Cyber Security**. Cyber risks are also among the most impactful in the Global Risk Report¹⁰. Alperia monitors this risk through the work of the **Data Protection Officer (DPO)** and the security advisor, in collaboration with Enterprise Risk Management.

Considering the continuing pandemic, Alperia continued to monitor the impact of COVID-19 on its business in 2021 in accordance with the model set up in 2020. This means that from both a financial and HSE point of view, the risks were all managed and contained by the Emergency Board. The Board continued to meet periodically and shared all the measures at Group level (purchasing protective equipment, providing for remote working and the necessary hardware, limiting workers' presence at the sites, limits for stores and front offices), also introducing additional measures to those required by law. This was audited by the IMQ certification body, after which a certificate was issued for each organisation.

The main task of the Enterprise Risk Management function is to implement and develop the management of risks, both financial and non-financial. In 2021, the ERM function has 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. The Risk Policy for the Group will also be formalised in 2022.

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

¹⁰ <https://www.weforum.org/reports/global-risks-report-2022>

Strategic objective: We want to identify and actively manage our sustainability risks.

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2020 Value	Status
Implementation of a structured analysis and assessment of sustainability risks, followed by monitoring and risk control within the framework of sustainability and risk management	<ul style="list-style-type: none"> * Establishment of an integrated and periodic monitoring and reporting process for risk management at Group level * In-depth analysis of reputational risk 	2021	-	-	-	✓



Territory

Our energy comes from this land. A resource that we protect, improve and promote by focusing on sustainability. With our activities, we want to create added value for the community in the form of clean energy, jobs, support for the local economy and safe infrastructure.

7 AFFORDABLE AND CLEAN ENERGY



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

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



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

11 SUSTAINABLE CITIES AND COMMUNITIES



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

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



We ensure sustainable patterns of production and consumption

In figures

Economic value for South Tyrol	260.098.138 euro	Duration of outage per customer (in minutes)	24.56
Net energy produced from renewable sources	93%	Energy availability index (hydro plants)	84.49%
Underground lines	74%	Total investments	€180,369,266
Number of outages per customer	-12% (1.68)	Percentage of contracts awarded locally (based on number of contracts)	59%

6.1. Economic development

What we want to do

We plan to invest €1 billion between 2022 and 2024 with a focus on environmental, economic and social territorial impact. Alperia's efforts will focus on energy transition and customers with investments of more than €400 million in the energy upgrading of buildings. Sustainability and innovation will be central to our activities. Indeed, 80% of investments will be directed towards supporting at least ten UN Sustainability Goals. 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.alperigroup.eu.

6.1.1. Economic value

“From a social point of view, the South Tyrolean population should get more added value”.	
Comment by a collaborator; Stakeholder Survey 2021	
Alperia replied: We aim to generate €1.2 billion added value for South Tyrol in five years. In 2021, we allocated around €260 million to South Tyrol in terms of direct added value; €103 million was paid to public bodies in the form of taxes, environmental funds, concession fees and electricity supplied free of charge to the province; €62 million was for wages and social security contributions paid to employees; €2,1 million was provided in the form of sponsorships with benefits for the local community and donations. The owners received €30 million in dividends in 2020. Finally, South Tyrolean companies have been awarded contracts that have generated revenue of around €61,4 million. 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.	

Table 2: Direct economic value generated and distributed {GRI 201-1}

	Unit	2021	2020	2019 ⁵	2018	YtY variation
Direct economic value generated:	EUR	2,082,824,896	1,437,718,992	1,546,878,354	1,272,182,146	45%
Revenues	EUR	2,082,824,896	1,437,718,992	1,546,878,354	1,272,182,146	45%
Economic value distributed:	EUR	2,002,687,126	1,375,769,723	1,490,245,497	1,228,491,345	46%
Operating costs ^{*1}	EUR	1,814,571,098	1,196,350,493	1,327,594,723	1,067,875,802	52%
	% ^{*4}	87.1	83.2	85.8	84.0	
Employee wages and benefits	EUR	71,792,398	77,068,468	73,093,184	68,525,722	-7%
	% ^{*4}	3.4	5.3	4.7	5.4	
Payments to providers of capital	EUR	11,472,319	9,514,673	9,250,687	13,443,507	21%
	% ^{*4}	0.6	0.7	0.6	1.1	
	EUR	102,703,726	90,180,251	78,524,074	76,939,902	14%

<i>Payments to government</i> ²	% ⁴	4.9	6.3	5.1	6.0	
<i>Community investments</i> ³	EUR	2,147,587	2,655,837	1,782,828	1,706,412	-19%
	% ⁴	0.1	0.2	0.1	0.1	
Economic value retained	EUR	80,137,770	61,949,269	56,632,857	43,690,801	29%
	% ⁴	3.8	4.3	3.7	3.4	

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 royalties; free energy; environmental funds, etc.).

³ This item includes sponsoring costs and donations.

⁴ Percentage of direct economic value generated.

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

The **revenue** generated by Alperia in 2021 was €2.1 billion (more than €1.4 billion in 2020), with around €1.8 billion (€1.2 billion in 2020) of the total covering operating costs. More than €260 million (€257 million in 2020) was allocated to South Tyrol in terms of direct added value (+1% compared to 2020), of which €103 million (€90 million in 2020) was paid to public bodies in the form of taxes, environmental funds, concession fees and electricity provided free of charge to the province, €62 million (€70 million in 2020) was allocated to wages and social security contributions paid for employees, €2.1 million (€2.6 million in 2020) was paid in the form of sponsorships with benefits for the local community and donations. In 2021, the owners received €30 million (€33 million in 2020) as dividends. Finally, procurement contracts with South Tyrolean companies amounted to around €61.4 million (€60 million in 2020). 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. We have also introduced measures to lower the cost of bills following the increase in energy prices. It launched the **Alperia Smile** offer for families, with which it locked in the price at the market value before the increases. This offer applies to domestic customers at their main residence, customers on the protected market, Alperia customers on the free market and customers of third-party providers. For a typical family, savings can be up to €200 per year by 2022, given the current price level. For SMEs, for several years, Alperia has been guaranteeing, both through the framework agreements signed with SWR-EA (Südtiroler Wirtschaftsring – Economia Alto Adige) and with **Rete Economia – WirtschaftsNetz (RE/WN)**, excellent services linked to transparent, clear and competitive tariffs, as well as a widespread presence in the local area for thousands of beneficiary companies in South Tyrol. Finally, Alperia supplies large industrial companies in South Tyrol on the basis of very flexible and competitive contracts aimed at strengthening their competitiveness on the international market.

Table 3: Value for South Tyrol¹ {GRI 201-1}

	Unit	2021	2020	2019	2018	YtY variation
Employee wages and benefits	EUR	62,614,966	70,264,455	69,682,656	66,384,082	-11%
	%	24	27	30	30	
Payments to government	EUR	103,920,113	90,951,387	78,524,074	76,939,902	14%
	%	40	35	33	35	
Dividends to local governments	EUR	30,000,000	33,300,000	26,000,000	24,000,000	-10%
	%	12	13	11	11	
Community investments	EUR	2,147,587	2,655,837	1,782,828	1,706,412	-19%
	%	1	1	1	1	
Local procurement	EUR	61,415,472	60,286,081	59,833,219	53,343,496	2%
	%	24	24	25	24	
Total value for South Tyrol	EUR	260,098,138	257,457,761	235,822,778	222,373,892	1%
	%	100	100	100	100	

¹ Alperia Bartucci, Gruppo Green Power, Alperia Sum and Hydrodata are excluded from the count because they are located outside South Tyrol.

6.1.2. Taxes {GRI 207-1, 207-2, 207-3}

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.

6.1.3. Social responsibility

Looking after the weakest

In 2021, Alperia again took numerous social responsibility measures. To help **families** in difficulty due to the COVID-19 crisis, it gave a **one-off bonus** worth €50 off their electricity bills. The initiative was aimed at those who, in the period from 14 November 2020 to 31 March 2021, were unemployed or laid off by their employer without receiving a 100% wage supplement from their employer or who worked in 2019 or 2020 under a seasonal contract as an employee and who, between 14 November 2020 to 31 March 2021, were unable to work.

The **bill-payment holiday** for businesses for January, February and March was also renewed in 2021 and postponed to September, October and November 2021 respectively.

To contain the increase in energy costs, the government has intervened with a buffer measure and Alperia has also provided a package of measures. In particular, it launched the **Alperia Smile** offer for families, with which it locked in the price at the market value before the increases. This offer applies to domestic customers at their main residence, customers on the protected market, Alperia customers on the free market and customers of third-party providers. For a typical family, savings can be up to €200 per year by 2022, given the current price level. For SMEs, for several years, Alperia has been guaranteeing, both through the framework agreements signed with SWR-EA (Südtiroler Wirtschaftsring - Economia Alto Adige) and with **Rete Economia – WirtschaftsNetz (RE/WN)**, excellent services linked to transparent, clear and competitive tariffs, as well as a widespread presence in the local area for thousands of beneficiary companies in South Tyrol. Finally, Alperia supplies large industrial companies in South Tyrol on the basis of very flexible and competitive contracts aimed at strengthening their competitiveness on the international market.

Alperia also donated a **mobile multi-specialist clinic** to the Province of South Tyrol Red Cross. The vehicle, which is equipped with two diagnostic areas and a medical history office, can be used, jointly with the health authority, territorial districts and territorial Cri Committees, for a variety of services, including activities to combat COVID-19, medical examinations, specialist examinations for people in retirement homes and in the event of natural disasters. In the field of healthcare and prevention, Alperia has also installed 11 new **defibrillator columns** in collaboration with the White Cross and the Italian Red Cross Bolzano Committee, **with public access** in busy areas, optimising emergency assistance in the event of cardiac arrest.

In addition, Alperia has continued to support the **associations** that are dealing with the direct, daily consequences of the pandemic, showing solidarity in particular with the elderly, women and children by donating €100,000 to the association of retirement homes in South Tyrol.

Furthermore, with its contribution of €80,000 it supported the continuation of sports and social activities, such as the donation to the Association of South Tyrolean Sports Clubs (VSS), with which it helped the member clubs by purchasing nasal tests for children and young people aged between 12 and 18.

In addition to these associations, Alperia reaffirmed its responsibility towards the region with donations to:

- AIAS Onlus
- Caritas Diözese Bozen-Brixen
- Futura Social Cooperative
- Elki Meran
- FABI Familienberatung
- Freiluft Kinder und Jugendtheater
- GWB Genossenschaft
- Hotel Masatsch
- Jugendzentrum Jungle
- Kinderherz
- Licht für di Welt

- Südtiroler Jugending
- Südtiroler Vinzenzgemeinschaft
- VKE
- Cooperat. Africa Mission
- Propositiv Südtiroler AIDS Hilfe
- Elternverband Hörgeschädigter Kinder
- Associazione Incontriamoci - families dealing with autism
- Sozialgen. Vergissmeinnicht
- Mandacarù Fairtrade Coop

6.1.4. Investment in infrastructure {GRI 203-1}

In 2021, we invested €180 million (€126 million in 2020) to maintain and renew our infrastructure so that it remains safe and efficient. In detail, 28.2% was allocated to distribution networks, 31.9% to production, 6.7% to district heating, 15.1% to the Smart Region and 18.1% to IT infrastructure, facilities, supply and trading and other areas.

Table 4: Infrastructure investments and services supported {GRI 203-1}

Type:	Unit	2021	%	2020	2019	2018	YtY variation
Energy distribution	EUR	50,914,000	28.2%	46,390,000	41,571,000	36,520,000	10%
Teleheating and services	EUR	12,100,000	6.7%	11,251,000	13,059,000	6,866,000	8%
Energy production – mandatory	EUR	57,487,751	31.9%	27,529,000	19,078,000	17,147,000	109%
Energy production – stay in business	EUR	5,679,626	3.1%	4,804,000	10,777,000	9,009,000	18%
Smart Region	EUR	27,321,000	15.1%	14,003,000	9,235,000	7,718,000	95%
IT infrastructure and digital projects	EUR	21,909,834	12.1%	20,783,000	7,836,000	4,294,000	5%
Supply and trading	EUR	0	0.0%	1,095,000	1,430,000	412,000	-100%
Facility investments	EUR	537,736	0.3%	773,000	588,000	1,587,000	-30%
Other investments	EUR	4,419,319	2.5%	72,000	1,126,000	828,000	6038%
Total	EUR	180,369,266	100%	126,700,000	104,700,000	84,381,000	42%

Investments in the electricity grid

The electricity distribution grid of Edyna, a subsidiary of Alperia, is **9,090 km** long (high, medium and low voltage), with more than **2.59 TWh** of electricity distributed. Edyna, the Group's distribution company, is the fifth largest national distributor, and is one of the four operators that are introducing new generation **Smart Meters** in Italy. The replacement plan, which began in 2020 for a duration of four years, progressed effectively in 2021, with approximately 50,000 meters installed. The total investment is over €41 million 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 in the municipalities of Bassa Atesina and Val Pusteria also continued.

Network **resilience** works 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 new primary substations with the completion of the one in Laces, the installation of new power lines (CP S. Antonio 40MVA/66/20/16kV, CP Z.I. Lana 40MVA/66/20/16kV), the unification of the medium voltage networks in Bolzano, Merano and Laives, the decommissioning of 93,175 m medium voltage lines, safer in the event of meteorological events extremes.

Helicopter inspections of the entire network also continued, with the launch of a pilot project for drone monitoring. A method that is currently useful for close visual inspections but which in the future we would like to develop over long distances.

Edyna has also signed an agreement with the Civil Protection to facilitate radio communication via the TETRA system. It provided 160 radios to all on-call staff and set up a system of continuous tests to check their functionality.

The Smart Edyna project was completed and the Smart Land project continues.

Edyna has also launched an experimental project on replacing SF6 gas-insulated compartments with dry air-insulated compartments.

Most of these activities will continue in 2022. In particular, the One Vision update for the BU confirms:

- installation of more than 260,000 new-generation meters, including 20,000 meters for other local distributors;
- continuous investments to ensure network resilience, and increase the quality and continuity of the electrical service;
- consolidation and integration of the Bolzano/Bozen 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;
- investments of more than €230 million from 2022 to 2024.

Smart Edyna

Managing water, parking, lighting, access and waste more efficiently

The Smart Edyna project was launched to create a smart base at the Alperia headquarters in Via Resia in Bolzano. With the use of innovative technologies and through a single dashboard, it is possible to monitor different areas, such as:

- water reuse: Smart Water is a project dedicated to the collection of rainwater for irrigation, measurement of water transit and detection of soil moisture;
- parking management: Smart Vehicle is an intelligent parking system that identifies free spaces for cars, bikes and motorbikes, counts vehicle numbers and has electric charging columns.
- lighting sensors: Smart Lighting is an LED lighting system activated by pedestrian detection sensors;
- access control: Smart Access is an automatic access recognition system.

The project was completed in 2021 and Smart Access will soon be on the market.

Investments in district heating

Alperia Ecoplus operates district heating at 5 sites in South Tyrol for a total of 11 production plants, including plants in the cities of Bolzano and Merano. Through a network of **over 137 km**, we provide heat to our customers. A quarter of the thermal energy produced in South Tyrol by district heating comes from our plants. Alperia Ecoplus is the fifth largest national operator with approximately **312 GWh** produced and distributed. In 2021 we invested **€11 million**, primarily in: the expansion of the district heating network in Bolzano and Merano, the first start-up of the biomass plant in Merano, the construction of a small co-generation plant with a generator in Chiusa to provide continuity of service in the event of breakdowns. Maintenance and efficiency improvements also continued. In particular, Bartucci installed an automatic programmer 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. In addition, the PPP for the Bolzano hospital was presented and the nine-year tender for the Merano Thermal Baths was secured.

The One Vision update confirms the strategic priorities for the BU:

- Extension of the Bolzano district-heating network
- Improving the energy mix in Merano
- Building three new cogeneration plants in Bolzano
- Consolidating other district heating plant operators
- Building a cooling plant in Bolzano
- Investments of more than €40 million from 2022 to 2024

Investments in hydroelectricity

Alperia is third in the Italian ranking for renewable hydroelectric generation with **around 4,000 GWh/year** produced by 34 large, medium and small derivation hydroelectric plants subject to management and coordination (and five plants that are not majority-owned by Alperia and which are not subject to Alperia's management and coordination) with a capacity of 1,300 MW. To ensure the sustainable and efficient management of water resources, Alperia continues to invest significant

resources in its plants. In 2021, investments amounted to **€63.2** million, mainly for the revamping of some plants, but also for other activities that improved their safety, environmental impact and reliability. In addition, preparatory activities continued with the implementation of the activities planned in 2021 and in the 310 Strategic Plan for 2020-2024, which involve investments of €310 million (97% of which are aimed at achieving Sustainable Development Goals). The main extraordinary activities foreseen in the Plan include:

- Tel – new plan for the minimum water flow – 4.4 M€ (by April 2022)
- revamping of the Bressanone (large derivation) plant for 41.6 M€ (by end of 2022)
- revamping of the Lasa (large derivation) plant for 43.2 M€ (by end of 2022)
- revamping of the Lana (large derivation) plant for 38.8 M€ (by 2024)
- revamping of the Cardano (large derivation) plant for 34.7 M€ (by 2023)
- Pracomune (large derivation)– extension of life – for 12.8 M€ (by 2024).
- reconstruction of the penstocks of Lasa and San Pancrazio under the plan ~€22 million (as well as work on four additional penstocks post-2024 for ~€30 million).

In addition, a task force was set up, also thanks to the acquisition of a majority stake in Hydrodata S.p.A., a historical and prestigious engineering company based in Turin, for participation in future tenders for the renewal of the eight Alperia concessions expiring on 31 July 2024 (~400 MW).

Investments in the Smart Region {GRI 102-12; GRI 203-1; GRI 302-4}

In 2021, Alperia Smart Region renewed its commitment to making the region increasingly innovative, efficient and sustainable. In particular, with the companies Alperia Bartucci and Gruppo Green Power, Alperia Smart Region 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. **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 SpA – 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 **€27.3 million** in 2021 and will continue to focus on the coming years, as foreseen in the One Vision plan update:

- Building efficiency improvements (including thermal insulation)
- Development of domestic photovoltaics
- Innovative energy efficiency solutions based on algorithms, data analysis and artificial intelligence
- Continuing the development of Smart Health, Smart Land and Smart City solutions
- Development of energy efficiency and facility management solutions also for public administration and health, including through strategic partnerships
- Continued development of sustainable mobility (electric and hydrogen) both for the infrastructure of the territory and for the development of innovative commercial solutions
- Total investments of over €380 million (of which about €250 million for the Superbonus)

Strategic objective: We aim to create added value for South Tyrol in various areas, including jobs, local taxes and social commitment.

Operational objectives	Measures implemented in 2020	Deadlines (new)	KPI	Target value	2020 Value	Status
€1.2 billion added value for South Tyrol in five years	* Creation of local added value (payments to public bodies e.g., environmental funds, staff remuneration and benefits, contracts with local companies, sponsorships and donations, dividends to local shareholders)	2017-2021	Local economic added value (EUR)	*1.2 billion	1.2 billion	✓
Assessment of cooperation opportunities for the inclusion of migrants in South Tyrol	<p>* Collaboration in the Protection System for Asylum Seekers and Refugees (SPRAR) project, which provides reception facilities for asylum seekers and refugees in small housing units in South Tyrol with two buildings made available:</p> <ul style="list-style-type: none"> – one in Barbiano, which welcomed 17 people in March 2019 and aims to support 25 asylum seekers in total; – a second in Naturno, where Alperia Greenpower has given a building on lease to the Burggraviato District Community to use for the temporary reception of small immigrant communities. The lease runs until 31 December 2020 <p>* Nothing was implemented in 2020 because of COVID-19, but Alperia has made several donations to associations that do extensive work with volunteers as support during this difficult period</p>	✓	-	-		✓

Strategic objective: We aim to steer the future of South Tyrol towards a Smart Region.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Expansion of the ultrabroadband network and creation of a network that enables access to the Internet of Things in South Tyrol	* IoT network development in orchard areas in South Tyrol	✓	Number of installed IoT gateways (antennas)		>40 installed gateways	✓

Promotion of cooperation for the development of an innovative and smart infrastructure	* Smart Edyna project completed; SmartLand project in	2021-2022	Number of new products	-	Development of two new products in addition to the T360 tensiometer	Ongoing
Active collaboration in research projects for the development of new solutions for smart grids	<p>*SmartVizze concluded.</p> <p>*For SmartNet Pilot A, the objectives were largely achieved and also recognised by ARERA.</p> <p>*For Storage4grid, the objectives were achieved.</p> <p>*Flexigrid is ongoing</p> <p>* MV off-grid operation</p>	2017-2021	Number of completed projects	3	3	✓

6.1.5. Green Bonds

Alperia on the financial market

In June 2016, Alperia S.p.A. approved the establishment of a Euro Medium Term Note programme (EMTN programme) up to a total amount of €600 million. In the period June 2016-October 2017, it issued four tranches under the EMTN programme, for a total nominal amount of €475 million, 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 million 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 represents 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 has used the proceeds of the Green Bond to:

1. Refinance debt used for the acquisition/creation of a portfolio of:

- hydroelectric plants in Northern Italy: 249 MW, generating about 0.9 TWh per year of energy. A similar amount of energy generated from conventional sources would have resulted in 0.76 Mton of CO₂ pollution per year in the case of coal plants and in 0.33 Mton of CO₂ pollution per year in the case of natural-gas plants (combined cycle)
- photovoltaic systems in central Italy: 1 plant for 4.3 MW of installed power, generating about 4.4 GWh per year of energy. A similar amount of energy generated from conventional sources would have resulted in 3.74 Kton of CO₂ pollution per year in the case of coal plants and in 1.62 Kton of CO₂ pollution per year in the case of natural-gas plants (combined cycle) (this plant is being divested in 2020)
- biomass power plant (wood chips) in Northern Italy: 1 plant of 9.5 MW of installed power, generating about 20 GWh per year of energy. This plant has replaced a total system of equal power from domestic heating boilers powered by heating oil. According to the declaration verified and accepted by EMAS (Ecomanagement and Audit Scheme – the European Community Ecomanagement System and Audit), this plant saved about 5.1 Kton per year of CO₂e emissions in comparison with the previous diesel-fuelled heating system.

2. Refinance debt used to purchase a section of the electricity distribution grid from another network operator served by the company in Northern Italy.

These investments have allowed the connection of 265 renewable energy production plants (hydroelectric, photovoltaic, biomass) to the electricity grid, with a total capacity of 51 MW and an average annual production of 91.5 GWh. As a result, there were 32,000 tonnes of CO₂ saved from being released into the environment.

3. Finance the modernisation of hydroelectric power plants and the electricity distribution grid, and continuing in 2019. These investments made it possible to:

- achieve a significant reduction in grid losses by increasing the efficiency of the entire power management system;
- increase the technological level of the grid by introducing several devices for “smart” solutions aimed at optimising power flows into the grid and minimising the need for further grid extensions;
- increase the production of hydroelectric power by increasing the efficiency of the plant infrastructure.

Alperia has commissioned DNV GL Business Assurance Italia S.r.l. to provide a Green Bond eligibility assessment. The scope of the DNV GL opinion is limited to the Green Bond Principles 2017. In the course of the assessment, DNV GL also took into account the requirements of Version 2.1 of the Climate Bond. However, at the time of review, no Technical Criteria for Hydropower was available for Issuer use. Given Alperia's investment forecasts for the next few years, it is intended to utilise the financial world in 2022, 2023 and 2024, also by considering new types of financing in addition to Green Bonds.

Overview of green bond issues

	Issue date	Maturity date	Amount (EUR)	Placed amount (EUR)	% of the amount placed (end of 2018)	% used for refinancing	% used for new projects	Description of the project
1.	June 2016	June 2023 (7 years)	100,000,000	100,000,000	100%	100%	0%	Refinancing of the debt used to acquire a portfolio of hydroelectric plants in Northern Italy
2.	June 2016	June 2024 (8 years)	125,000,000	125,000,000	100%	100%	0%	Refinancing of the debt used to acquire a portfolio of hydroelectric plants in Northern Italy
3.	December 2016	December 2026 (10 years)	150,000,000	150,000,000	100%	100%	0%	Refinancing of the debt used to acquire a portfolio of hydroelectric plants in Northern Italy
4.	October 2017	October 2027 (10 years)	100,000,000	100,504,681	100%	54%	46%	see below
			of which	18,793,436				Refinancing of debt used for the acquisition of a portfolio of hydroelectric and photovoltaic plants in Northern Italy
				35,480,450				Refinancing of the loan used to acquire a section of the electricity distribution grid in Northern Italy
				46,230,795				Finance for the modernisation of hydroelectric plants and of the electricity distribution grid

Strategic objective: We aim to use innovative and sustainable financial instruments.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Certification of green bonds according to the Climate Bond Standard		✓				✓

6.2. 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.

6.2.1. Green energy {GRI EU2; GRI EU10}

In 2021, Alperia produced **4,084** of energy from renewable sources, with a hydroelectric capacity of around 1.4 GW. Specifically, we produced **3,814 GWh of hydroelectric energy, 9 GWh of solar energy, 248 GWh from district heating, 262 GWh from biofuel**. 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.

Table 6: Net energy output broken down by primary energy source^{*1} {GRI EU2}

	Unit	2021	% ^{*3}	2020	2019	2018	YtY variation
Total net produced electric energy	GWh	4,135		5,108	4,373	4,256	22.25%
thereof:	<i>Hydro</i>	GWh	3,814 87	4,772	4,044	3,961	23.70%
	<i>Photovoltaic</i>	GWh	9 0	19	22	21	-13%
	<i>Cogeneration (gas/gasoline)</i>	GWh	51 1	47	47	53	0%
	<i>Biofuel</i>	GWh	262 6	270	260	221	4%
Total net produced energy for heating ^{*2}	GWh	248	6	222	217	199	2%
Total net energy output	GWh	4,383		5,330	4,590	4,455	16%

^{*1} Net energy output includes energy produced in our consolidated plants (34 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.

	Unit	2021	2020	2019	2018
Net produced energy from renewable sources	GWh	4,084	5,061	4,326	4,203
	%	93	95	94	94

Table 7: Quantity of products provided {GRI 102-7; GRI 302-1}

	Unit	2021	2020	2019	2018	2017	YtY variation
Electricity sold to end customers	GWh	6,636	5,372	5,423	3,994	3,212	24%
<i>thereof green-labelled electricity sold to end customers</i>	GWh	2,140	2,015	1,813	1,891	657	6%
	%	32	38	33	47	20	
Trading	GWh	1,834	3,166	4,788	1,907	2,310	-42%
Thermal energy sold to end customers	GWh	246	222	217	199	195	11%
Natural gas sold to end customers	MSmc	450	421	464	367	328	7%
<i>thereof green-labelled gas sold to end customers</i>	MSmc	12	3	1	0	0	318%
	%	3	1	0	0	0	

6.2.2. Our distribution network {GRI EU4; GRI EU28; GRI EU29}

The supply of electricity in South Tyrol is managed by Edyna, which also distributes natural gas in four municipalities. It operates a 9,090 km electricity distribution network with **74% of underground lines**, supplies 96 municipalities (out of a total of 116), and distributes 2.59 TWh of electricity to more than 237,423 users. Edyna's lines are:

- Low voltage: 5,358 km – of which 80% are underground
- Medium voltage: 3,491 km – of which 69% are underground
- High voltage: 241 km – of which 9% are underground

with:

- 38 HV/MV primary substations
- 4,156 MV/LV secondary substations
- 44 MV switching substations

Table 8: Distribution network^{*1} {GRI EU4}

Electricity distribution network	Unit	2021				2020				2019			
		Above ground	Under-ground	Total	% of underground lines	Above ground	Under-ground	Total	% of underground lines	Above ground	Under-ground	Total	% of underground lines
Length of transmission and distribution lines													
High voltage	km	220	21	241	9%	239	21	260	8%	233	19	252	8%
Medium voltage	km	1,086	2,405	3,491	69%	1,129	2,298	3,427	67%	1,171	2,144	3,315	65%
Low voltage	km	1,068	4,290	5,358	80%	1,097	4,167	5,264	79%	1,126	4,043	5,169	78%
Total	km	2,374	6,716	9,090	74%	2,465	6,486	8,951	72%	2,530	6,206	8,736	71%

^{*1} Distribution network includes the network of Edyna S.r.l., Edyna Transmission S.r.l., Municipality of Parcines, and Municipality of Laces.

Gas distribution network	Unit	2021	2020	2019	2018
	km	114	113	113	113

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities	Unit	2021	2020	2019	2018
	No. Municipalities	96	96	96	98

Customers connected to the electricity grid	Unit	2021	2020	2019	2018	YtY variation
	No. PODs ^{*2}	237,423	235,585	233,335	232,207	1%

^{*2} Only end customers included in the years 2017-2019. As of 2020 all PODs (including interconnected distributors) are included.

Electricity distributed in South Tyrol ^{*3}	Unit	2021	2020	2019	2018	YtY variation
	TWh ^{*3}	2.6	2.7	2.6	2.6	-4%

^{*3} Only energy distributed to end customers included in the years 2017-2019. As of 2020 all energy distributed is included.

Substations*⁴	Unit	2021	2020	2019	2018	YtY variation
Primary HV/MV substations	No.	38	37	37	36	3%
Secondary MV/LV substations	No.	4,156	4,131	4,121	4,112	1%
MV switching substation	No.	44	45	46	48	-2%

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

Edyna's remote monitoring centre in Bolzano monitors the electricity and gas networks 24 hours a day, every day of the year. In the event of faults, Edyna provides a 24-hour emergency service, staffed by bilingual personnel who take phone calls, and 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 2021, recorded at the remote monitoring centre, were

- 1.68, with a **SAIFI** (System Average Interruption Frequency Index) reduction of 12% compared to 2020, with a duration of 24.56 minutes with the **SAIDI** (System Average Duration Index Frequency Index) dropping 18% compared to 2020. We have therefore achieved our objective of improving the quality of service and network stability.

Table 9: System Average Interruption Frequency/Duration Index (SAIFI/SAIDI) {GRI EU28; GRI EU29}

	Unit	2021	2020	2019	2018	YtY variation
SAIFI (Frequency of interruptions per customer)	No.	1.68	1.91	1.51	1.73	-12%
SAIDI (Power outage duration per customer)	Minutes	24.56	29.82	28.07	27.36	-18%

These 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. These measures include:

- the installation of new power lines (CP S. Antonio 40MVA/66/20/16kV, CP Z.I. Lana 40MVA/66/20/16kV);
- the burying of power lines in Val d'Ultimo, Val Ridanna, Val Martello and Val Racines (currently 74%);
- the completion of the Laces substation;
- the unification of the medium- and high-voltage grid in Laives;
- the decommissioning of 93,175 m of MV lines;
- the replacement of transformers in secondary substations and PTP pole cabins using vegetable oil transformers;
- remote control of secondary substations (in 2021, 113 secondary substations and 2 pole disconnectors already in service or newly built were remote-controlled);
- modernisation of the infrastructure and unification of the MV networks in Merano, Bolzano and Laives;
- the 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.

Edyna has also been deploying the **Civil Protection's** TETRA system since 2021 to enable radio communication in the event of faults. There were 160 radios purchased and distributed to all on-call staff, and tests were carried out to check their functionality. This is a further step in the collaboration between Alperia and the Civil Protection Agency. As early as 2020, a blackout simulation was carried out – thanks also to the cooperation of the national operator TERN, the Azienda Pubbliservizi Brunico, Alperia GreenPower, local electric companies and the Politecnico di Milano – to test Edyna's ability to respond promptly to this type of emergency. The trial, the only one of its kind in Italy, involved the hydroelectric power plants of Lappago and Brunico, which were affected by intense weather phenomena, testing the effectiveness of the isolated power supply in the event of a power outage. This is all aimed at ensuring ever greater energy security for the population and business continuity for companies.

Edyna's meetings with the South Tyrolean **municipalities** also continued, with the definition of an emergency and priority programme. The aim of these regular meetings is to work together in synergy, making Edyna a strategic partner in the area. With the aim of improving the service and working more closely with stakeholders, Edyna acts as a mediator between the Autonomous Province of Bolzano, the South Tyrolean municipalities and TERN, participating in working groups where it brings the region's requests to the table. An intensive investment programme is planned in many areas of South Tyrol, such as Bolzano and the Gardena, Badia, Pusteria and Isarco valleys. The investments allocated to network resilience and sustainability that will be put in place, considering the NRRP will be equally important and will involve Edyna working with Utilitalia.

In addition, as foreseen in the plan, Edyna continued with the installation of smart meters in 2021, installing almost 99% of the meters planned for this year, i.e., around 50,000 metres. The project began in 2020 and will finish 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 **Smart Edyna** platform with which Edyna monitors consumption in four areas was also been completed: Smart Water: for rainwater collection for irrigation, measurement of water transit and detection of soil moisture and intelligent irrigation based on forecast and/or received weather data; Smart Vehicle: intelligent parking system, which identifies free spaces, counts vehicle numbers, provides a parking system for bikes and motorbikes and has electric-charging columns; Smart Lighting: intelligent lighting system with detection sensors and Smart Access; automatic access recognition system. The platform will be offered to the market to promote better management of energy resources.

Edyna's commitment to the development of smart grids to manage production, storage, grid and consumption with a single system also continues with the European **Flexigrid** project. 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 already available on the EDYNA SCADA system.

As far as occupational health and safety is concerned, Edyna continued to implement the measures against COVID-19 infection identified and punctually updated by the Alperia Emergency Board for the management of the pandemic. In addition, Edyna 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. The collaboration is the culmination of a partnership that began a few years ago and which now aims to progressively involve other electricity distributors in Italy and Europe. 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.

Severe weather events

In June 2021, there was a major flood, which mainly affected the areas of the Isarco Valley, Sarentino Valley and the Sciliar Plateau. In the affected areas, the fire brigade worked to deal with flooding and landslides and several roads were closed to traffic. Edyna worked on measures to restore the networks. The landslides carried hundreds of metres of cable down into the valley.

6.2.3. District heating

District heating is 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. 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 tonnes. Alperia Ecoplus, a subsidiary of Alperia, is responsible for the management of district heating. It operates five of its own plants – Bolzano, Merano, Sesto, Chiusa and Lazfons, as well as managing the Silandro plant – and has a total of **2,414 exchangers** serving thousands of South Tyrolean households. To produce thermal energy, Alperia Ecoplus 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. For demand peaks or in the event of failure of the biomass boiler, district heating plants also have gas or diesel boilers. Three plants are also equipped with co-generators (plants that produce electricity and heat at the same time and therefore ensure extremely high energy-efficiency levels) that are fuelled by natural gas. 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 million over the next two years.

The excellence of Bolzano's district heating system was recognised in 2021 by the **Global District Energy Climate Award**, which honours the best sustainable-energy solutions based on innovative forms of urban heating and cooling. The jury was impressed by the quality of Alperia's offering and its positive impact in environmental terms. In fact, since its launch in 1986, the district-heating system operated by Alperia has developed considerably. In 2016, Alperia modernised the district-heating plant in Bolzano by building a powerful pumping station and a storage tank with a volume of 5,600 m³ of hot water. Integration of the new incineration plant brought heat-demand coverage to 60% from waste heat from the incinerator; after the integration of the storage tank, the coverage even reached peaks of 95%. This resulted in a significant

reduction in CO₂ emissions. The valorisation of the heat recovered from the Bolzano incineration 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 of Bolzano, with winter pollution from nitrogen oxides and smoke from individual heating systems decreasing significantly. There was a 137.5% increase in usage of waste heat used and CO₂ emissions were reduced by 60%, just between 2013-2019.

This goes hand in hand with a project to extend the network to bring district heating to as many buildings as possible. In particular, in **Bolzano** a €70 million maxi-plan is in place to support this expansion. In 2021, the plan was also presented for the connection of 24 buildings owned or managed by the Autonomous Province with a total capacity of 22 MW. In total, the Alperia Ecoplus network covers 35 km, with 300 connected buildings serving around 6,000 homes. Via Resia, Via Druso, a large part of the industrial area and the hospital, which will be connected in 2019, are already covered. Alperia Ecoplus provides energy for 100 MW of connected power, which will be doubled by 2025. Work in 2021 focused on Corso Libertà, Via Resia, Via Alessandria, Via Bari, Piazza Vittoria, Via Cesare Battisti, Via Virgilio, Via Mancini, Via Diaz, Via Duca d'Aosta and Via Capri. There are also plans to connect Gries Village, the new district built by Signa Holding, to the Muri Gries Abbey and Convent. Even Walther Park, the shopping centre being built in Via Alto Adige, will be heated with water heated by the Bolzano incinerator; in summer, meanwhile, it will be cooled by the waters of the Isarco. The water will come in at 12 degrees and leave at 12.5 degrees, with no negative impact on the river, but with considerable energy savings on air conditioning. Currently, 262 apartment blocks are connected in the city, and another 250 will be connected to the network by 2025. The number of new customers has actually exceeded expectations, demonstrating a growing awareness of the potential of district heating. This is also thanks to the timely awareness raising work carried out by Ecoplus' technicians, together with those of ASS, 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 incinerator. When the investment plan for Bolzano is complete, around 7.5 million cubic metres of gas will be saved each year, saving somewhere in the region of 15,000 tonnes of avoided CO_{2e} emissions, equivalent to a virtual forest of over a thousand hectares appearing in the city. Also in 2021, construction of the new cogeneration plant that Alperia Ecoplus built for Infranet was completed. The 140-kW plant provides electricity and heat. A tri-generation plant (electricity, heat and cooling) will be built by 2023, to be equipped in case of incinerator failure. In addition, one of the most significant projects that Alperia Ecoplus has been engaged in, and will continue to work on, is the management of the Bolzano Hospital for which the PPP was submitted in 2021.

Alperia Ecoplus also operates in **Merano** where it supplies 509 district heating substations, providing green heat to more than 5,800 households (28% of all households) and around 420 additional company, school and office users. Also here, the number of users requesting connection to district heating continues to grow. In addition, an innovative phase change storage tank has been installed in Merano and is currently being tested. The tank is the result of one of Alperia Startup Factory's innovation projects. Currently, the district heating system saves 8,000 tonnes of CO₂ emissions every year, roughly equivalent to the CO₂ absorption of a 6-square-kilometre forest. This represents 1/5 of the Municipality of Merano's surface area. At the end of 2021, the **biomass** plant was started-up for the first time, and in February 2022, the new plant will be in provisional operation, with subsequent commissioning starting in February. Once in operation, the new power plant will make it possible to connect other private and public buildings to the district heating network and to decommission obsolete heating systems that release large amounts of carbon dioxide and nitrogen dioxide into the air. 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 5,800 tonnes of carbon dioxide emissions. The new plant will burn virgin wood from forests. By using a renewable source, the plant will reduce the dependence of Merano's district heating system on fossil fuels and contribute 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. Also in Merano, Alperia Ecoplus won the contract to manage the thermal baths for the next nine years.

Connections also continued in **Chiusa and Lazfons** (around 10 in Chiusa and 2 in Lazfons, where a new residential area with 14 units is planned to be connected to district heating in 2022). In Chiusa, a co-generation plant with a generator was also installed to ensure greater continuity of service. The new plant will be commissioned in 2022. Again, in Chiusa, with Alperia Bartucci, an optimisation and efficiency project is underway. This is a pilot project that will continue throughout 2022 and involves the use of an automatic programmer with a forecasting model that allows it to react in advance to network demand. All this should lead to fuel savings, optimised operation and higher margins for the plant, also in view of the cost of energy and gas. In Chiusa, an extraordinary maintenance project has also been set up using Geocal software to optimise maintenance, regulatory aspects, deadlines and much more.

In **Sesto**, on the other hand, the installation of a second electrofilter is at the tender phase, which will allow the two biomass boilers to be operated completely separately, increasing efficiency. In the past, during maintenance, it was necessary to switch off the biomass heat generation and use a very high-consumption oil boiler. Now, this will not be necessary. In addition, to ensure optimum combustion, the system is equipped with a lambda probe control. This reduces emissions caused by incomplete combustion.

The conversion factor has been certified for all plants and the calculation of CO_{2e} emitted is being planned to offset operational emissions with green gas.

Alperia Ecoplus has also launched a project to optimise heat and power production by developing a simulator that makes predictions. The aim is to ensure less stressed systems, save resources and also have a positive impact in economic terms.

The emergency service, launched in 2020, proved to be useful and effective, even though the calls received were mainly related to suspected outages. There were only three cases of leakage at substations, which were minor and immediately resolved.

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 launched a competition in collaboration with the Bolzano Association of Architects 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 were 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 even more efficient service, Alperia Ecoplus set up a toll-free emergency number in 2020. 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.

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 tonnes 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

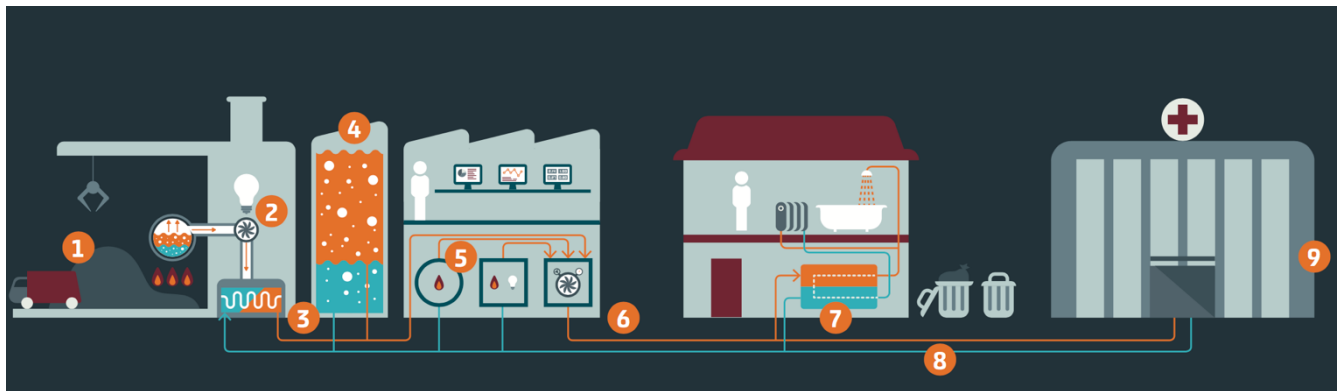


Figure 8: The Bolzano district-heating system (source: Alperia)

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, meeting citizens' needs. 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 Bolzano Hospital (9).

Strategic objective: We aim to guarantee a safe and efficient energy supply.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Investments of €400 million over 5 years in the core business	* Investments to improve plant performance in terms of availability, reliability and efficiency	2017-2021	Investments (EUR)	400 million	558 million	✓
Investments of €400 million over 5 years in the core business	* TEL power plant, construction work in progress, expected to be operational by the end of 2022.	2018-2021	-	-		✓
Increase the energy availability index for hydroelectric plants to 88%	Planning and scheduling maintenance measures to make our plants safer, with a focus on maintaining a balance between environmental impact and production optimisation	2024	Energy availability index (%)	88	84.49	Ongoing
Expansion of the district heating network in Bolzano	* Expansion of connections and network in Bolzano	2021	Number of exchangers		333 (Bolzano) / 2412 (All of South Tyrol)	✓
100MW of new thermal power connected to our district heating network	* Expansion of connections and network in Bolzano	2020-2024	Connected power [increase 2020-2024] (MW)	100	288.51	Ongoing
Reduce the duration of outages	* Improving service quality and modernising infrastructure to improve network stability	annually	SAIDI (minutes)		24.56	✓
Reduce the duration of outages		annually	High SAIDI Concentration (minutes)	28	8.3	
Reduce the duration of outages		annually	Medium SAIDI Concentration (minutes)	45	31.36	
Reduce the duration of outages		annually	Low SAIDI Concentration (minutes)	68	30.81	
Reduction of power outages	* Inspection and tree-cutting programme for overhead lines * Replacement of sections of overhead lines with underground cables and construction of new HV and MV connections	annually	SAIFI (Number of interruptions per user)		1.68	✓

Reduction of power outages		annually	High SAIFI Concentration (Number of interruptions per user)	1.2	0.38	
Reduction of power outages		annually	Medium SAIFI Concentration (Number of interruptions per user)	2.25	1.82	
Reduction of power outages		annually	Low SAIFI Concentration (Number of interruptions per user)	4.3	2.56	

6.3. Asset Integrity {GRI EU21}

Each year Alperia produces an average of around 4,000 GWh of clean energy through 34 large, medium and small hydroelectric plants subject to management and coordination (and five plants that are not majority-owned by Alperia and which are not subject to Alperia's management and coordination). These plants include 13 large dams, 16 smaller reservoirs, 160 km of tunnels and 21 km 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 2021, Alperia invested more than €63 million in activities to improve plant performance in terms of availability, reliability and efficiency, reaching a total of €400 million planned as investments in security of supply in the five-year plan. Thanks to these activities, the **availability of hydroelectric plants** in 2021 was **84.49%**.

Table 10: Energy availability {GRI EU 30}

Availability factor *1		Unit	2021	2020	2019	2018
Energy source	Hydro	%	84.49	88.88	86.43	87.67
	Photovoltaic	%	not available	not available	not available	not available

“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 for them.”

Comment by a collaborator; Stakeholder Survey 2021

Alperia replied: We are aware of how much climate change will impact our operations and work daily 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 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

Edyna is replacing mineral oil transformers with **vegetable oil transformers** to reduce the risk of environmental incidents. 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 2021, there were two significant environmental incidents (discovery of suspicious material during an excavation and a fire following an electrical fault), which, however, did not result in significant negative impact on the environment.

Table 11: Environmental incidents

	Unit	2021	2020	2019
Number of environmental incidents	No.	2	2	0
Number of significant environmental incidents	No.	0	0	0
Financial impact of environmental incidents ^{*1}	EUR	0	0	0

^{*1} This includes fines paid and costs for cleanup.

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 Document drawn up by the Autonomous Province of Bolzano and an internal procedure for employee actions in the event of significant weather events. 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 smaller dams. 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 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, in part, 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 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. Around half of Alperia Greenpower's 200 employees are in charge of controlling and maintaining the dams and all electromechanical components of each hydroelectric plant.

In 2021, water infiltration occurred in the basement of some buildings in the village of Curon Venosta: without immediate danger for the area. Alperia Vipower intervened in cooperation with the municipality of Curon Venosta and the local voluntary fire brigade to mitigate the inconveniences, and started work on improving the waterproofing of the St. Valentin tunnel worth 10 million euros, which will continue in 2022.

To increase the safety of our hydraulic infrastructure, we are also developing many innovative projects in cooperation with startups such as **Fieldbox**, **Sentetic** and **Hydrosim 4.0**. In particular, with **Fieldbox** we are working to apply Artificial Intelligence to penstocks. Algorithms make it possible to highlight possible critical elements and propose digital solutions applicable to other pipelines of the same type. The project was applied to the Santa Valburga penstock, which is usually

subject to stress caused by the presence of deep-seated gravitational slope deformation (DGSD), i.e., an average slope-slip of about 2 mm/year. **Hydrosim 4.0**, winner of the 3rd Alperia Startup Factory, focuses on land safety in the field of flood protection through the intelligent use of dams. By using a flood simulator, it is possible to predict incoming water flows in reservoirs through AI 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. It emerged that being able to predict these phenomena correctly would make it possible to reduce the flood wave by 30-40% and even eliminate or reduce flooding altogether. In addition, Hydrosim 4.0 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 riverbed. In this way, the damage to the fish fauna is much lower. Finally, **Sentetic** is a project that involves the installation of sensors usually used in the road sector to hydraulic works on infrastructures.

Another important innovation project also began in 2021: Alperia's first **Mining Farm**. At the oldest power plant, in Tell, 190 computers have been installed whose task it will be to sell computing power on this specific market. This power will be developed from hydroelectric power. The project is developed 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. Alperia remains the owner of the infrastructure while Alps Blockchain maintains and markets the generated computing power.

In addition to continuing these projects, in 2022 Alperia Greenpower also intends to meet 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. Finally, a **climbing** activity is planned on the Neves Dam in the municipality of Selva dei Molini, which will be added to the climbing proposal already active on the Martello Dam, on the Gioveretto Reservoir. These projects aim to create a sport-and-leisure 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, and Alperia will also bury the overhead power lines at Neves Dam and in Val Cesa, which serve both the plant and various facilities 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 million until 2022.

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

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Definition of a KPI at Group level for Asset Integrity		✓	Environmental accidents	-	1	✓
Development of a secure and stable communication network with the Provincial Civil Protection Agency	*Purchase and commissioning of fixed and portable radios with tetra technology connected to the civil protection system of the Autonomous Province of Bolzano. They are distributed to the various business units that contribute to or are responsible for the management of critical infrastructure	✓	-	-	-	✓

6.4. Supplier Management {GRI 102-9, 102-10; GRI 204-1; GRI 308-1, 308-2; GRI 414-1, 414-2}

Alperia also promotes a sustainable approach in its supplier management. Sustainability is also a requirement in tenders. All 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 €100,00, 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.

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

- **Register of suppliers:** this includes suppliers with specific social/environmental certifications, such as ISO 14001, ISO 45001, EMAS or demonstrating that they have taken equivalent measures. The qualification is valid for three years. In 2021, the Register was updated, totalling 2,729 registered suppliers with 1,073 qualified suppliers and 499 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. In 2021, the tender management platform was expanded to include RDAs. This made the process much faster and timelier. 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 was implemented in 2021 and will become fully operational in 2022.
- **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 2021, due to the ongoing COVID-19 pandemic, no supplier audits were carried out.

In 2021, the entire supplier management process, from the first purchase requests to the final evaluation, was fully **digitised** and integrated within a single platform. The system generates contracts on the basis of clauses that are selected by buyers. Instead, clauses relating to respect for human rights, the Code of Ethics, Model 231, etc., are standard and cannot be amended.

In the course of the year, Alperia also met with its suppliers and with some trade associations and bodies, launching a fruitful discussion that improved dialogue and made relations easier.

Alperia's purchases, where made centrally, are the responsibility of the Procurement Department and in 2021 59% were local¹¹. Using local suppliers, where compatible with business needs and current procurement regulations, is one of the ways in which Alperia supports the economy of its territories and consequently, also contributes to the reduction of transport emissions. The percentage of products and services purchased locally in 2021 was 28% (36% in 2019) of total expenditure. Among these:

- ✓ origin of works suppliers: 77% local
- ✓ origin of service suppliers: 30% local
- ✓ origin of product suppliers: 5% local

¹¹ "Local purchases" are those made in the Province of Bolzano.

Table 12: Proportion of spending on local suppliers^{*1} {GRI 204-1}

	Unit	2021	2020	2019	2018
Percentage of products and services purchased locally (based on expenditure in EUR)	%	28	36	35	27
Percentage of works purchased locally (based on total works expenditure)	%	77	72	42	36
Percentage of services purchased locally (based on total service expenditure)	%	30	20	39	22
Percentage of products purchased locally (based on total product expenditure)	%	5	21	18	19
Percentage of contracts awarded locally (based on number of contracts)	%	59	58	62	60

^{*1} The organisation's geographical definition of "local" refers to the province of South Tyrol. Data does not include procurement data for Alperia Bartucci, Alperia SUM and GGP, as they are located outside of the province of South Tyrol.

In 2021, the total volume of purchases made by Alperia was almost **€223 million** (€169 million in 2020), of which **€61 million** were with local suppliers (€60 million in 2020). 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.

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

Comment by a collaborator; 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.*

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 the use of corporate glass dispensers instead of plastic water bottles or glass/aluminium flasks for employees. In 2022, in particular, the new tender for beverage distribution will begin, with specific requirements in the area of sustainability. All these measures are also detailed on the intranet with regular reports from the HSE department and contribute to raising awareness on sustainability issues.

Table 13: Significant investment agreements and contracts that include human-rights clauses or that underwent human-rights screening^{*1} {GRI 412-3}

	Unit	2021	2020	2019	2018
Number of significant investment agreements and contracts that include human-rights clauses	No.	information unavailable	information unavailable	information unavailable	0
Percentage of significant investment agreements and contracts that include human-rights clauses	%	information unavailable	information unavailable	information unavailable	0

^{*1} Clause was included in the General Terms and Conditions of contracts as of May 2019. All new significant contracts include this clause. However, there may still be active contracts signed prior to 2019, which did not include this clause; thus, the exact number and percentage cannot be reported. Significant contracts are defined as "contracts, which are managed centrally at group level by procurement and which exceed a value of €100,000".

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.

Table 14: New suppliers that were screened using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2021 ^{*1}	2020	2019	2018
Percentage of new suppliers that were screened using environmental and/or social criteria	%	100	100	100	100

^{*1} All suppliers must pass the screening of pre-established requirements (e.g., minimum certification requirements such as EMAS, ISO 14001, OHSAS 18001 o 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 questions that ensure suppliers meet Alperia's requirements, with a focus on economic, social and environmental sustainability issues.

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 2021	Deadlines	KPI	Target value	2021 Value	Status
100% of purchase contracts and the Group's general terms and conditions contain a human-rights clause		✓	Share of purchase contracts that contain a clause for the protection of human rights	100%	100%	✓
100% of significant tenders assess minimum product-related sustainability requirements	In PRO 204, the requirement for a sustainability assessment was included: technical specification, to be attached where appropriate; indicate any minimum requirements for sustainability;	2021	Share of significant tenders containing minimum product-related sustainability requirements	100%	80%	X
100% of new suppliers are assessed according to specific social and environmental requirements (e.g., information on accidents at work)		✓	Share of new suppliers assessed on the basis of specific social and environmental requirements	100%	100%	✓
The Vendor Rating System contains sustainability criteria		✓	-	-		✓



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 activity 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 action 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

In figures

Energy consumption within the organisation:	3,560 TJ	GHG Operational Intensity (Scope 1,2) market based (tCO ₂ e /Mwh of energy produced, gross):	0.02
Energy consumption from renewable sources:	65%	Total operational emissions (Scope 1 and Scope 2), market-based:	83,583 tCO₂e
Electric, hybrid, hydrogen company cars:	172		

7.1. Water {ALP6; ALP7}

Our primary source of green energy

Every year, Alperia produces around 4,000 GWh of energy from a clean and sustainable resource: water. Electricity from renewable sources is generated with 34 hydroelectric power plants under management and coordination and 5 subsidiaries, 13 large dams and 16 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, such as droughts or the anti-freeze project to optimise use in agriculture or sediment management. As regards the stretches of watercourses affected by the use of water resources for hydroelectric production, particular attention is paid to respecting the minimum planned releases and to mitigating the effects of plant management, providing, where necessary, for the consolidation of fish stocks. 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.

7.1.1. Sustainable management of water resources

Our projects to support the territory

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 2021 as an example, Alperia made around 4.5 million m³ of water available for the Vinschgau Valley alone in the period from the end of March to the beginning of May, in order to protect crops from night frosts. This is possible because of the volumes stored in the Resia and Gioveretto reservoirs, as well as in the reservoirs of the Ultimo and Senales valleys and is provided free of charge. In addition to the Vinschgau, large quantities are also taken at the Lana, 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 **conscientious usage of water resources**, also through collaboration and dialogue with stakeholders (public institutions, consortia and trade associations). Alperia acts in line with current regulations both in the area of water withdrawals and discharges. Alperia is well 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.

Furthermore, in view of the forthcoming expiry of hydroelectric concessions, Alperia worked with **Hydrodata** to analyse the characteristics of the plants affected by the renewal. After the first inspections, a detailed study of their functionality

and organisation criteria will be carried out. In addition, a penstock was replaced in Lasa, also carried out by Hydrodata. Work started in 2021 and will continue in 2022.

7.1.2. Protecting biodiversity

Alperia adopts mitigation and compensation measures to protect the vulnerability of species and habitats affected by its activities. 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/decommissioning phase of a power plant and in its day-to-day operation. Dams can prevent the distribution and migration of fish, and sediments, which are usually considered a natural element of aquatic ecosystems and can also be altered by the presence of weirs or dams. Sediment – usually considered a natural element of aquatic ecosystems essential for their hydrological, geomorphological and ecological functioning – can also have its natural movement affected by the presence of weirs or dams. Under natural conditions, there is a constant movement of sediment towards the sea, while the presence of large reservoirs affects this. Maintenance work involving the periodic discharge of sediment can also harm habitats and species if not managed properly.

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, we carry out renaturalisation and restoration of the original landscape at disused intake works. In 2021, this activity continued, and the decommissioning of the Rio Fonderia intake (connected to the Santa Valburga plant) was completed. The removal of the Foltin intake works (connected to the Lasa plant) has been postponed until 2022.

7.1.3. Minimum vital flow {GRI 303-2}

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 biocenosis of the water course in the short and long term. 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 dry 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 diversion. This trial process was planned to last about eight years. To date, the trial has been completed for six of these plants, as certified by the assessments of the Environmental Services Conference and by the decision of the Provincial Council. The remaining five plants are expected to be completed in 2022.

In 2020, we received a complaint from the Office for Sustainable Water Management of the province in the light of a report drawn up by the Mals Forestry Station regarding an insufficient release in a small watercourse in Upper Vinschgau (Glorenza plant). This complaint was filed by the province during 2021. Also in 2021, a blockage occurred in the release device on the Rio Plima (a diversionary works serving the Castelbello plant) but, as confirmed by the responsible province office, this was an accidental event. It caused a 200-metre stretch of the stream to dry up. Alperia promptly compensated by planting fish stocks.

Table 15: Water {ALP6; ALP 7}

	Unit	2021	2020	2019	2018	YtY variation
Water released for minimum flow	litres per second	38,925	38,919	38,926	38,883	0%
Incidents of non-compliance with MVF (minimum vital flow) requirements	No.	1	1	0	0	0%

7.1.4. Fish ladders for intake works

To support the fish in their passage, Alperia has built fish ladders. During 2020, we completed the executive design of the **Castelbello fish ladder** at the Lasa crossing. The launch of the tender and commencement of work began in 2021. The project is expected to be completed in 2022. The fish ladder, which involves works costing around €1,200,000, financed with environmental funds, was designed by the engineering department of Alperia, modelled on the 2018 construction of the **fish ladder in Sarentino**. The fish ladder in Lasa will be larger, as it will be built on a larger watercourse, the Adige, where there are considerable flow fluctuations which are not always constant. A system of tanks with sluice gates that adjust according to the water level has been designed. The fish ladder built for the Corvara crossing at the Sarentino plant, on the other hand, was monitored during 2020 with excellent results. The ladder, built in agreement with the Hunting and Fishing Office and Water Protection Office under environmental plans, is uniformly divided into 16 small tanks, allowing fish and other aquatic species to easily overcome the water-level difference. These are both important projects that demonstrate Alperia's ecological commitment to protecting aquatic species. During 2020 we also carried out a **feasibility study in Brunico**.

In 2021, a **fish-deterrent system** was installed at the Fontana Bianca dam in Santa Valburga. 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. However, monitoring will continue in 2022.

Finally, Alperia has signed a number of agreements with **local fishermen's associations** for the management of their fishing rights, in particular with the Val Martello Fishing Association for the management of fishing rights in Gioveretto and the Alta Pusteria Fishing Association. 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.

7.1.5. 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 basins periodically, both to allow deposited material to flow downstream and to maintain the basin'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 basins 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 turbidity of the water during such operations is comparable to that experienced during natural flood events. The release of silt and sand from weirs is also necessary to regenerate the characteristics of the riverbed.

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 Concession Regulations and 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 province 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 operation was also repeated in the **Curon and Colma reservoirs** with positive results. 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 also tested, thereby also verifying the effectiveness of this method. Further trials are planned in 2022, in particular aimed at sediment management during flood events.

Alperia is also working 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 – is 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 will construct GIS digital bathymetric maps of the reservoir (graphically representing its depth) pre- and post-release of sediments. The difference between these maps will show the exact amount of sediment deposited. Alperia will provide data on water and sediment discharges recorded by its monitoring stations. This is crucial information to enable the mathematical models used by Alperia and unibz to perform the numerical simulation of soil erosion and sediment transport processes at the reservoir level. To study the impact of sediment release in watercourses downstream of the dams, researchers will take eDNA samples in the water of the reservoir and the river downstream. E-DNA is Environmental DNA, DNA fragments released by organisms into their environment and which can be found in environmental samples of water or sediment. Based on the analysis of these samples, using eDNA as a biological tracer, they will be able to deduce the presence or absence of organisms in the ecosystem, hence the variation in biodiversity. Ultimately, they will be able to better define the state of health of the latter.

7.1.6. Environmental Plans Investments for riparian municipalities

For the large hydroelectric plants, whose concessions have been renewed since 2005 (14 plants), Alperia – in agreement with the competent authorities – has defined a plan of works for the improvement and conservation of the river environment and landscape amounting to **around €400 million** with a 30-year duration. Environmental funds are also paid for 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, the Alperia Group provides **more than €18 million** 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, 43 riparian municipalities have been able to obtain considerable funding and have carried out various projects, mainly concerning the improvement of the wastewater treatment system, 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 2021, in particular, the province government approved the 2020-2022 environmental plan for the **Cardano all'Isarco power plant**, including partial funding for noise barriers along the railway in Prato all'Isarco. Alperia will directly implement measures for an amount of €1,495,000; the province of South Tyrol is entitled to environmental funds for €2,935,000; and the riparian municipalities will receive a total of €5,870,000. The municipality of Cornedo will use the environmental funds for various measures in the area of drinking water pipe renovation and underground laying of low-voltage overhead lines. It will also carry out thermal and acoustic renovations on the secondary school building in Prato all'Isarco and upgrade the energy system in the primary school in Cornedo. In addition, there are: noise barriers in Prato; the General Drainage Plan and the first measures in the municipalities of Fiè, Cornedo and Bolzano; the feasibility study of the municipality of Renon; and the planning of the Rotwand channelling. In addition, together with the Civil Protection Agency, the Province of South Tyrol will continue the ecological rehabilitation of the Eisack in Bolzano, rehabilitate the Gummerbach barriers and carry out consolidation work on other streams. The Provincial Office of Geology will carry out the geognostic investigation of the subsoil of the Bolzano basin. The Provincial Biological Laboratory will continue its measures to clean up Lake Fiè by tying up phosphates and planting glasswort. Instead, the Nature department of the Provincial Environment Agency will carry out a survey on habitats and species in the municipalities of Cornedo, Castelrotto and Fiè. All measures are available on the website of the Autonomous Province of Bolzano¹².

¹² <https://news.provinz.bz.it/de/news-archive/646112>

Environmental Management Systems

Alperia Greenpower is committed to achieving and reducing environmental impacts and risks in the management of hydroelectric plants through the voluntary adoption of Environmental Management Systems certified according to ISO 14001 and Emas Registration.

The improvement targets set by Alperia Greenpower concern **greenhouse gas (SF6) emissions into the atmosphere**, the management of produced waste and industrial wastewater, among others. To this end, an environmental training programme entitled “Management of electrical equipment containing fluorinated greenhouse gases” was provided in 2021. It involved all the company’s technical and operational staff (around 150 people) to improve their skills in reducing greenhouse gas emissions.

In the field of production process energy efficiency, the pilot project for the ISO 50001 certification of the Ponte Gardena hydroelectric power plant was launched in 2021. The objective of this system is to enable an organisation to pursue, with a systematic approach, the continuous improvement of its energy performance, including energy efficiency and energy consumption and use. The end result is to reduce greenhouse gas emissions and other related environmental impact and energy costs through systematic energy management.

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

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2021 Value	Status
Compliance with legal provisions on minimum vital water flow	* Monitoring and maintenance of the intake works of the plants managed by Alperia Greenpower	annually	Compliance with provisions on minimum vital water flow	100%	100%	✓
Construction of fish ladders and compensation measures	Carried out: fish ladder at the crossing in Lasa: completion of the executive design and start of the tender process monitoring the functionality of the fish ladder set up at the Corvara crossing (Sarentino plant)	✓	-	-		✓
Piloting new technologies to reduce environmental impact during sediment management	*Carried out trial dredging project at the Fortezza reservoir and sent in the diversion works; duration of around two months with removal of 30,000 m ³ of sediment; final report and assessments on the effectiveness and sustainability of this method	✓	-	-		✓
Renaturalisation and restoration of the original landscape in disused facilities	*Carried out: - demolition of the Rio Bremè subsidiary intake (Ponte Gardena plant) - demolition of the Rio Valles subsidiary intake (Bressanone plant) - demolition of San Giovanni intake works (Lasa plant) - removal of Rio Fonderia intake works (Santa Valburga plant)	2021	-	-		✓
Reducing the danger of contamination from recycled water derived from open-cycle cooling		✓	-	-		✓

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

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Be in continuous dialogue with stakeholders (e.g., in the areas of agriculture, artificial snow, fishing) regarding multiple uses of water resources	* Dialogue with stakeholders (e.g., in the areas of agriculture, artificial snow, fishing) regarding multiple uses of water resources	2023	-	-		Ongoing
Introduce new projects and services to promote responsible use of water resources	*Marketing of the T360 product began at the end of March 2021: Target achieved	2021	Number of sensors sold	-	100	✓
Introduce new projects and services to promote responsible use of water resources	*Commissioning of the Smart Water part for the digital measurement of water consumption. Installed all sensors and connected to the LoraWan network. Commissioning of the PLC that manages the irrigation of the flowerbeds with rainwater	✓		-		✓

7.2. Energy consumption {GRI 302-1}

Alperia developed an **integrated energy management** project in 2021 that allows it to better manage the entire process at Group level and that will accompany it in its preparation for ISO 50001:2018 certification. This kind of management, while dedicated to energy management, also allows us to combine sustainability issues, which in Alperia's case are strongly linked to the appropriate and efficient use of energy.

In 2021, Alperia began on its path towards **ISO 50001:2018 certification**, through a pilot project related to two production sites (Ponte Gardena hydroelectric power plant and Bolzano district heating plant) with a view to extending the procedures and the management flow of energy performance indicators to the whole company later. In this way, energy management and the reduction of emissions can be standardised. This process has already enabled Alperia to implement a first energy efficiency project in Ponte Gardena, involving the revamping with LED lighting of the entire hydroelectric power plant. Other measures are planned for district heating in Bolzano, some of which are still being analysed. Integrated management will make it possible to improve the value of the projects carried out in terms of energy saved and to monitor the savings, improving the management of the objectives for the Plan. These are very challenging targets that can only be achieved through the dedicated work of each individual Alperia company.

Alperia consumes energy directly and indirectly. **Direct consumption** includes the use of fuel to produce 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 2021, the Group's direct and indirect energy consumption, defined as that of the Group's operating companies, customer offices and representative offices, amounted to 3,560 (3,646 TJ in 2020). 35% (32% in 2020) of energy consumption comes from non-renewable sources and 65 % (68% in 2020) from renewable sources.

Alperia mainly uses energy from **renewable sources** in its offices and production areas. Two out of five district heating systems have installed photovoltaic panels. Moreover, during 2021, Alperia continued to pursue the **energy efficiency** programme defined in 2019, integrating some measures identified through the assessment carried out by Alperia Bartucci. These measures include the introduction of transformers to reduce losses and facilitate heat recovery, and the installation of energy-efficient motors.

The following are also planned:

- complete pump replacement for three production units;
- replacement of a tunnel fan at the Bressanone plant;
- installation of an advanced control system for thermal generation and on biomass boilers;
- review of the control logic of the heating and cooling system.

Alperia has also begun a process to improve the efficiency of its sites, evaluating a series of projects, such as the future connection of the Dodiciville site to district heating instead of using natural gas boilers and the installation of BMS integrated with Artificial Intelligence systems.

Table 16: Energy consumption within the organisation {GRI 302-1}

	Unit	2021	%	2020	%	2019	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,262.65	35%	1,168	32%	1,204	34%	8%
Gasoline	TJ	32.03	1%	25	1%	78	2%	26%
Natural gas	TJ	822.55	23%	738	20%	751	21%	11%
Electricity for own consumption (produced and acquired)	TJ	408.07	11%	404	11%	375	11%	1%
Total energy consumption within the organisation from renewable sources:	TJ	2,297.53	65%	2,478	68%	2,340	66%	-5%
Palm oil	TJ	2,025.78	57%	2,125	58%	1,997	56%	-5%
Wood chips	TJ	159.97	4%	168	5%	173	5%	-5%
Electricity for own consumption (produced and acquired)	TJ	111.78	3%	185	5%	170	5%	-13%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	0%
Total energy consumption within the organisation	TJ	3,560.18	100%	3,646	100%	3,544	100%	-1%

Alperia has obtained UNI 11352 certification, which confirms the results in terms of energy savings achieved by the Companies that provide Energy Services in the industrial sector and, as noted above, has set the objective of obtaining ISO 50001 certification first on two pilot sites, to be certified at the beginning of 2022, and then extending the process to the entire Group.

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

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Establishing energy management at Group level	<ul style="list-style-type: none"> * Revision of the data collection and aggregation system of the different BUs on the basis of monitoring findings * Extension of the frequency of energy monitoring * Revision of the system for collecting and aggregating data from the premises managed by Facility Management * Installation of measuring instruments 	2022	-	-		Ongoing
Reduction of energy consumption in buildings and plants through targeted energy efficiency initiatives	<ul style="list-style-type: none"> * Start of ISO 50001 certification process * Completion of voluntary energy audits on all company sites * Implementation of energy efficiency projects on both civil and operational sites 	2021	Energy consumption (TJ)	-	3.560 TJ	✓

7.3. Emissions {GRI 305-1, 305-2, 305-3, 305-4, 305-7}

“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 167 green (i.e., electric or hybrid) vehicles. In addition, we have provided ad hoc subsidies to encourage green mobility and the use of public transport, and we have provided 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). A commitment that will be further strengthened in the future through the Mobility Manager position established in 2021.*

The management of emissions is closely linked to the new energy management process. After carrying out an analysis in 2020 to understand the volume of emissions are generated and where they derive from, further improving the process already started in previous years, Alperia has started to define an internal process for the management of this information. In particular, the aspects addressed include:

- 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 power plant, which will replace the use of natural gas, went into operation at the end of 2021;
- the use of SF6 gas (by improving monitoring of consumption and evaluating new insulation solutions in the future)

In addition, in 2021, Alperia signed **Amazon's Climate Pledge** and signed up to the **Science Based Target Initiative**. Furthermore, as defined in the business plan update, after achieving Carbon Neutrality for operational emissions (Scope 1 and 2) in 2020, the Group intends to further improve its Scope 3 emissions to accelerate the path to **Net Zero**. Also in 2021, Alperia offset a total of 2,638.10 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 01/01/2021 to 31/12/2021.

All this allows Alperia to contribute to the provincial Climate Plan 2050 by reducing its emissions. South Tyrol currently generates 5 tonnes of CO₂ per capita per year (at European level it is 9 tonnes), which, according to the Climate Plan, will have to be reduced to 1.5 tonnes of CO₂ per capita per year. In this scenario, CO₂ emissions from the energy sector contribute significantly to the increase in greenhouse gases responsible for climate change. Hence the commitment of Alperia, whose Business Units continue to generate tangible results for the region. The main impacts, measurable at the end of the plan, will be over 303 kilotons of CO₂ avoided, over 85% of retail customer base provided with green products (both electricity and gas).

7.3.1. Our climate strategy

We want to be a reliable partner for the energy transition and are committed to reducing our own emissions and aiming for climate neutrality by 2024. The strategy to achieve this important goal **consists of 3 steps**:

- 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;
- define targeted action to reduce them, developing and adopting new technology (e.g., converting existing plants to biomass, developing energy efficiency projects in 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 CO₂e and energy savings, including through ISO 50001 certification, with the aim of increasing the reduction of emissions;
- take action to offset remaining emissions (Scopes 1 and 2) by joining specific climate protection programmes. In this way, we want to save more than 303 ktons of avoided CO₂e emissions. In 2020, we achieved Carbon Neutrality for operational emissions (Scope 1 and Scope 2), with offsetting through VCS and Gold Standard certificates.



Monitoring and reducing emissions

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 those 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).

Specifically, we estimated the generation of **83,583 (82,443 tCO₂e** direct and indirect market-based in 2020), of which 5.76 SO_x and 47.09 NO_x in 2021. The gross, direct greenhouse-gas emissions (Scope 1, which also includes SF₆) deserve particular attention, which were 50,820 in 2021 (45,483 tCO₂e in 2020). This is a physiological change, the result of data-collection refinement which has led to a broader and more complete view of the situation. NO_x and SO_x have adverse effects on climate, ecosystems, habitat and agriculture, as well as human and animal health, leading to deterioration in air quality and ocean acidification. These emissions come from combustion processes, which relate to a small part of the Alperia business.

Table 17: GHG emissions^{*1} {GRI 305}

	Unit	2021	2020	2019	YtY variation
Gross direct (Scope 1) GHG emissions ^{*2}	tCO ₂ e	50,820	45,483	52,709	12%
Biogenic CO ₂ emissions ^{*2}	tCO ₂ e	10,922	11,364	3,551	-4%
Gross location-based energy indirect (Scope 2) GHG emissions ^{*3}	tCO ₂ e	25,474	34,878	34,662	-27%
Gross market-based energy indirect (Scope 2) GHG emissions ^{*4}	tCO ₂ e	21,841	25,596	39,393	-15%
Gross other indirect (Scope 3) GHG emissions ^{*5*7}	tCO ₂ e	2,871,885	2,833,961	32,096	1%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	87,217	91,725	90,882	-5%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	83,583	82,443	95,653	1%
Total GHG emissions location-based	tCO ₂ e	2,959,102	2,925,686	122,978	1%
Total GHG emissions market-based	tCO ₂ e	2,955,469	2,916,404	127,749	1%
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	-12%

Operational GHG emissions intensity (Scope 1 & 2, market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.01	0.02	67%
Total GHG emissions intensity (Scope 1, 2 & 3, location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.68	0.55	0.03	23%
Total GHG emissions intensity (Scope 1, 2 & 3, market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.68	0.55	0.03	23%

^{*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 2020. The increase in emissions is due to an update in the emission factor.

^{*3} Location-based emission factor used for purchased electricity: ISPRA (2018) 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 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 (845,739 tCO₂e) and non-renewable energy electricity (1,931,484 tCO₂e). Emission factors used: DEFRA and cargo manifest.

^{*6} Biogenic emissions are included in ratio.

^{*7} The increase in 2020 of Scope 3 emissions is due to the accounting of downstream emissions relating to the sale of non-green products (gas and electricity).

Proportion of emissions	Unit	2021	2020
Scope 1	%	2.1%	2%
Scope 2	%	0.9%	1%
Scope 3	%	97.1%	97%

Emissions avoided	Unit	2021	2020
Scope 1 ^{*1}	tCO ₂ e	1,834	1,935
Scope 2 ^{*2}	tCO ₂ e	668	674
Scope 3 ^{*3}	tCO ₂ e	1,689,609	2,159,539
Total emissions avoided ^{*4}	tCO ₂ e	1,692,112	2,162,148

^{*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.

As part of the process of energy efficiency and, consequently, of reducing emissions, the switch **from fossil to green energy sources** for the supply of sites and plants is included. One example is connecting Edyna's headquarters to district heating. In addition, the Heat and Services Business Unit itself has among its objectives the switch from natural gas for production to the use of biomass. Alperia also has two storage tanks, one in Sesto and the other in Bolzano. The Bolzano tank has a capacity of 5,800 m³ and uses thermal energy from the local municipal solid waste incinerator, reducing the consumption of fossil fuels and CO₂ emissions in the city. A detailed analysis has also shown that there are no Group activities that involve the emission of other climate-altering gases. Given the large share of renewable energy used by Alperia, this results in an overall GHG (greenhouse gases) Intensity (Scope 1, 2, 3) of 0.68 **(0.55 tCO₂e/MWh in 2020) and a market-based operating intensity (Scope 1 and 2) of 0.02 (0.02 tCO₂e/MWh).**

The climate-neutral status of green gas – one of Alperia's sustainable products – is certified every year by the independent body TÜV NORD. Alperia customers are therefore guaranteed that all greenhouse-gas emissions generated are offset by a certified climate-protection project. Alperia **offset 24.256 tonnes of CO₂** in 2021.

From 2020, with the aim of making the monitoring of GHG emissions even more comprehensive, Alperia has expanded the emissions inventory to include part of indirect downstream Scope 3 emissions from the sale of products from traditional

fossil sources. In addition, it has implemented a reporting system of avoided emissions divided by Group company and Purpose, resulting from all the projects and activities that the Alperia Group has put in place to reduce its carbon footprint. The projects that the Alperia Group has carried out in 2021 to reduce greenhouse-gas emissions have been numerous and relate to different fields of the company's activities. They include those closely linked to the core business, such as the production of electricity from renewable sources and to the use of electric company cars, the provision of electric company bicycles for its employees to travel between Group sites and compensation projects to offset each printed sheet of their publications. Avoided emissions amounted to 1,692,112 tCO₂e. This activity was carried out with the intention of completely offsetting the Scope 1 and 2 emissions of the entire Alperia Group and to meet the target of additional avoided emissions that the Alperia Group has set for the five-year period 2020-2024 equal to 303 ktCO₂e, with a positive impact on the emission reduction targets set by the Autonomous Province of Bolzano of 5.2% (also in the five-year period 2020-2024).

7.3.2. Sustainable Mobility

Alperia has always promoted more sustainable mobility, convinced that even everyday actions such as travelling to and from work can be fundamental in reducing emissions and restoring the environment. In 2021, to further strengthen this commitment, it established the position of the **Mobility Manager** and presented the **Home-Work Travel Plan** to the relevant 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 five 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.

The Plan benefits from the decision to extend smart working (based on a mixed format) and comes with Alperia already well prepared for green travel with:

- **Bike grants:** created with the aim of encouraging the purchase or long-term rental (24 months) of e-bikes. The initiative, already offered at the beginning of 2021, will be launched again at the start of the new year and will give offer a company grant of €240 for three models (city bike, mountain bike and trekking bike);
- **Incentives for public transport:** Alperia provides for a company grant of €240 if the number of kilometres travelled exceeds 2,000 per year. The data on kilometres travelled can be taken from the Alto Adige Pass to simplify the grant recognition process;
- **Mobile cycle workshop:** the initiative involves periodically setting up mobile cycle workshops at the Group's main sites. Now in its second year, it will be offered again in April 2022;
- **Charging and inflating stations:** to further encourage the use of bicycles, both electric and non-electric, Alperia has decided to invest in maintenance equipment by providing tyre inflation stations and recharging stations for private cycles at its various locations throughout the country;
- **Park Sharing:** the scheme allows you to share the parking space with a colleague and thus halve the monthly rental cost.
- **Showers and lockers:** cyclists are provided with showers and lockers to facilitate the use of bicycles by people who have to travel longer distances to work.

The Plan will be supported by a Communication Programme, the main objective of which will be to circulate information on the results that the Home-Work Travel 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.

Not only that the **Alperia for Sustainable Mobility** project won the **2021 Sustainable Mobility Award**, which was launched to encourage companies to develop innovative ideas and strategies for more sustainable mobility. Out of 17 entrants in the competition, Alperia SpA managed to impress the jury by presenting a plan with measures that actually avoid creating traffic. The action was coordinated by the Green Mobility department of STA (Strutture Trasporto Alto Adige SpA). The award consists of a cheque for €6,000 which Alperia donated entirely to the non-profit association Independent L. from Merano, which, as a non-profit centre for people with disabilities, develops sustainable projects for barrier-free mobility for all. In particular, thanks to the cross-border project ITAT-2034|GATE, financed by the EU and the Interreg V-A Italy-Austria 2012-2020, the association has provided the first ten parking spaces reserved for disabled people in the Municipality of Bolzano with latest generation parking sensors. The Find Parking Spaces app shows, in real time, whether reserved parking spaces are currently free or occupied. The wireless sensors use LoRaWAN radio technology, for which there are already several low radiation antennas in Bolzano.

As part of the routine renewal of the Group's vehicle fleet, the target of **172 green** (i.e., electric or hybrid) vehicles was reached, surpassing the ambitious targets the Group had set itself. Of these, more than 120 are fully electric, that is, Zero-Emission vehicles. The number of green vehicles is almost 100% of the group's "electrifiable" vehicles (it should be noted that not all company vehicles are considered "electrifiable", as in the case of special vehicles such as trucks or vehicles

used for operations in mountainous areas with adverse weather conditions). Increasing the range of electric vehicles on the market will allow further increases in the green fleet in the coming years.

7.3.3. The New Alperia Sites

Sustainable, integrated, focused on well-being

In 2021, the executive planning of the new Alperia headquarters in Merano was completed, followed by the tender process. Work will begin in spring 2022 and continue until summer 2024. The building will aim 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 million (excluding VAT).

The new projects in the field do not end there. Planning has begun for **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. Work on Alperiatech – the name of the site – will start at the end of 2022 with delivery scheduled for 2025. Here, too, high standards for energy usage and well-being are envisaged, with the aim of certification similar to that which will be obtained for the Merano site, including the 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.

A renovation project will also be carried out at **Alperia's headquarters in Via Dodiciville in Bolzano** to improve energy efficiency. Work will then be carried out on the installations and the façade with completion during 2022. Finally, at the Resia site, the main building will be renovated, and windows and systems will be replaced. Here, the timetable foresees the start of design in 2022 and implementation from the following year.

7.3.4. Noise Pollution

We limit plant noise levels

Alperia is not only committed to reducing the CO₂ emissions deriving from its activities, but also to limiting environmental noise produced by its plants. There were no reports of noise pollution from the installations in 2021. The noise levels measured at district heating plants fall within the limits set by current regulations. All the information on these issues can be found in the Alperia Greenpower and Alperia Vipower EMAS declarations, updated in 2021 and available on them www.alperigroup.eu website.

Strategic objective: We aim to support the the Province of Bolzano's 2050 Climate Plan and reduce our greenhouse-gas emissions.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Set up reporting on greenhouse-gas emissions at Group level	<ul style="list-style-type: none"> * Establishment of reporting on greenhouse-gas emissions at the Group level * Implementing monitoring of greenhouse-gas emission reduction activities and improving reporting * Offsetting Group Operational Emissions 	2023				Ongoing

Reduce emissions within the company	<ul style="list-style-type: none"> *Implementation of a series of initiatives to promote sustainable mobility among employees: <ul style="list-style-type: none"> - setting up private electric bicycle charging stations at all sites <ul style="list-style-type: none"> – expansion of the company's fleet of electric bicycles at all locations – creation of parking spaces at each location for free charging of employees' private electric cars – setting up mobile bicycle repair shops at the main sites - installation of equipment for self-maintenance of bicycles at each location 	2020-2023	-	-		Ongoing
Reduction of emissions in the heat and services sector through the application of environmentally sustainable technologies and optimisation measures	<p>Biomass Plant: work started in October 2020 and due to COVID-19 completion date postponed to the end of December 2021</p> <p>* New cogeneration plant in Chiusa: work nearing completion. Plant start-up by the end of March 2022</p>	2017-2021	t CO ₂ e avoided	-	29,420	✓
Making the Alperia Group Carbon Neutral by 2024	*Offsets for operational emissions (Scope 1 & Scope 2) from 2020 onwards by the Group signed on to the Science Based Target Initiative and Climate Pledge, and initiated a process to establish the path to NET Zero	2020-2024				✓
Saving over 303 kton of additional avoided CO ₂ equivalent emissions	<ul style="list-style-type: none"> * Calculated the absolute avoided emissions (Scope 1, 2, 3) for the whole Group * Identified projects to avoid additional emissions for all Business Units 	2020-2024	additional kt CO ₂ e avoided	303	–	Ongoing
In three years, 50% of its own vehicle fleet will be electric and operate with zero emissions	Measures achieved and exceeded	2017-2021	Number of electric vehicles in fleet	120 electric/hybrid vehicles by 2020 and 170 by 2021	172 (167 at 31/12)	✓



Customers

We want to provide our customers with all the tools to build a more sustainable future. We do this by working with them in an open, transparent and agile way, putting mutual trust and respect at the heart of the relationship.

7 AFFORDABLE AND CLEAN ENERGY



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

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



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

11 SUSTAINABLE CITIES AND COMMUNITIES



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

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



We ensure sustainable patterns of production and consumption

In figures

Total customers	369,406	Complaints per 100 customers	0.12
New customers in 2021	+8%	Percentage of complaints promptly processed	99.5%
Percentage green products on new clients	100%	Total number of identified leaks, thefts, or losses of customer data	0

8.1. Customer Satisfaction {ALP1; ALP2; GRI EU3}

In 2021, Alperia supplied electricity, natural gas and district heating to **369,406** households, large and small businesses and public institutions. 80% of customers have signed contracts for electricity, 19% for gas and 1% for heat. We have always wanted to build a direct and transparent relationship with each of our customers, using a variety of communication tools. These include the website, call centre, toll-free phone number (active at least 35 hours a week in accordance with the service quality criteria imposed by ARERA, the Authority), Energy Points throughout the territory, social networks and also apps. These are varied tools that demonstrate our desire to invest not only in the digital relationship with our customers, but also in physical contact. We want to be present in the local areas, to demonstrate our proximity to the communities. That's why, in addition to the services we make accessible online, after opening three Energy Corners in shopping centres in Venice, Padua and Treviso, with the addition of the Energy Point in Vicenza, in the heart of the city, we are opening a new store and two new Energy Points in Verona in 2021, with the aim of opening others in 2022. In addition, in 2021, we recruited and trained around 70 agents, creating a nationwide network. They are 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.

Our commitment is also reflected in some important awards. **Altroconsumo**, the magazine of the consumer association of the same name and one of the most important in Italy, has named us Best Operator in the gas-supply sector, after analysing multiple criteria and monitoring the top twenty providers by market share. The criteria used in the survey include contracts and general conditions of supply, customer satisfaction, monitoring of the complaints and how they are handled by companies. And we also took second place in the electricity category.

In 2021, we also carried out a survey on Alperia's **Brand Awareness** in Veneto and Piedmont. From these surveys it emerged that we need to build a stronger link with these areas, in order to raise awareness of the Alperia Group and to highlight the value generated including outside South Tyrol. This is a commitment that we will pursue with determination.

Our customer satisfaction survey, planned for 2021, has been postponed because we believe it is more appropriate to carry out when the pandemic is behind us, 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 stress, however, that even during the most critical months of the pandemic, we did our utmost to provide physical access to our counters, always operating in compliance with regulations and in full respect of safety protocols. In addition, we gave customers the opportunity to make an appointment at a specific time via the web or 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. A system that was very much appreciated. 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. This is an area that we intend to improve further, favouring less bureaucratic and more "immediate" management. The Alperia **Facebook** page itself has 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.

8.1.1. New Partnerships

Alperia has finalised several valuable partnerships with the aim of being increasingly present in new areas. First, we launched a project in Veneto with the national and regional Rugby federation. The **Alperia – Rugby for All** project aims

to promote the educational and sporting values of rugby through more than twenty Rugby Festivals organised by the Veneto Committee's technical structure with the support of Alperia for the supply of materials. Starting with children, the programme is full of vital educational factors that Alperia has chosen to support, confirming its focus on values and lifestyles, which have always been a fundamental part of the company's identity. This commitment testifies to the focus on the territory, local communities and the future of the next generations.

Since 2021, we have been the Official Green Partner of the **Juventus FC** football club and will provide 100% green energy to the Allianz Stadium. The aim of the partnership is to help Juventus on its path to sustainability by supplying energy from renewable sources, be it electricity, gas or heat. The partnership also includes new opportunities for Juventus fans who will be involved in a joint journey towards sustainability and environmental protection: the company will give away 12 kilowatt hours of 100% green energy for every Juventus victory in the league and European cups through its 100% Green Alperia Energia Juventus. And that's not all. Customers will get the same energy that is used to light Juventus and the Allianz Stadium. The goal now is to hold the first Carbon Neutral football match in Serie A.

Equally significant is the PPE signed with **Barilla**, a leading Italian food group, which will purchase green energy from the Resia power plant for the next three years. This is an important and valuable agreement because it certifies not only the use of green energy but also its origin.

In South Tyrol, Alperia Smart Services has extended the framework agreement with the **Association of South Tyrolean Cable Car Operators** for the next two years (2022 and 2023) for the supply of certified green energy to cable car companies. The energy supplied to the installations is renewable and produced locally in our Alperia hydroelectric power plants. In addition to the competitive energy prices provided for in the framework agreement, cable car companies that choose Alperia will also receive Green Energy certification, which allows them to certify themselves as a sustainable business, an increasingly important aspect in the tourism sector and particularly in ecotourism.

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.

"More cooperation with local companies is desirable."

Comment by a collaborator; Stakeholder Survey 2021

Alperia replied: *With the Alperia Bartucci and Gruppo Green Power companies, we have worked to implement energy efficiency projects for large industrial and commercial groups, as well as for apartment blocks and individual homes (operations supported by the 110% Superbonus) in cooperation with the South Tyrolean local enterprises network ARO and Ivh.apa Confartigianato Imprese. 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 professionali altoatesini – so that all member SMEs can use green gas.*

8.1.2. Energy Efficiency to Create Value

In 2021, we launched two very important products that, each in their own area, bring a new way of producing and consuming energy to the market. We are talking about **MyHome** and **Smart Land**. 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. Depending on the size of the installed system, up to 4,500 kilowatt hours (kWh) of electricity can be used per year. For comparison, the average energy consumption of a washing machine is 200 kWh per year. 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.

The second innovative product launched on the market in 2021 was Smart Land, i.e., smart sensors with a digital infrastructure to for more targeted irrigation of fruit-growing areas, conserving resources and saving 30% or more of water. 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 Smart Services offers a complete package that includes both the sensor and the technical data transmission.

In 2021, **Alperia SUM** (a company that joined the Alperia Group in 2019) launched a project for companies in the Veneto region. The aim is to create **energy communities** among companies, encouraging the spread of photovoltaic systems and, more generally, the generation and consumption of green energy. This strategic activity allows Alperia to further strengthen its presence in the northeast, promoting a more sustainable approach to energy. The integration of Alperia SUM with the processes and procedures of Alperia Smart Services continued. Since 2020, all purchases made by Alperia Smart Services have used the same pricing tool that updates market prices with real-time quotes, and end-customer billing is also done by Alperia Smart Services. In 2022, the same insurance company will be used for credit risk coverage and gas purchases will also be made directly from the ASS-A company. In terms of sustainability, Alperia Sum has made important steps forward, reducing the use of paper, making all bills paperless, digitising processes and favouring electronic payments (75% through SEPA Single Euro Payments Area and 25% by bank transfer). The goal for the future is to continue to increase the number of customers using green products (currently the green volume is 26%, up from 2020).

Gruppo Green Power is also involved in energy efficiency. It became 100% owned by the Alperia Group at the end of 2020. Boasting strong local ties with the north of Italy, as well as the Marche and Lazio regions, Gruppo Green Power has been a supplier for many years of domestic solutions for photovoltaics and energy accumulation, as well as heat pumps and heat recovery boilers. During 2021, the company redefined its business model, deciding on one hand to focus on a select network of agents to work with customers and on the other to establish close partnerships with construction companies and design firms. It should be noted that Gruppo Green Power successfully settled a dispute with five agents who were claiming €700,000 in unpaid wages. All of the agents' claims were rejected by the Venice labour court, and they were ordered to pay Green Power's legal costs.

Alperia Bartucci is equally committed to energy efficiency. In 2021, the company achieved significant results in climate strategy by offering companies decarbonisation advisory services. With energy prices rising steadily, ESG factors have become crucial for the competitiveness and sustainability of companies over time. The service starts by monitoring the company emissions, then establishing a path with a precise target to reduce emissions on the basis of the data collected and finally identifying concrete solutions to be implemented. The partnership with the Feralpi group is a good example of this work. The steel group in Brescia decided to begin the journey to becoming climate neutral by adopting Alperia Bartucci's tailor-made strategy. The strategy is based on artificial intelligence with the installation of Sybil Steel for advanced control, energy monitoring and strategic CO₂ management.

"Alperia must commit to reducing all emissions from its client portfolio."

Customer comments; Stakeholder Survey 2021

Alperia replied: In 2022, a new company called Alperia Green Future will be established, following the Alperia Group's aim to be an increasingly sustainability-focused company and an energy transition partner for our customers. Alperia Green Future's activities will be developed along 4 main axes, which also represent strategic development factors for local businesses and communities:

1. 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 and Superbonus 110%).
2. Strategic Business Consulting. A high-level consultancy aimed at defining a decarbonisation strategy for companies or public bodies.
3. Energy Performance Contracts. Energy Performance Contracts are contracts where Alperia Green Future supports the investment of an energy efficiency and/or decarbonisation project, sharing the benefits gained with the end customer.
4. Artificial Intelligence. The Sybil Solutions Artificial Intelligence solutions are advanced automation systems that predictively optimise complex production processes and building climate control systems.

Alperia, together with Alperia Bartucci and Gruppo Green Power, already has numerous energy efficiency activities. In particular, in 2021, with Ecobonus, Sismabonus, Bonus casa and Bonus facciate, Alperia Bartucci worked with more than 1.479 private customers and developed 78 EPC (Energy Performance Contract) projects for industry, with a total annual saving of 4.460 toe (tonnes of oil equivalent) for a total of 11.996 tCO₂e of avoided emissions into the atmosphere (20,818 tCO₂e in 2020). Added to this is the decarbonisation advisory service for companies. This is a very important project in the light of the rising cost of energy. Please see the following section and the Sustainable Products and Services section of the Development and Innovation chapter for further updates.

8.1.3. Complaints management

The Alperia call centre employs bilingual employees who answer customer enquiries from Monday to Thursday, from 8 a.m. to 4 p.m., and on Fridays from 8 a.m. to 12 p.m. Last year, the call centre was expanded with additional staff hired to respond to the high number of calls received due to COVID-19. In addition, the call centre was also integrated into Salesforce. In 2021, the number of complaints for every hundred customers was 0.12. Alperia has set itself the target of responding to 99% of calls received each month and in 2021 it reached 94%, down from 96% in 2020. This drop in service levels is explained by the sharp increase in calls (+51.67%) recorded during the year. In detail:

- 2020: 82,921 incoming calls, of which 96.3% were handled
- 2021: 125,765 incoming calls, of which 93.6% were handled

This increase is mainly due to higher electricity and gas prices. As of June 2021, Alperia therefore started to work with an external contact centre in Bolzano (Provoice) to react to the sharp increase in calls. So far, 7 people have been trained to work exclusively for Alperia and we are still strengthening the team to guarantee a high service quality.

Please note that ARERA (Italian Regulatory Authority for Energy, Networks and Environment) requires a 85% monthly response rate to calls received. 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 improve even further by increasing monthly call-response rates to 100% and reducing complaint handling to seven days.

Furthermore, with the aim of constantly improving 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. According to Alperia's monitoring – required by law – there were 433 complaints in 2021. 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 2021, Alperia processed 99.5% of complaints on time, compared to a target of 100%. In addition, we have launched an online reputation project for the Gruppo Green Power, which in previous years had been the subject of negative media coverage as a result of the previous management. To resolve these situations, the Group has revolutionised its customer management, introducing a toll-free phone number with call centre available to customers and is building a CRM for structured customer management. All complaints are handled and resolved promptly by a commercial, legal and technical task force. In 2021, there were no recorded interventions with the conciliation service.

Strategic objective: We aim to proactively manage complaints, in order to prevent reputational and operational risks.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Introduction of a standardised, Group-wide system for handling complaints		2021	-	-	-	X

Strategic objective: We want to offer our customers fast, solution-oriented customer service.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
99% of calls to the toll-free phone number answered.	* Increase in staff answering at the call centre due to the significant increase in calls during COVID-19	annually	Percentage of telephone calls answered	99%	94%	X
100% of complaints received from customers are processed within 30 days	* Further standardisation and refinement of responses to complaints. Continue to closely monitor the timing of responses. Involve other staff in more standardised/less-complex responses. Containment of numbers (complaint index)	annually	Percentage of complaints promptly processed	100%	100%	✓
For a better understanding of the causes, all complaints were divided into subgroups and analysed, starting in 2018		✓	Percentage of complaints analysed	100%		✓
Number of complaints per 100 customers less than 0.14		annually	Number of complaints per 100 clients	0.14	0.12	✓
Improvement of customer satisfaction	* Scheduling of a new customer satisfaction survey to be carried out in 2022	2020-2024	Customer satisfaction index	90%	87.2% (2018)	Ongoing

8.2. Marketing and transparent communication {GRI 417-2}

Alperia has always used transparent and direct communication with its customers. To do this, we have equipped ourselves with various tools to engage stakeholders and get them involved. In particular, in 2021, we launched the following marketing and communication activities:

- **Press and online:** Announcements, PR articles, customer website (www.alperia.eu) and institutional website (www.alperigroup.eu), social media, online portal and customer apps. During the year, in total there were 1,902 (2,007) print and online articles relating to Alperia, of which 1,075 (1,028) were in the local press, 790 (948) in the national press and 37 (31) in the international press. These articles reported on events at Alperia (e.g., new acquisitions, divestments, opening of new Energy Corners/Energy Points), COVID-19 initiatives (e.g., donations) and only in a couple of cases had a negative tone, referring to the presence of cracks in the Valdaora dam, the leakage near the dam in Curon Venosta and the risk for fish fauna connected to the opening of the dams in the Fortezza reservoir and in the Monguelfo dam. All these situations 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 Points:** We continued Energy Point activities in South Tyrol, supporting our customers with qualified advisors and call centre staff, both in person – when possible and with appropriate safety measures – and online. In addition, to demonstrate our proximity to our new customers in the Veneto region, we have opened a new store and two new Energy Points in Verona.
- **Stakeholders** were involved with five roundtables (two in Veneto and three in South Tyrol). Representatives, customers and opinion leaders took part. Various sustainability issues were discussed at each table, identifying trends, targets, needs and possible improvements. At the end, an online survey was launched to which 790 people responded. The results will help define the matrix for the new sustainability plan.
- **Events:** In 2021, with all possible safety measures in place, some face-to-face events were restarted after their suspension due to the pandemic in 2020. On 31 July, we brought the prestigious Campiello literary prize to Bolzano. Numerous literary enthusiasts took this opportunity to meet and listen to the authors up close. We also took part in the Urban Play event organised as part of the Asvis National Festival of Sustainable Development in Bolzano, launching the Clean Up initiative to beautify banks of the Talvera and Isarco rivers. We thereby raised awareness of the importance of using waste to create new energy, which takes place every day in Bolzano's district heating system.
- **Surveys:** in 2021, Alperia carried out a survey on brand perception in Veneto and Piedmont. The survey revealed that the Group's brand awareness needs to be strengthened, in line with expectations given that Alperia has only recently started operating in these areas. The distinctive brand values are, however, positive and in line with our positioning, therefore characterised by mountains, green and, of course, energy. We also involved our staff members working at the headquarters/stands in a one-to-one survey. It was found that the most important elements that motivate customers to come to Alperia stands are price, consultancy service and being a green supplier, and above all that the perception that the Alperia Group's values are closely linked to the service provided. Customers particularly appreciate the transparency and application of sustainability criteria in the company's decisions. The new customer satisfaction survey has been postponed.
- **Intranet:** Alperia uses its intranet to communicate with its employees and strengthen corporate cohesion. During 2021, we launched the new version, which is even more engaging and interactive. We want this to be a place where the company can come together in an efficient and organised way and where employees can share opinions between departments, management can convey important information and technology can be brought together.
- **Information evenings:** These events were suspended due to the pandemic. However, we continued to talk to municipalities – especially in relation to the installation of Smart Meters – using new ways of communication. In addition, in October 2021, Alperia Greenpower presented the project for the rehabilitation of the new Curon penstock to the population of Upper Vinschgau. The evening was attended by more than 100 people as well as the local press who reported on the event. Although all the inspections carried out by Alperia in the tunnel have always ruled out the presence of cracks, recent phenomena of groundwater surfacing in the underground rooms of some buildings in S. Valentino have led Alperia's technicians, as a precautionary measure, to begin radical waterproofing work on the entire section of the tunnel close to the village. The renovation work will be completed at the end of March 2022. The presentation event attracted a lot of interest.
- **Employees:** we distributed an abridged version of the Sustainability Report to our 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). In addition, every year, we scrutinise our advertising materials to ensure we are making the most 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). In 2021, we received one report of non-compliance of information and labelling of products and services, which we have adjusted accordingly;

- **Gadgets:** 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. At the moment, 35% of Alperia's total customers receive paperless bills. This equates to 100,000 fewer DIN A4 pages printed per year; this percentage includes energy and gas contracts on the open and protected market. Reseller contracts, where Alperia does not manage billing are not taken into account). By 2024, we would like to increase the percentage of customers receiving paperless bills to 75%.
- **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 4 out of 5. It also has a positive ranking on Trustpilot.com.

8.2.1. 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.alperiaigroup.eu/it/sponsoring.html>. Among the activities supported in 2021, there are a number of youth-related activities, particularly in the field of sport.*

In 2021, 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. This commitment has also seen an increase in the funds allocated by Alperia S.p.A. to smaller associations, faithful to its mission of supporting the local area, creating added value for the local economy and being close to the communities in which it 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.

8.2.2. Green Brand Award

Alperia was recognised as the best Green Brand in the world in the International Charge Energy Branding Award 2020, standing out among competing energy companies from the United States, Norway and Germany. The award recognises excellence in brand management and communication and is selected by a jury of independent, globally active experts from branding agencies, consultancies, universities and the marketing industry. The jury awarded Alperia in recognition that sustainability represents an added value for commercial purposes for us, which we support with a coherent multi-channel strategy. The award ceremony took place virtually, during the Charge Energy Branding conference in Iceland. This award, together with the recognition received from Altroconsumo, are an important acknowledgement of the path we have taken to establish Alperia as a provider of green and sustainable energy services, whose primary values are transparency and customer satisfaction. We also strive to involve citizens in the district heating project by explaining to them, including with apartment block meetings, the advantages of this system. We also organise one-to-one meetings and targeted campaigns.

8.2.3. Transparent pricing

“Low transparency of electricity costs, high electricity costs for charging stations”.

Community comment; Stakeholder Survey 2021

Alperia replied: *With indexed pricing, the cost of energy follows the market trend; if the price of energy falls, bills are lower and vice versa. Prices vary according to the National Single Price (PUN). The PUN is the reference price of electricity as recorded on the Italian electricity exchange and published by the energy market manager Gestore dei Mercati Energetici (GME). Fixed price offers, on the other hand, guarantee a fixed price for the energy component for a period of 12 months regardless of energy market trends. If the price of energy increases, there is therefore no effect on bills. In 2021, the cost of energy rose sharply as a result of international trends in energy commodities, with repercussions for end consumers. When it comes to the cost of electricity for charging stations, however, the cost of charging your electric vehicle at home coincides with the cost of supplying electricity to your home and depends on your energy supplier. It is certainly the cheapest way to recharge your electric vehicle. The cost of recharging at public stations for Neogy customers is within the average cost for this type of service in the country. In addition to the cost of supplying electricity in a public place – which is already higher than the cost at home – the investment in the construction, maintenance and operation of the charging network with public access must also be taken into account.*

Last year – and likely too for the whole of 2022 – there has been a sharp rise in electricity and gas bills. As specified by ARERA¹³, the increases reflect the trend of strong growth in the international prices of energy raw materials and the increase in the price of CO₂. In particular, the spot price of natural gas on the TTF (the European reference market for natural gas) increased, from January to December 2021, by almost 500% (from 21 to 120 €/MWh in average monthly values); Over the same period, the price of CO₂ more than doubled (from 33 to 79 €/tCO₂). The marked increase in fuel and CO₂ costs was therefore reflected in the wholesale electricity price (PUN), which rose by almost 400% over the same period (from 61 to 288 €/MWh in monthly average values). Similar effects on end-consumer prices were seen across Europe. New record high prices for wholesale energy products and CO₂ emission permits would – without countermeasures – lead to an increase of 65% in electricity bills and 59.2% in gas bills.

In Italy, specifically, the causes of the increase in prices are mainly due to a sharp rise in the international price of gas, which covers 39% of Italy's 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. Specifically, the increase in the cost of natural gas is due to lower available reserves. This is due both to the weather (the winter was longer and led to higher consumption) 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, the Government intervened with a buffer measure and Alperia also provided a package of measures. In particular, it launched the **Alperia Smile** offer for families, with which it locked in the price at the market value before the increases. This offer applies to domestic customers at their main residence, customers on the protected market, Alperia customers on the free market and customers of third-party providers. For a typical family, savings can be up to €200 per year by 2022, given the current price level. For SMEs, for several years, Alperia has been guaranteeing, both through the framework agreements signed with SWR-EA (Südtiroler Wirtschaftsring – Economia Alto Adige) and with **Rete Economia – WirtschaftsNetz (RE/WN)**, excellent services linked to transparent, clear and competitive tariffs, as well as a widespread presence in the local area for thousands of beneficiary companies in South Tyrol. Finally, Alperia supplies large industrial companies in South Tyrol on the basis of very flexible and competitive contracts aimed at strengthening their competitiveness on the international market.

¹³ https://www.arera.it/it/com_stamp/21/211230cs.htm

Strategic objective: We want to make our marketing communication and internal communication transparent, up to date and stakeholder oriented.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Expansion of website content dedicated to sustainability	Building of the website and intranet with sustainability content.	✓	-	-		✓
Regular meetings between stakeholders on sustainability issues	<ul style="list-style-type: none"> * Implemented translation * Subheading implemented * News implemented. * Distribution implemented 	2017-2021	-	-		✓
Reduction of complaints about the transparency of marketing and communications	*Stakeholder Management and Reputational Risk Management project launched to create a structured process for stakeholder and reputational risk management	2018-2021		-		✓
Full compliance with voluntary guidelines and codes of conduct on transparency of marketing communications		annually	Compliance with voluntary guidelines and codes of conduct on the transparency of marketing communications	100%	100%	✓
Consider aspects related to sustainability in the sourcing of advertising material	As far as printed matter is concerned, in the specific case of business cards, a worksite has been opened together with IT to find a suitable technical solution to create and store digital business cards with a QR code on smartphones so they do not have to be printed (at least for certain categories of employees not specifically involved in sales). For gadgets, we are focusing on an approach that favours quality over quantity, favouring those using sustainable materials in the higher price range rather than a wide distribution of low-cost, less sustainable products.	annually	-	-		✓
Consider aspects related to sustainability in customer documents and advertising materials		✓	-			✓

Certification of open days as Going Green Events		✓	-	-		✓
Increase in the number of customers receiving paperless bills	*New customers receive paperless bill as standard, they are only provided on request in paper form.	annually	% of customers receiving paperless bills	30 %	30%	✓

8.3. Cyber Security {GRI 418-1}

2021 was a year of consolidation for Alperia's **Data Protection & Security** structure. The unit operates with an innovative **Security and Privacy by Design** approach, according to which security and data protection go hand in hand and must be addressed from the inception of individual projects, with the aim of adopting the best risk mitigation to protect the security and business 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.

During 2021, all planned audits were carried out with company representatives to verify the regulatory compliance of Group companies. **Compliance** data from 2022 will also be monitored through a specific management application. This computerised model makes management more efficient by highlighting progress, creating greater synergy between departments and generating automated risk map control reports.

During the year, **ISO 27001** certification was renewed, covering the IT security management system, and extended to cover OT (Operation Technology).

To limit the risks of phishing and ransomware attacks, which are often related to human error, and to improve the awareness of each employee on these sensitive issues, Alperia has introduced an **automated training** platform that delivers e-learning courses on cyber security and data protection to all employees. At the end of each course there is a test, the results of which are analysed in an aggregated way, in terms of the companies to which they belong, so as to give a clear picture of which areas are the most vulnerable or where targeted improvements need to be made. 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. Through the same platform where the training courses are customisable, delivered in three languages (Italian, English, German) also provided through gamification systems, Alperia has provided specific training on data protection, designed and implemented within DP&S. This activity will be renewed also in 2022. The DP&S unit also continuously monitors possible threats through the analysis of multiple bulletins issued by specialised companies and, via the MyAlperia intranet, promptly alerts employees in the event of particular risks or threats.

As required by the ISO 27001 standard, Alperia has defined a security plan that it has shared with the IT department and the board, including the introduction of new technologies, methodologies and processes. This plan is based on contextual analyses of possible security threats. **EDR** – Endpoint Detection and Response – is one of the new tools Alperia has equipped itself with as a result of the scenario analysis. It 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, will be completed in spring 2022 and has been boosted by the introduction of **Multi Factor Authentication**. This is a method that adds a second layer of security to user access and transactions, greatly reducing attempted attacks. Other tools adopted in 2021 include **SIEM** and **SOC**. The former, Security Information and Event Management, allows anomalies to be identified by correlating information from several sources. On the SIEM, in addition to the cyber security dashboards, a new system of reporting data for the sustainability report has also been created, allowing data to be available 24 hours a day. The set of collected data, possible correlations and behavioural analyses can be analysed by the **SOC**, Security Operation Centre, an external structure operating 24 hours a day, which can rapidly deploy remediation measures to mitigate automated security risks. The SIEM is currently already operational, while the SOC will be operational by spring 2022. In addition to this, there is a further component implemented through technology called Threat Intelligence, an intelligence focused on the deep web and dark web that enables the identification of possible cyber threats that are still in a latent state. This is also an important activity to carry out checks on Alperia's online reputation, with targeted surveys on the web.

As part of its relationship and collaboration activities at regional and national level with organisations and institutions working in the prevention of cyber attacks, Alperia also signed an important memorandum of understanding with the Trentino Alto Adige Postal Police. The agreement makes it possible to define the adoption of operational modules for the security of the networks and information systems of the Group companies, as well as to promote the stable exchange of information for the prevention of possible cyber attacks, to protect the security of the provision of services and activities that are essential to the public. Staying in contact with these types of institutions is very important to Alperia, as is working with organisations specialising in security, such as **Clusit** – the Italian Association for Information Security and **CSIRT** – Computer Security Incident Response Team. In fact, Alperia applies the **National Framework of Data Security and Protection** issued by the Presidency of the Council of Ministers and the various Ministries, a tool that helps organisations define a specific path for cyber security and data protection with continuous monitoring of the activities implemented. Alperia is also working to adapt its information and document systems to the issue of the right to be forgotten established by the GDPR, through the development of a dedicated platform. In 2022, it is also intended to be certified ISO 27701, a further step in the area of secure data management.

Table 24: Customer Privacy {GRI 418-1}

	Unit	2021	2020	2019	2018	YtY variation
Total number of substantiated complaints received concerning breaches of customer privacy	No.	0	0	0	0	0%
I. complaints received from outside parties and substantiated by the organisation	No.	0	0	0	0	0%
II. complaints from regulatory bodies	No.	0	0	0	0	0%
Total number of identified leaks, thefts, or losses of customer data	No.	0	0	0	0	0%

Security figures

In 2021, Alperia did not encounter any significant IT security incidents, but threats did emerge. The protection systems blocked an average of 11,200 malicious emails (not only spam) and 1,500 malicious connection attempts every day. The number is also much higher than in 2020 (+460% of malicious emails) and reflects the continued growth of attempted attacks via email. At the same time, however, 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:

- 55 viruses: the figure compared to 2020 is clearly down (-90%), 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);
- 19 pieces of spyware (software that collects information about a user's online activity): the figure for 2020 has improved by 30%;
- 17 million malicious, suspicious or prohibited internet use incidents (activities related to suspicious or prohibited browsing): the value is + 570% compared to 2020 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 therefore 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;
- 270,000 malicious or unauthorised applications: increased for the same reasons noted above.
- 84,000 malicious or prohibited items of content: also up 56% compared to 2020 because as the number of threats increases, the number of blocks implemented on perimeter firewall systems increases. This category is an "of which" of the previous two: once the permitted Internet activities and applications have been blocked, the amount of malicious content handled in data traffic is unlikely to increase by much.

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

- Security awareness: 90% of 1159 users participation rate in security training. A percentage that can be improved but is considered adequate;
- Security awareness: 80% overall final test score. A percentage that can be improved but is considered adequate;
- Phishing simulation: 20% of clicked links, or click rate. A result that leaves room for improvement and is considered inadequate;
- Phishing simulation: 7% compromised access. A result that leaves room for improvement and is considered inadequate;
- Data protection: 88% of 1211 participation rate in privacy training. A percentage that can be improved but is considered adequate;
- Data Protection: 89% overall result final test score. This is the starting point of the Data Protection course learning level.

Table 25: Other indicators related to cyber security

	Unit	2021	2020	2019	2018	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
malicious emails	No.	11,200	2,000	4,000	3,000	460% ¹
% of malicious emails vs total mail processed	%	29	24	-	-	5%
malicious connection attempts	No.	1,500	1,000	6,000	22,000	50%
Each month, Alperia identifies and blocks an average of:						
viruses on local devices	No.	55	530	2,930	70	-90% ²
pieces of spyware on local devices (software that collects information about a user's online activity)	No.	19	27	31	40	-30%
malicious, suspicious or prohibited internet activities	No.	17,000,000	2,800,000	2,000,000	1,000,000	507% ³
malicious or unauthorised applications	No.	270,000	360	200	120	74900% ⁴
malicious or prohibited items of content	No.	84,000	54,000	250,000	250,000	56%
Each year, Alperia Security Awareness Program results:						
Security Awareness: % security training participation rate	%	90% of 1159 users				
Security Awareness: % overall result final test score	%	80				
Phishing Simulation: % of clicked links click rate	%	20				
Phishing Simulation: logins compromised	%	7				
Data Protection: % privacy training participation rate	%	88% of 1211 users				
Data Protection: % overall result final test score	%	89				

¹ In 2021, categories of malicious emails in general were added, i.e., not just spam. This decision was taken in order to harmonise the term "malicious" with data from other systems as well.

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

^{3/4} As a result of the generational change in firewalls, blocking rules were rewritten and the level of detection of malicious activity was raised.

Strategic objective: We aim to ensure the protection of all data and compliance with applicable safety standards.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Full compliance with privacy laws	* Sw implementation of the One Trust product to manage GDPR, during 2021 - - COMPLETED	annually	percentage compliance	100%	100%	✓
No security incidents involving information management and data protection	*ISO27001 recertification in June 2021	annually	security incidents	0	0	✓
Ensure business continuity in the event of computer incidents (such as server or power failures)	* Created the Data Protection & Security Department with the specific mission of defining guidelines for GDPR compliance and cyber security – Adoption of a SIEM solution (MS Sentinel) for continuous monitoring of cyber risks. Preparation of an evidence dashboard for compliance and risk measures – Preparation of the Group Security Plan – Mapping of IT risks for the Group – Integration of the GDPR for the new affiliated companies * Sw implementation of the One Trust product to manage ISO27001, under way during 2021	2022	preparation percentage	-	60%	Ongoing
Create a culture of information security among our employees to reduce risks	Launched and implemented the Cyber Security Training plan, with both training and TEST elements, for both Security and GDPR Privacy	2021	preparation percentage	-	100%	✓



Team

People are our strength. We invest in their growth, we support diversity, we support them with work-life balance measures, we create an inclusive and safe environment, where everyone is free to express their potential.

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 for gender equality and female empowerment

8 DECENT WORK AND ECONOMIC GROWTH



Promoting inclusive and sustainable economic growth and decent and secure employment



9.1. Employee Development {GRI 102-8; GRI 401-1}

2022: Acknowledgement and developments

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

Comment by a collaborator; Stakeholder Survey 2021

Alperia replied: Alperia accompanies its people 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 2021, 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.

Table 26: Information on employees and other workers^{*1 *2 *3 *4} {GRI 102-8}

Diversity employees	Unit	Total number of employees				Employment contract								Employment type							
		2021	2020	2019	2018	Permanent				Temporary				Full-time				Part-time			
		2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018
Women	Persons	294	261	230	195	274	244	211	182	20	17	19	13	193	173	147	121	101	88	83	74
	%	25	24	23	21	23	22	21	19	2	2	2	1	16	16	14	13	9	8	8	8
Men	Persons	882	826	787	750	830	779	750	708	52	47	37	42	859	807	769	729	23	19	18	21
	%	75	76	77	79	71	72	74	75	4	4	4	4	73	74	76	77	2	2	2	2
Total ¹	Persons	1,176	1,087	1,017	945	1,104	1,023	961	890	72	64	56	55	1,052	980	916	850	124	107	101	95
	%	100	100	100	100	94	94	94	94	6	6	6	6	89	90	90	90	11	10	10	10

^{*1} Alperia Bartucci is 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 2020 data.

^{*2} Employees who left the organisation on 31 Dec are included in the total number of employees per 31 Dec.

^{*3} Directors are included in employee numbers.

^{*4} The percentages communicated from 2019 are calculated for total employees, whereas in the 2018 Sustainability Report they were calculated for employment contract/type.

From 2020, Alperia has included the development of personnel and the development of talent in its business plan as one of its strategic objectives. This is fundamental to achieving its growth objectives and strengthening the current and future pillars of the Group's companies. The Group is made up of people, 89% of whom are employed on a full-time basis, 94% on a permanent basis, most of whom are subject to the rules of the National Collective Agreement for Workers in the Electrical Sector. The rate of recruitment of new employees in 2021 was 9%, with 111 people joining the Group, including 35 women.

Table 27: New employee hires and employee turnover*1 {GRI 401-1}

New employee hires		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	35	26	21	13	35%	13	17	2	3
	%	32	30	28	22					
Men	Persons	76	62	54	46	23%	24	28	22	2
	%	68	70	72	78					
Total new employee hires	Persons	111	88	75	59	26%	37	45	24	5
Total head-count on 31 Dec.	Persons	1,176	1,087	1,017	945	8%				
New employee hire rate	%	9	8	7	6					

*1 Hydrodata S.p.A. is not included in the 2020 data. Gruppo Green Power is not included in the 2019 data. Alperia Bartucci is not included in the 2018 data. The total number of employees of the Alperia Group in 2020 can thus not be compared to the total number of employees indicated for 2019 net of employees leaving plus new employees hired in 2020. This misalignment is due to a different scope of reporting for 2020 compared to 2019 (entry of new companies).

Employee turnover*2		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	15	19	7	10	-21%	0	7	1	7
	%	25	24	12	19					
Men	Persons	45	60	52	44	-25%	7	9	6	23
	%	75	76	88	81					
Total employee turnover	Persons	60	79	59	54	-24%	7	16	7	30
Of which retired		24				0%				
Total head-count as of 31 Dec.	Persons	1,176	1,087	1,017	945	8%				
Employee turnover rate	%	5	7	6	6					

*2 Employee turnover: employees who leave the organisation voluntarily or due to dismissal, retirement, or death in service; turnover per 31 Dec; employees who leave the organisation on 31 Dec are not included in employee turnover.

The year 2021 was focused on consolidation and evolution. The working arrangements put in place at the outbreak of the pandemic, a temporary form of **smart working** – pending the end of the state of emergency – were consolidated, with employees required to be at the company's premises at least two days a week. Smart working was, in fact, the subject of an agreement with the trade unions and will become a permanent fixture after the end of the emergency period for 8 or 10 days per month. In 2021, we offered a training course for managers to better supervise employees remotely and to explore the critical issues that can arise in agile working. In 2022, an employee survey will be repeated to better understand how remote working is perceived. In addition, following a proposal made by an employee through the MyIdeas tool on the company intranet, a ten-module course was developed with a **psychologist** who drew up useful advice on life-work balance during smart working.

With the aim of promoting the involvement of employees, Alperia relaunched **Team Alperia 2021**. The project was launched to boost team spirit and allow employees to get to know each other better through activities with colleagues in their area in a non-work environment. A budget was made available for any employee who wished to take part – on a voluntary basis – in the activity, which was often the result of a joint effort at Area level (e.g., short trips, guided tours, dinners, non-dangerous sports, etc.).

During the course of 2021, the HR department also launched a taxonomy of processes project for the companies Alperia, Alperia Greenpower, Alperia Trading and Edyna. It is important because it not only identifies roles, responsibilities, priorities and possible shortcomings in the processes involved but also creates greater clarity and transparency.

9.1.1. The evolution of leadership and personnel {GRI 404-2, 404-3; GRI 401-1}

Innovation, talent and entrepreneurship in business

Encouraged by the positive feedback received, the second edition of the **Talent Management** programme was launched in 2021, providing ad hoc training courses. Potential talented individuals were put forward by the managers or could apply for themselves. If assessed positively by a commission, they underwent an assessment aimed at highlighting strengths and development of talent. In 2021, 28 talented individuals were identified at Group level. The training programme included – as in the previous year – five training modules covering topics such as strategy, budget, marketing and sales, innovation and for the first time also the value of diversity. In a departure from the previous year, the talented individuals had to directly manage each module, receiving specific training for this purpose. In particular, three workshops on innovation and entrepreneurship are planned for 2022, with the aim of further promoting entrepreneurial thinking and awareness of the importance of innovation. For this reason, a specific workshop will be offered to all those who need this specific training for their work. In 2021, the first edition of the talent programme was also concluded with a certificate awarded to the participants summarising the development measures taken and any growth steps they had made in the meantime.

Convinced that to keep pace with change and invest in the growth of a shared corporate culture, it is essential to have a prepared leadership, Alperia has continued to devote specific attention to the **Leadership in Motion** project. In addition to continuing to organise workshops with managers from across the Group with the aim of creating a shared leadership culture, a workshop was also offered to new managers who had been hired in 2021. Pathways for **female leadership** have also been developed, with the aim of empowering women in key positions. To strengthen and continue working on the shared corporate culture, Alperia has also created a cultural group that operates at an intra-company level, dealing with topics such as Leadership, Performance Management, Meetings and Sustainability. The results of the working groups and the cultural group will be presented in 2022 at the **Leadership Forum** attended by all Group management.

Career development plans were implemented for 92% of directors, 2% of management and 2% of employees. The number of **annual interviews** considered essential for developing a culture based on feedback was 87% (83%) of staff, and feedback interviews were also carried out with female and male workers.

Table 29: Percentage of employees receiving regular performance and career development reviews^{*1} {GRI 404-3}

Percentage of employees receiving regular performance and career development reviews – Gender

	Unit	2021	2020	2019	2018
Women	%	2	3	3	4
Men	%	4	2	3	3
Total	%	3	2	3	4

Percentage of employees receiving regular performance and career development reviews – Employee category^{*2}

	Unit	2021	2020	2019	2018
Directors	%	92	5	19	36
Management	%	2	11	15	9
White-collar employees	%	2	1	0	1
Blue-collar employees	%	0			

^{*1} From 2021 only newly approved Career Development Reviews are included, as well as MBO Reviews. Since 2018, regular employee feedback reviews have been rolled out. Due to the fact that automated data on the % of feedbacks concluded is not yet available, these are currently not included in the indicator.

^{*2} Before 2020 the following breakdown was applied: Senior Management (directors+direct reports); Middle Management (2+3 level); Employees.

As from 2021 the following breakdown is applied: Directors; Managers; White-collar employees; Blue-collar employees

Finally, Alperia continued to focus on remote **training** in 2021, especially due to the continuing COVID-19 emergency situation, with 31,109 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). These are topics that will be investigated in the coming years as they are considered essential for a growing company. The courses take around half a day and due to being available digitally, they were more accessible to all employees. The training platform has also been extended to the employees of Alperia Smart Services and Alperia Ecoplus, but not to Alperia Fiber as its 231 model will be processed after the reorganisation.

Table 28: Average training hours {GRI 404-1}

Average training hours per employee – Gender						
	Unit	2021	2020	2019	2018	YtY variation
Women	Hours	28.8	17.1	15.9	14.9	69%
Men	Hours	25.7	20.4	21.6	19.7	26%
Total	Hours	26.5	19.6	20.3	18.7	35%

Average training hours per employee – Employee category*¹	Unit	2021	2020	2019	2018	YtY variation
Directors	Hours	26.7	34.1	28.2	31.5	-22%
Managers	Hours	38	33.2	25.3	28.4	14%
White-collar employees	Hours	24.7	16.4	19.2	16.5	51%
Blue-collar employees	Hours	26.4				0%

*1 Before 2020 the following breakdown was applied: senior management (directors+direct reports); middle management (2+3 level); Employees.

As from 2021 the following breakdown is applied: directors; managers; white-collar employees; blue-collar employees

These initiatives, combined with a shared corporate culture based on mutual trust, help strengthen team spirit and the bond with the company, thereby limiting the **turnover** rate, which in 2021 was 5% or 60 people.

The development of Alperia's **succession plans** is also progressing, an indispensable tool for coping with the demographic development of the working population and preventing the rushed replacement of key staff. A survey of key roles was carried out in 2020, involving the senior management of individual companies. In addition to defining the key roles and replacement timing, back-ups were also appointed in case of temporary absence of staff members. The business plan envisages around 91 retirements and 140 new joiners by 2024. In 2021, there were 24 retirements and 111 new joiners.

To provide management with useful data for the management of staff and activities, the **information dashboard** on employee attendance/absence, such as overtime, holidays, illnesses, etc., was improved, and the company intranet network was made more interactive and intuitive for users. **MyIdeas**, the intranet portal where every Alperia employee can send in suggestions and share projects, continues to be very popular.

Strategic objective: We aim to be an attractive employer for motivated employees.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Increase employee satisfaction to 43% (+3%)		✓	Employee satisfaction index	43%	50% (2019)	✓

Strategic objective: We want to support and challenge our employees in their further development.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Continuation and further development of individual development plans for future managers	* Extend individual development plans to other categories of employees * Also offer training courses for employees on leave	✓	Individual development plans (No.)	-	21	✓
Creating a High Potential Programme	* Implement the talent management programme for the "high performer" group and development of assessment activities for the "pillar" group	✓	Number of talented individuals	-	28	✓
Promoting digital skills	* 651 hours for office courses and 4573 hours for teams courses	✓	Percentage delivered	-	20,440	✓
Expanding e-learning programmes	Introducing an e-learning platform	✓	-	-		✓

Strategic objective: We want to establish a culture of open, transparent communication.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Organise regular feedback interviews with employees	*Extend annual interviews to the whole Group	2021	% of employees who regularly conduct feedback interviews	100%	87%	X
Raising managers' awareness of their importance as role models, with targeted workshops	* Continuation of the leadership programme	✓	Number of workshops for managers	-		✓

9.2. Diversity and equal opportunities

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

Comment by a collaborator; 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, 21% of women are in management positions and our gender pay gap is 9%, while for white-collar 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 – a testament to efforts to promote a healthy work-life balance for staff. Parental leave is one of the measures and in 2021, 95% of men took advantage of it.*

In 2021, Alperia appointed a **Diversity Manager** who is responsible for developing policies to foster the development of the Group's human resources, helping to create an inclusive and welcoming working environment through various measures and projects. With this in mind, a mentoring project has been launched, lasting approximately nine months, to integrate and improve the specific skills of the various generations of key positions and talented individuals within the Group. At the moment, 34% of the Group are over 50. For this reason, Alperia is also working on the succession plan, which from 2022, will include a specific section on senior management roles.

Gender is another important challenge. To date, 294 women have been hired by the Alperia Group, 25% of the total, 1% more than in 2020. In Governance, however, women account for 42%. To promote the growth of women, courses and workshops on female leadership are organised and the collaboration with Valore D, an association of companies promoting gender balance and an inclusive culture within companies, will continue. To attract more women into technical professions, we continue to invest in cooperation with universities and local colleges.

In addition, aware of the fact that increased participation of women in corporate life is also determined by **reconciliation measures**, incentives continue to be provided for flexible working hours, parental leave and parenting support tools such as grants for childcare services. In 2021 the **Family Audit** certification, awarded by the Family Agency of the Autonomous Province of Bolzano and the Chamber of Commerce for the Alperia Group, was renewed. This certificate demonstrates our efforts to improve the work-life balance of staff. All measures implemented in this area have been successful. In 2021, **parental leave** was taken by 100% of women and 95% of men, with 100% returning to work when expected. In total, more than 16,000 hours of leave were taken by women and more than 5,000 by men (including breastfeeding leave, parental leave and compulsory maternity and paternity leave).

With regard to remuneration, the **gender pay gap** in the Group is 0.92 on average (8%). In management, women earn on average 9% less than their male colleagues, for white-collar workers the percentage drops to 7%.

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

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Formalise diversity-management governance within Alperia	* During 2021, the training initiatives promoted by Valore D for “female leadership” training continued; Daniela Gufler was appointed as Diversity Manager; due to the continued smart working linked to COVID-19, there was no need to promote paternity leave to a greater extent	2021	-	-		✓
Promote measures to encourage female leadership)	Women’s leadership training and mentoring programme continued	2021	Percentage of women executives		21%	✓

Strategic objective: We aim to attract more women to technical professions.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Extend targeted marketing measures by personnel to raise public awareness of the issue of “women in technical professions”	*Information days in girls’ schools *Part-time technical positions have been advertised to attract women as well	2021	Proportion of women in the workforce (%)		25%	✓

Strategic objective: We aim to be a family-friendly company for both women and men.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Promote flexible shorter working hours for men and women and managers	Emergency smart working continued throughout 2021	2018-2021	Proportion of part-time staff (%)	-	11%	✓

Industrial Relations/Collective Bargaining Agreements

Strategic objective: We aim for standardised, fair conditions at the Group level.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Standardising Alperia Group trade-union agreements	Trade-union agreement for requesting access to the COVID-19 emergency wage supplementation scheme (Alperia Greenpower) Results-bonus agreement (2 for group employees, 1 additional note for Alperia Spa, Smart Services and Ecoplus) Working-time agreement for energy management activities (Alperia Trading)	✓	Number of new standardised union arrangements for the whole Group	4	5	✓

Reporting HR

Strategic objective: We aim to create a reliable and robust staff reporting process.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Improving data quality		✓				✓

9.3. Occupational health and safety {GRI 403-2; GRI 404-1}

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.

9.3.1. 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. This is why 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. Training is carried out regularly every year. In 2021, more than 31,109 hours of training were carried out, of which 11,371 were dedicated to security, 708 to cyber security and 60 to anti-corruption. The training was open to all Group companies and 1,216 employees took part. Among the topics covered, there were also insights into certification, sustainability and non-financial reporting, with a focus on GRI. The aim was to raise awareness among employees about these topics. In addition, the monthly report on quality, asset integrity, environment, health and safety continued to be published, in which any accidents at work are discussed and there is also a section on zero waste. This awareness-raising also continues with information bites on the company intranet and lessons learned.

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 to training, each employee is provided with Personal Protective Equipment (PPE) and suitable work equipment, which is regularly maintained and, where necessary, replaced.

The most significant risks for Alperia are assessed in the risk assessment document. For the management of accidents and near misses, we have had a procedure in place since the founding of Alperia to speed up the reporting of such events. In 2021, in particular, there were 21 accidents involving our employees. There were 472 days of absence. The **Frequency Index (FI)** was therefore 11.10 and the **Severity Index (SI)** was 0.25. In addition, with the aim of assessing both the accident performance within the Alperia Group and that of external companies operating at our sites, we have consolidated the 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 in-house through the monthly HSE report.

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 collected data, 2 accidents occurred during the year, leading to 57 days of absence from work. The FI index, the accident frequency rate of contractors, was therefore 2.73 in 2021 while the SI index on work absences was 0.08. As the collection years progress, 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 2021, 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.

Semi-automatic defibrillators have been installed in cooperation with the Red Cross and the White Cross, and training has begun for staff who will be qualified to use them. The fruitful cooperation with the provincial Civil Protection Agency continues, and in 2021 new TETRA radios were distributed, which are very useful for managing communications in a more efficient and resilient manner in the event of critical situations or even serious emergencies.

Table 33: Work-related injuries {GRI 403-9}

Employees^{*1}	Unit	2021	2020	2019	2018	YtY variation
Fatalities	No.	0	0	0	0	0%
High-consequence work-related injuries (excluding fatalities) ^{*2}	No.	0	0	0	0	0%
Injuries that result in days away from work	No.	21	14	14	13	50%
Injuries that result in restricted work or transfer to another job	No.	NA	NA	NA	NA	0%
Injuries that result in medical treatment ^{*3}	No.	0	0	0	0	0%
Other significant injuries diagnosed by licensed healthcare professional ^{*4}	No.	0	0	0	0	0%
Hours worked	No.	1,891,290	1,721,452	1,613,516	1,454,474	10%
Lost work days ^{*5}	No.	472	320	427	293	48%
Rate of fatalities as a result of work-related injury (per 1,000,000 h)	Rate	0.0	0.0	0.0	0.0	0%
Rate of high-consequence work-related injuries (per 1,000,000 h)	Rate	0.0	0.0	0.0	0.0	0%
Rate of recordable work-related injuries (per 1,000,000 h)	Rate	11.10	8.13	8.68	8.94	37%
Lost day rate (per 1,000 h)	Rate	0.25	0.19	0.26	0.20	34%

Contractors^{*1}	Unit	2021	2020	2019	2018	YtY variation
Fatalities	No.	0	0	0	0	0%
High-consequence work-related injuries (excluding fatalities) ^{*2}	No.	0	0	0	0	0%
Injuries that result in days away from work	No.	2	16	2	1	-88%
Injuries that result in restricted work or transfer to another job	No.	NA	NA	NA	NA	0%
Injuries that result in medical treatment ^{*3}	No.	0	0	0	0	0%
Other significant injuries diagnosed by licensed healthcare professional ^{*4}	No.	0	0	0	0	0%
Hours worked	No.	731,328	770,223	656,616	584,353	-5%
Lost work days ^{*5}	No.	57	73	86	13	-22%
Rate of fatalities as a result of work-related injury (per 1,000,000 h)	Rate	0.0	0.0	0.0	0.0	0%
Rate of high-consequence work-related injuries (per 1,000,000 h)	Rate	0.0	0.0	0.0	0.0	0%
Rate of recordable work-related injuries	Rate	2.73	20.77	3.05	1.71	-87%

(per 1,000,000 h)					
Lost day rate (per 1000 h)	Rate	0.08	0.09	0.13	0.02
					-18%

^{*1} Injuries as a result of commuting incidents have only been included where the transport has been organised by the organisation.

^{*2} Work-related injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.

^{*3} Beyond first aid, or loss of consciousness.

^{*4} Does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.

^{*5} When calculating "lost days", "days" means calendar days; lost-day count begins the day after the accident.

9.3.2 Emergency board and infection prevention measures

The Green Pass and new procedures

In 2021, Alperia renewed, with some adjustments, the safety measures defined in the previous year to curb the spread of the COVID-19 pandemic. 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 are communicated to employees via the MyAlperia intranet and through targeted communication activities.

In addition to applying the provisions of national and provincial legislation, Alperia also adopted additional safety measures, organising operational shifts as necessary so as to avoid the crossover of groups as far as possible, maintaining fixed teams which are more easily traceable in the event of infection, and ensuring workstations were disinfected between shifts. For each of the Group's sites, managers have been identified to check **Green Passes**, creating a widespread network to cover all shifts. Monitoring is mainly carried out using the Ministry of Health's monitoring platform provided by INPS, so that the degree of coverage can be effectively verified. Alperia obtained the CSQ COVID-19 Restriction certification from IMQ in 2020: This tool is aimed at monitoring, through random audits, the application of measures to combat and contain the spread of COVID-19 in the workplace.

In view of the new organisation setup, which involves three days remote working and two days in the company, Alperia has provided for a reduced presence in the offices, with the obligation to wear masks when working together. Every employee had the opportunity to take compulsory online training with a final test dedicated to conduct to be adopted to avoid spreading the infection. In addition, body temperature measuring devices were installed at the main sites, while smaller sites were equipped with infrared thermometers. Special mask disposal systems have also been introduced to raise awareness of environmental sustainability. Alperia's employees were also given the opportunity to have their flu vaccination in the office.

9.3.3 Focus on health

Wellness-focused

In compliance with Legislative Decree 81/2008, we have organised medical examinations to check employees' professional suitability, and we give 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). Each employee can take advantage of a dedicated welfare program, 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, Alperia 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 2021 was 5.6 (per 1,000 hours worked), about 30% lower than in 2020. In addition, the number of working days lost due to illness fell by 25% to 12,566, partly due to a decrease in the number of hours of furlough payments to operational staff. There were zero cases of occupational disease in 2021, as was the case in 2020.

Table 34: Work-related ill health {GRI 403-10}

Employees	Unit	2021	2020	2019	2018	YtY variation
Fatalities as result of work-related ill health	No.	0	0	0	0	0%
Work-related ill health that results in days away from work	No.	0	0	0	0	0%
Lost work days due to absences of all kind ^{*1}	No.	12,566	16,698	11,729	10,033	-25%
Work-related ill health that results in restricted work or transfer to another job	No.	0	0	0	0	0%
Work-related ill health that results in medical treatment ^{*2}	No.	0	0	0	0	0%
Other work-related ill health diagnosed by licensed healthcare professional	No.	0	0	0	0	0%
Cases of recordable work-related ill health	No.	0	0	0	0	0%
Hours worked	No.	1,891,289	1,721,452	1,613,516	1,454,474	10%
Hours scheduled to be worked	No.	2,243,027	2,086,963	1,950,015	1,822,584	7%
Absentee rate (absentee days per 1,000 hours worked) ^{*3}	Rate	5.6	8.0	6.0	5.5	-30%

^{*1}Lost-day count begins the day after the absence; increase of lost work days due to an increase in absences related to the COVID-19 pandemic.

^{*2}Beyond first aid, or loss of consciousness.

^{*3}Absences exclude permitted-leave absences such as holidays, study, maternity or paternity leave and compassionate leave.

Contractors	Unit	2021	2020	2019	2018	YtY variation
Fatalities as result of work-related ill health	No.	0	0	0	0	0%
Work-related ill health that results in days away from work	No.	0	0	0	0	0%
Work-related ill health that results in restricted work or transfer to another job	No.	0	0	0	0	0%
Work-related ill health that results in medical treatment ^{*1}	No.	0	0	0	0	0%
Other work-related ill health diagnosed by licensed healthcare professional	No.	0	0	0	0	0%
Cases of recordable work-related ill health	No.	0	0	0	0	0%

^{*1} Beyond first aid, or loss of consciousness.

Strategic objective: We aim to ensure the highest level of safety in the workplace for our employees and external staff (external companies).

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2021 Value	Status
Record all accidents of significant external companies	Accidents of external companies detected.	✓	Frequency and severity of accidents of external companies	tbd		✓
No incidents involving employees and external companies	<p>* The following information is provided through the monthly HSE Report:</p> <ol style="list-style-type: none"> 1. FI frequency index and SI severity index for all Alperia Group companies 2. Types of accidents and near misses 3. Accident and near miss descriptions with description of causes and corrective actions – > Lesson Learnt 4. Internal audits of all Group companies with a certified management system 5. Steering committee with all Group HSE <p>* Monthly meetings are held with all Group HSE (Steering Committee), to discuss all safety, quality and environmental training activities, safety open points and audit recommendations, internal and external audit programmes for ISO certifications</p>	annually	Number of accidents with lost days	0	21 (employees) 2 (external companies)	X

Strategic objective: We aim to actively promote the health of our employees.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Reduction in the rate of absence	Sessions were offered with a psychologist for all employees for advice during smart working	annually	Absence rate (days of absence per 1,000 hours worked)	-	5.6	X



Development and Innovation

We are betting on the future, with the conviction that energy sector innovation will be essential to create smarter and greener territories. This is why we track global trends, launch international competitions for ideas in which we also involve our own employees, and establish partnerships with leading academia and research centers.



We promote a healthy and safe working environment also through our products



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



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



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



We ensure sustainable patterns of production and consumption

10.1. Innovation, Research and Development {GRI EU8; GRI 102-12; GRI 203-1}

International competitions and R&D investment

The energy transition requires decisive investment in innovation. This is a central area for Alperia, as also highlighted by the 2020-2024 Business Plan, One Vision, with planned investments of €680 million. Investments in innovative projects are subject to a specific internal procedure aimed at standardising and strengthening the management of individual projects, introducing a series of standard analyses to assess their effectiveness and decide on the allocation of resources during their life cycle. Each initiative will be subject to several stages of assessment and approval by the Decision Committee made up of the General Manager of Alperia, the Deputy General Manager, the Director of Corporate Strategy and the Head of Engineering & Consulting. The entire process is coordinated by the **Innovation Board**, a working group set up in 2017 specifically to implement in-house research and development activities. The team also includes a number of experts from Group companies who will provide support in the assessment of individual projects. After having a **Trend Manager**, the team is now defining its **Trend Radar**. Together with colleagues from the other business units and consultants from Trendone (Alperia's Trend Manager supplier), they have drawn up a list of around 40 trends that will be assessed according to three parameters: 1) time to mainstream adoption in the market; 2) impact on industries; 3) internal competence. Each trend is then assessed as more or less impactful and the radar is built based on the results. This will be complemented by Innovation News, a page on MyAlperia where employees can view a press review specific to innovation.

In 2021, the budget for **innovation activities** was €2,062,329 (1,963,262 in 2020), out of a total of €2,206,119 (€2,148,484 in 2020) invested in research and development, and 44 (110) employees were involved in these activities.

Table 35: Innovation, Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development {GRI EU 8}

	Unit	2021	2020	2019	2018	YtY variation
Number of employees working on R&D projects	Persons	44	110	88	46	-60% ¹
Employee hours on R&D Projects	Hours	not available	not available	not available	not available	
Total R&D expenditure thereof	EUR	2,206,119	2,148,484	1,560,934	1,056,717	3%
EU projects	EUR	143,790	185,223	167,293	393,169	-22%
Other Innovation projects	EUR	2,062,329	1,963,262	1,393,641	663,548	5%

¹From 2021 onwards, only people who actually recorded hours in the management system on innovation projects were considered.

10.1.1. A selection of our innovation projects

Alperia Startup Factory

Launched in 2018, Alperia Startup Factory, the startup accelerator to promote innovation in the field of renewable energy and the Green Economy, is now in its third edition and for the first time also open to employees of the Alperia Group, who were able to actively contribute by putting forward their own ideas. 189 startups from all over the world participated in the competition with 4 winning teams, including 2 from Alperia. During a multi-stage selection process, the ten most interesting projects are chosen and presented in detail at the Innovation Camp. The most promising ideas are then examined in more detail in the Proof-of-Concept phase, after which the winners' names are announced. They will be able to work closely with Alperia to develop and implement projects, representing added value for both customers and the company. The winning projects were:

- **DomoSafety** from Lausanne (Switzerland): creating Safety @ home solutions, i.e., those improving the quality of life at home, aimed mainly at the elderly, but not only, with various technical solutions including a 24/7 emergency service;
- **Uptime Analytics** from Bogotá (Colombia): focuses on optimising the operational and energy efficiency of industrial plants with AI-based fault detection;
- **Hydrosim 4.0**: focused on land safety, deals with flood protection through 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;
Smart Roof: improves company premises to renew their image, reduce energy costs and provide them with a social space. Possible solutions include renewable energy produced by photovoltaic panels, green areas on the roof, a relaxation area for employees, rainwater collection for intelligent irrigation.

November 2021 also saw the launch of the call for entries for the fourth edition of the competition, which focuses on the following themes: Hybrid Customer Engagement, Smart Region, Energy Communities, CO₂ Quotas and Corporate Well-being. As in the third edition, Alperia Group employees can actively contribute and develop their own ideas. The projects submitted will be chosen through a multi-stage selection process. The finalists will work together with Alperia employees and students enrolled in the Entrepreneurship and Innovation master's degree programme at the University of Bolzano to create a prototype of their idea and test its potential until it is launched on the market. The results will then be presented to a jury of Alperia managers who will select the winners. They will have the opportunity to work with the South Tyrolean energy provider to realise their projects for the benefit of customers and companies. The fourth edition will take place in partnership with the University of Bolzano and Gellify, a fast-growing innovation platform that connects high-tech B2B startups with traditional companies to innovate processes, products and business models through investment and expertise. For the future, Alperia is considering the launch of a Venture Capital activity to further support the growth of startups and seek out the best companies able to accelerate the Group's development and seize the many opportunities offered by a constantly evolving market.

Alperia Intrapreneurship

Growing innovative entrepreneurs in business

In 2019, Alperia launched INNOVATE!, an ideas competition through which any employee can put forward their own project idea and follow its implementation as a Project Manager. Projects may relate to new products, services, processes, as well as the improvement of those already existing. INNOVATE! was also held in 2020, and included as part of the Alperia Startup Factory, giving internal ideas even more visibility and the tools to successfully develop the suggested solutions. Two projects in particular won Alperia Startup Factory: Hydrosim 4.0 and Smart Roof (described in the previous paragraph).

Open Innovation

Alperia collaborates with local and international partners from the scientific world and industry, including research institutes, companies and startups. In 2021, a number of long-standing partnerships continued, such as those with Eurac Research, the Laimburg Experimentation Centre, IDM South Tyrol and NOI Techpark, the Bolzano innovation district.

In addition, in 2021, Alperia took part in the open innovation programme **Disrupt Me**, promoted by EIT Innovation HUB Israel with the aim of fostering contact between innovative startups in Israel and companies in the EU. 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 the same year, Alperia participated in **Mission Innovation 2.0: Green Powered Future Mission**, a global initiative focused on energy transition. The initiative is co-ordinated by Italy, the UK and China and involves many other countries as well as a number of energy operators including Alperia. This involvement came about thanks to a direct invitation from RSE (Ricerca sul Sistema Energetico, a subsidiary of GSE, Gestore dei Servizi Energetici) and the Ministry of Ecological Transition, which recognise Alperia's role as a key player in the energy sector in Italy. The mission 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 to achieve this by increasing their investment in research and development, as well as contributing to the implementation of demonstration projects. The project started in June 2021 and will last five years. The first Mission Executive Committee took place in July, followed by the Mission's participation in the COP26 (United Nations Climate Change Conference), which was held from 31 October to 12 November 2021 in Glasgow. Alperia held an internal discussion table on the subject, in which several employees participated. The main units involved are: Corporate Strategy, Engineering & Consulting, all BUs.

Also in 2021, Alperia took part in the **Verbund Accelerator (VXA)**, an Austrian innovation programme in which we were the only Italian company. We were involved in two areas. The first focused on energy communities and options for improving the management of energy flows (in terms of maximising self-consumption, decentralised systems, energy storage, energy efficiency, legislative process and IT issues) and to identify software tools or service companies that can set up and manage the billing process for energy communities. The second area relates to energy trading, optimising consumption forecasting based on the load curves of industrial customers through AI and machine learning technologies. We are working on these projects with two startups: Accure Battery Intelligence and Predictive Layer. These are important collaborations for us, reinforced by a common predisposition to innovation and multilingualism, an important driver for sharing ideas between the German and Italian world. South Tyrol is privileged in being able to host experimental pilot projects, to trial and launch new technology for this reason too.

Alperia's innovation activity also continues in the hydropower sector through the joint venture with Hydrodata, and with Alperia Innoveering, which will enable the introduction of new technology related to IoT, artificial intelligence, blockchain, Industry 4.0, etc., in the Group's hydropower plants.

LifeforHEATrecovery

LIFE4HeatRecovery promotes a new generation of smart district heating and cooling networks, where 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. The project, which started in 2018, will continue until 2023.

SINCRO

Alperia Bartucci participates as a partner with Fraunhofer Italy, Eurac Research and Systems in the SINCRO – (**S**ensible **I**nteractive **C**ontrol **R**OI system for smarter buildings) – project, which aims to develop an interactive system for energy management in buildings with a view to sustainability and reduction of consumption thanks to both the control of the heating system and the active and intelligent involvement of users. Starting from the Sybil CT (Centrale Termica) experience, during the SINCRO project Alperia Bartucci will develop and apply new control and management logics for the building heating system by integrating them with the data coming from room monitoring. The activities the partners will carry out during the project relate to: the development of an IT solution for managing building data from different sources with different communication protocols; the implementation of an intelligent management system for the heating system that integrates indoor comfort data and predictive user profiles; the development of an interactive interface based on artificial intelligence algorithms, capable of actively involving users and making them aware, providing information on energy consumption and suggestions to encourage them to undertake a series of actions to reduce their energy consumption. The solution will be tested on two case-study buildings connected to district heating, one residential and the other tertiary or commercial, so that its effectiveness can be assessed in two different contexts.

Hydrodata

In October 2020, Alperia SpA acquired 50.51% of the shares of Hydrodata Spa, a leading technical consultancy company in Italy, active in the development and offer of engineering and technical-economic consultancy and applied research in the field of water management. This led to the establishment of Alperia Innoveering, a joint venture of Alperia and Hydrodata. With Hydrodata, amongst other things, Alperia intends to take part in future tenders for the reallocation of hydroelectric concessions with the support of a team of professionals with extensive experience and a high level of expertise, capable of developing advanced and innovative design solutions from both 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 2021, in view of the forthcoming expiry of the large hydroelectric concessions, Hydrodata supported Alperia in the first phase of analysis on the plants affected by the renewal. In the second phase, which will run throughout 2022, the knowledge on these facilities, their functionality and the management and organisational aspects will be further developed. As far as engineering activities are concerned, in 2021 the close collaboration between Alperia and Hydrodata should be noted, both in the resolution of the problems occurred in San Valentino concerning the tunnel from Resia lake to the hydroelectric plant of Glorenza, and in the works for the replacement of the penstock in Lasa, started in 2021 and to be

completed by 2022, for which Hydrodata has developed all the project phases and is currently in charge of the works management.

The activities go beyond engineering. In 2021, Hydrodata was also involved in other technologies, such as hydrogen. A technical and economic feasibility study was carried out with Alperia for the production of green hydrogen at the Group's hydroelectric plants.

Furthermore, Hydrodata, in addition to its work with Alperia, continued in 2021 to be engaged in consulting, engineering and applied research activities in the broad area of water resources and services, including related environmental, economic and institutional disciplines. This includes plans and regulatory schemes at regional level, in particular in the field of integrated water services, due diligence activities in Italy and abroad on large portfolios of plants (hydroelectric in particular), hydrological and hydrogeological studies at all scales of detail, plant engineering at various levels, procurement and supervision/testing during construction and operation, site surveys and measurements, trials, permitting management in the launch of works.

In the field of services to agencies, and in particular in the field of hydrological monitoring, Hydrodata offers numerous consulting services, such as the management of the hydrometric monitoring of the Piedmont Region network. This is an activity that Hydrodata has been carrying out for more than 10 years, both in terms of station operations and in relation to the validation and processing of parameters for the production of regional hydrological data.

Alps Mining Farm

The Alps Mining Farm Alperia project aims to improve the economic yield of hydropower, compared to the traditional yield from feeding energy into the national market. Alps Blockchain will be responsible for setting up and managing the mining farm for four years. The mining farm will have revenues from mining and/or from the sale of computing power against operating costs. Alps Blockchain has three years of experience in mining, with four mining farms in operation and six under construction.

Alps Blockchain consists of a team of experts in the fields of mining, blockchain and bitcoin. In particular, for the creation and management of mining farms Alps Blockchain guarantees: the development of a proprietary monitoring algorithm with auto profitability switching to identify the best performing cryptocurrencies to be mined in order to improve mining profitability.

Alps Blockchain's well-established relationships with suppliers ensure that projects are always carried out with the most efficient machinery available and will upgrade the fleet as and when deemed economically viable. Thanks to a well-established network of experienced developers and collaborators, Alps Blockchain is able to exclusively obtain the best software for machines that improve performance and efficiency for the same investment. In cooperation with other players, Alperia is also developing a mineral oil cooling system that will improve miner performance. Alps Blockchain also carries out ongoing market research to identify the best cryptocurrencies to mine for optimal machine performance. Finally, it retrieves all information that can help predict the bitcoin price trend to identify the best times to sell or hold the cryptocurrency.

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 aims to make data on buildings easily accessible to public authorities for the optimal management of energy efficiency policies. The project is financed by the European Union through the European Regional Development Fund (ERDF). Alperia's partners for the IDEE project are the Bolzano-based company R3 GIS and the Faculty of Computer Science of the Free University of Bolzano. The project aims to develop 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 will support public authorities in pursuing their 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 graphs, and to compare data on a timeline, which is particularly important for monitoring the results of works. The project will be developed in the city of Merano and is intended to be replicable and adaptable for other territorial organisations.

Having the necessary information and easy access to it is crucial for the definition of energy efficiency strategies, for the timely monitoring of implemented measures and for planning awareness-raising activities aimed at the general public.

10.1.2. Digital transformation

AI drives our future

Alperia's digital transformation process entered an increasingly advanced phase in 2021, as demonstrated by the **Innovation Manifesto** whose main headings are artificial intelligence and blockchain. This resulted in an innovation funnel, i.e., a method and process involving the Innovation BU and the **Digital Lab**. The latter is a newly established team that checks the feasibility of innovative ideas arriving internally (from the BUs) and externally, accompanying the most promising ones into the Digital Factory, i.e., the production phase. This initiative, launched in 2021 and based on the implementation of the Agile methodology, aims for the continuous improvement and renewal of Alperia's processes and infrastructure. The funnel also includes the monitoring of initiatives and their connection to the Group's internal and external needs.

In the certainty that AI is the future for companies like Alperia, we also worked in 2021 to manage data in an increasingly business-aligned way. As the Group expands, the complexities and possible vulnerabilities increase, as do the security measures to be put in place. At the same time, the business opportunities that can be created with this growing amount of data are also increasing. To this end, a **data platform** was created to cross-reference data to develop predictive analyses. This produces new indicators linked to the quality of data, its availability and timeliness of use, which generate very useful and up-to-date information, including in terms of sustainability. It should be noted that the entire data platform runs in the Cloud and not in data centres, as was the case in the past, generating a reduction in overall impact. The data were also the subject of several projects undertaken with the departments most concerned with this information. First and foremost, Trading, which through a better understanding of data, can optimise production and sales. A series of applications have been implemented to monitor production site by site and cross-reference this data with sales data (CRM, digital channels, etc.). All this, supported by new forms of billing that will be increasingly useful for those who use e-mobility services or are part of energy communities. In addition, since 2021, the entire Alperia Group has been using the SAP infrastructure for HANA, which enables much faster and more precise forecasting analyses, with KPI monitoring on a monthly basis rather than half-yearly, as was previously the case. CRM Salesforce, the world's leading provider, was also introduced.

There was a specific focus on IT security, through the work of an external company which, in addition to the activity already carried out by Alperia's Cyber Security and DPO, monitors any external attacks. All this is accompanied by internal courses to raise awareness of security issues among Group employees. In collaboration with unbz, the innovation hub of South Tyrol, NOI Techpark, and vm-ware, a university training course for data-platform experts was set up. The course is called Cloud-Native Applications in Virtual Environments.

Finally, in 2021, smart working became a permanent fixture, normalising what started in 2020. All employees were given the opportunity to work from home with appropriate training and equipment. PCs, tablets and mobile phones were updated, telephone subscriptions were upgraded, and company PCs were made available for personal use.

Strategic objective: We aim to actively contribute to the energy future and develop new technological solutions with innovative research projects.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Creation of centralised and multidisciplinary innovation management	<ul style="list-style-type: none"> * Strengthening support and monitoring of all innovation projects * Proposal to revise the innovation procedure to improve support for innovation projects approved * Increased frequency of Innovation Board Expert Team meetings, to better respond to the support needs of the various projects * Launch of internal working tables on innovation issues: e.g., blockchain * Launch of specific training initiatives to support employees' entrepreneurship (e.g., open innovation, intrapreneurship, blockchain) 	2021-2024	Investment in research and innovation (EUR millions) Number of employees in research and innovation projects		€2.20 million 44 employees	Ongoing
Cooperation and search for synergies with businesses, startups and research institutes (OPEN INNOVATION)	<ul style="list-style-type: none"> * *Increase in open innovation programmes from one to three. Alperia's startup factory continued, we took part in the Verbund Multicorporate Accelerator (European multicorporate programme) and in Disrupt Me, promoted by EIT (international programme in which Alperia was the only Italian company, after a selection process) * Entry into the Green Powered Future Mission for the activation of new research initiatives at international level 	2021-2024	Number of projects with startups	5	14 Fortissimo Predictive Layer Alpsblockchain Accure Batteries Flowtech EggUP Fieldbox.AI Ecosteer FlexiDAO Sentetic Quantego Fleetmatica Domosafety Uptime Analytics	Ongoing
Development of tools (MyAlperia improvement proposals, workshops, etc.) to create space for ideas and encourage an entrepreneurial mindset among the workforce	*Entrepreneurs were supported after the acceleration phase and projects are moving forward, generating new opportunities. The Hydrosim4.0 project is working to launch a new international research project, while the Smartroof team is working to launch a pilot project on the Alperia building	2021-2024	Number of suggestions on the internet portal	-	12 business ideas, of which three were selected to participate in the SUF innovation camp and one was admitted to the SUF acceleration phase	Ongoing

	* Entrepreneurs were supported by dedicated training in open innovation					
Trend management – allowing continuous monitoring of trends and evolving technologies	*Definition of the trend manager for the management of market trends, built with the collaboration of the whole company	2021-2025	KPI TBD after introduction of the instrument in 2021			Ongoing

10.2 Sustainable Products and Services {GRI 302-5; GRI EU7; ALP4; ALP5}

In 2021, the revenue generated by Alperia with sustainable products and services was 47%. In 2020 the share was 46%. The objective, in line with the next business plan, is to significantly increase this share, investing increasingly in green gas, green energy, district heating, energy efficiency and electric mobility.

Alperia produces green energy from renewable sources, through its managed hydroelectric plants within the province. In 2021 these plants, together with solar energy and biomass, generated about **4.08 TWh/year** (about 4.8 TWh/year in 2020) 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 Plan¹⁴. 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. By taking up this type of energy, the companies can meet the usage requirements of some of the most important European environmental branding. 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 applies to those who choose green gas, 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.

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. To avoid additional emissions generated by using the postal service, green gas bills are sent exclusively in a paperless format.

"Green gas is greenwashing".

Comment by a collaborator; 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 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 2021 Alperia offset 24,257 tonnes of CO₂.*

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 AEW customers in the free market could switch to green energy.

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 professionali altoatesini – so that all member SMEs can use green gas. In 2021, with the targeted work of our agents, we strengthened our presence among SMEs based outside South Tyrol so that they adopt green energy and green gas.

Alperia also signed its first Power Purchase Agreement with Barilla, which will purchase 100% green energy from the Resia power plant for three years. All its products are therefore made with green energy from a specific plant. This is increasingly important for both companies and consumers.

10.2.1. Smart Region

A smarter region is a more resilient, more efficient and more sustainable. With this mission, in 2021, Alperia Smart Region invested €27.3 million in developing innovation projects in collaboration with its companies and in partnership with other players in the area. This is a series of high-tech initiatives for cities and citizens, which strengthens the positioning of apartment blocks, public administration, healthcare and smart services for citizens and cities. In 2021, the BU also prepared for a reorganisation that will enable it to work even more effectively in the future to provide innovative solutions for the energy transition.

In particular, with the companies Alperia Bartucci and Gruppo Green Power, Alperia Smart Region has worked on energy efficiency projects for large industrial and commercial groups as well as for apartment blocks and individual homes. These

¹⁴ https://ambiente.provincia.bz.it/publicazioni.asp?publ_action=4&publ_article_id=214427

operations were supported by the 110% Superbonus a scheme provided by the Relaunch Decree, which raises the tax deduction rate for expenses incurred from 1 July 2020 to 31 December 2021 to 110% 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 Bartucci, 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.

- **Alperia Bartucci:** An Alperia Group company specialising in the design and implementation of energy efficiency measures and integrated energy services. It offers its customers ESCo services (consultancy, EPC with efficient technologies from third party suppliers and credit transfers for tax deductions), as well as energy efficiency works based on Sybil's proprietary technology using Advanced Process Control Systems (APC). These systems use multivariable and predictive algorithms to automatically monitor the production process, pursuing a reduction in costs related to the primary energy consumed. After installing the proprietary Sybil HVAC (Heating, Ventilation and Air Conditioning) system in Venice airport in 2020, improving its cooling capabilities, in 2021 it also installed this model in two large shopping centres. The algorithms are able to acquire data on the expected crowding conditions in the various areas and adjust the air conditioning accordingly. In 2022, the system will be joined by one specifically designed for households (Sybil HOME).

in 2021, in the field of **energy efficiency** with Ecobonus, Sismabonus, Bonus casa and Bonus facciate, Alperia Bartucci worked with more than 1,479 private customers and 263 apartment blocks. It also assisted 245 customers with the Superbonus 110% thanks to the partnership with the MSM Consortium (of which Proger, Saccir and Gestioni Italiane), through its subsidiary EfficienteRete, a company that provides specialised consultancy and cutting-edge technological solutions, taking on the financial commitment of the projects, thanks to its ability to absorb the transfer of the tax credit.

In 2021, Alperia Bartucci also continued its activities in the field of EPCs – Energy Performance Contracts – for industry, with 78 projects managed (65 in 2020) and total annual savings of 4,460 toe - tonnes of oil equivalent (6,832 toe in 2020) for total emissions avoided of 11,996 tCO₂e (20,818 tCO₂e in 2020). Also in 2021, Alperia Bartucci S.p.A. issued 68,252 Energy Efficiency Certificates (115,719 in 2020) relating to 29,682 toe (48,480 toe in 2020) saved by customers for whom Alperia Bartucci S.p.A., as ESCO, carried out the process to obtain the Energy Efficiency Certificates (TEE).

Another very significant activity for 2021, which will see a gradual increase in the coming years, was the **decarbonisation** advisory service for companies. 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, also in collaboration with Gruppo Green Power.

Alperia Bartucci also supported the Alperia Group for the ISO 50001 certification, dealing with the efficiency upgrades of the Alperia Greenpower plants in Ponte Gardena and Ecoplus in Bolzano.

Alperia Bartucci is a member of Assoesco, collaborates with the Energy & Strategy Group of the Politecnico di Milano and is a member of CESEF – Centre for the Study of Energy Efficiency Economics and Management – of Università Bocconi which, among other things, is working to support the Ministry of Ecological Transition in the redefinition of the Minimum Environmental Criteria for energy services for the public administration. Public administration is an increasingly important area that Alperia Bartucci intends to strengthen in the near future, starting with the launch of a specific Business Unit in 2022.

- **Gruppo Green Power S.p.A** is a company based in Mirano, in the province of Venice, which is active in the sector of services for energy efficiency in the domestic sector, acquired by the Alperia Group in 2019. Gruppo Green Power has contributed to the realisation of **energy-efficiency** projects, installing over 450 systems under the 110% Superbonus. During 2021, the GGP Group – whose turnover amounted to €22 million – also underwent a major internal evolution, completely overhauling both its organisational structure and its business model. The company abandoned the traditional model based on call centres and networks of agents and agencies with direct offers, setting up new partnerships with strategic partners from the world of construction and with renowned technical design studios. Gruppo Green Power, in collaboration with the Alperia Group, also contributed to the development of innovative services such as Alperia My Home, an important project in the world of residential photovoltaic systems. Finally, Gruppo Green Power aligned itself with the measures envisaged by the Alperia Group in terms of sustainability, optimising its internal car fleet with hybrid or electric vehicles (both vans and cars), taking major steps in terms of digitalisation with the aim of eliminating paper in the sales phase by 2022 by using only tablets with digital signatures on contracts.

10.2.2. Smart Land

Alperia, together with the Laimburg Research Centre and the Fruit and Vegetable Consultation Centre, has developed intelligent sensors and a digital infrastructure to irrigate fruit-growing areas in a more targeted way, conserving resources with up to 30% or more of water savings. The sensors measure soil moisture in the fields and combine data from weather forecasts with current temperatures. Alperia's LoRaWan™ network enables this measurement data to be sent from the fields to the farmer in real time via an app. The data then guides the farmer's choices and irrigation is only carried out when actually needed. The project began two years ago with a test phase in the fields of 60 South Tyrolean fruit and wine growers, and in 2021, the solution was marketed and a further 100 sensors were installed in apple orchards. To make the solution accessible to all farmers, Alperia Smart Services offers a complete package that includes both the sensors and the technical data transmission. In addition, the development of a second sensor dedicated to vineyards is in the works and will come to market in 2022. The project is an important step towards the sustainable development of fruit growing. This is a key issue for the future, because on one hand, it allows water resources to be used efficiently and sustainably, and on the other, means crop yields and quality can be optimised. This is why we intend to increasingly work on spreading awareness on the use of these tools among professionals.

10.2.3. Alperia myHome

In 2021, Alperia developed and marketed Alperia MyHome, a turnkey photovoltaic system with storage specifically designed for households. With this system, electricity is produced at home through solar panels installed on the roof or in a sunny area, allowing private customers to produce their own green electricity and supply their whole house with energy. MyHome is a major addition to the range of green and smart products offered by Alperia, which is making its portfolio increasingly sustainable, for the benefit of its customers. As well as making a significant contribution to climate protection, using solar energy reduces energy costs. Depending on the size of the installed system, up to 4,500 kilowatt hours (kWh) of electricity can be used per year. For comparison, the average energy consumption of a washing machine is 200 kWh per year. 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.

10.2.4 Energy Communities

In collaboration with Regalgrid Europe, a leading digital energy company, Alperia has developed an optimised Renewable Energy Community (REC) model with the aim of maximising the benefits for all customers who are eligible to take advantage of this significant new opportunity offered by the government in the field of renewable energy. The aim 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.

The system was first tested at the **NOI Techpark in Bolzano**, South Tyrol's innovation district, interconnecting seven consumers and "prosumers" (those who consume and produce energy at the same time). The photovoltaic system on one of the buildings in the technology park was virtually divided up to simulate distributed generation and to provide some of the users identified in the building with their own production system, complete with inverters and energy storage systems (batteries) installed by Alperia. With the launch of the Alperia myHome product, the project reached residential homes with four standard solutions (small, medium, large and extra large) of differing installed power, each developed according to the specific consumption needs of a specific cluster of customers. In addition, the Special solution was introduced, dedicated to specific needs that do not fit into the previous four standard solutions. A total of five solutions are available, including Special, which by its very nature is also suitable for apartment blocks and will become the basis for the development of the MyBuilding offer for collective apartment building consumption. The first interconnections in the energy community will start in 2022, involving all new Alperia photovoltaic customers who are eligible. Furthermore, with Alperia SUM and the CUM consortium, which brings together around 200 companies from the Veneto region, Alperia intends to extend the energy communities project to **SMEs**. The **Südtiroler Bauernbund** has been involved in an interesting trial launched in 2020 and continued in 2021. Twenty-six volunteers took part in the project, all of whom already had photovoltaic systems, new inverters and appropriate energy storage systems were installed, and all of which were equipped with devices allowing interconnection via cloud and virtualisation of the energy community, the SNOcUs. After the initial

test, which provided very encouraging results, the project entered phase 2, also given the new opportunities offered by the legislation, which extended the subjects that can form an Energy Community to include users connected to the same primary substation, thereby greatly increasing the number of potential Communities that can be set up. The launch of a new product specifically designed for the farming world – MyFarm – is currently under consideration.

The effectiveness of the system – both in the trial with the Bauernbund and at the Bolzano Technology Park – has been tested and validated by Eurach Research, through the development of a specific modelling environment reproducing the two energy communities and a proprietary algorithm able to compare the results obtained with the theoretical optimum in terms of achievable collective self-consumption. The research institute simulated its operation based on real data and the results showed that the amount of self-consumed energy in a community can be up to twice as high than where interchanged energy flows are not optimised. This result is even more surprising when compared to the current state of the art of energy communities. Energy sharing at the NOI Techpark was in fact 20% higher than the industry benchmark data reported in the literature.

10.2.5. E-Mobility {GRI EU7}

It was recognised as one of the 100 Italian Excellencies, commended for having made a “valuable contribution to the growth of the country.” Neogy, a Alperia and Gruppo Dolomiti Energia joint venture, is one of the most important players in the field of electric mobility at national level. Founded in 2019 to promote sustainable mobility, it now has more than 800 public charging points throughout Italy, 280 of which at local level, which stand out for their green energy supply and advanced technology and the high output of the stations, which guarantees fast charging times.

Thanks also to the commitment of Neogy, Trentino Alto Adige is one of the best equipped territories for green mobility in Italy and in Europe, as emerged from the **Smart Mobility Report** carried out by the Energy&Strategy Group of the School of Management at the Politecnico di Milano. Only the Netherlands and Sweden are better ranked. There are around 500 vehicles and 100 charging stations per 100,000 inhabitants, with more than 40 electric cars registered in 2019 and more than 35 charging points per 100,000 inhabitants, and purchase incentives ranging from €5,000 to €8,000. The report also highlights how the presence of a widespread charging infrastructure is a key factor in the spread of electric vehicles. This is something Neogy will continue to work on. In fact, by July 2022, Neogy will have installed a further **33 Hypercharger columns** throughout South Tyrol, following the tender won with STA – Struttture Trasporto Alto Adige SpA. These are ultra-fast recharging stations for electric cars that can recharge 100 km of range in just 12 minutes and are already available in some areas of the province, such as Val Badia, an area devoted to tourism, reinforcing its commitment to sustainability.

In addition, Alperia has also brought shared electric mobility to the region's hotels, launching an initiative to provide an electric car for **car sharing in South Tyrol's hotels** free of charge. Guests can use the service free of charge to get around in an environmentally friendly way, experiencing driving an electric car during their stay. 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. This initiative is part of the One Vision strategic plan, embodying Alperia's commitment to involve the local economy in energy transition issues through partnerships to develop awareness on electric mobility. To achieve this goal, Alperia is working with E-Vai Srl, an FNM Group company specialising in integrated solutions for shared electric mobility. Access to the car sharing service in the accommodation is via the E-Vai App, which allows guests to manage all phases of the rental process in a simple and fully digital way. The total duration of the initiative is one year, and each facility involved will have a car available for three months. The cars are equipped with a card to access the public charging network, or they can be charged at the individual accommodation facilities. Each recharging station is powered by 100% hydroelectric energy, which means it is green. To find a charging station located nearby and see whether it is available, just visit the provincial website charge.greenmobility.bz.it, where you can find the locations and data of most public charging stations in real time. The website is constantly updated with new information on public charging stations. At local level, too, there is a growing focus on the issue of electric mobility. There has been increased use of columns by both Neogy customers and those who take advantage of the interoperability agreements between the various brands. This has had a positive impact on the environment. In 2021, 1,539,000 kWh were charged at public charging stations (995,000 in 2020), 8.7 million kilometres were covered (5.6 million in 2020) and 1,600 tonnes of CO₂ were saved (1,000 tonnes in 2020).

In addition, there was a significant increase in the number of requests for grants for the purchase of electric cars and vehicles, which grew significantly compared to the previous year. According to data from the Mobility Department, investment in this sector since 2018 has amounted to €2.3 million. And 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. The charging station is equipped with an intelligent device that manages the charging process and adjusts itself according to the available power and the devices used. This helps to avoid power cuts and interruptions in the home.

In addition, Neogy also participated in the provincial **eTestDays** initiative. For 18 days, 27 battery-electric or hydrogen-powered vehicles were made available to companies to raise awareness and appreciation of having sustainable clean mobility close by. Alperia provided free customer cards for public charging stations throughout the test campaign.

At the business level, Neogy is working to strengthen its sales capacity and, at the same time, to consolidate its advisory capacity. In addition, participation in innovative European projects continued, including:

- the **Mobster** project (Electric Mobility for Sustainable Tourism), which takes into account the tools already in use in the field of e-mobility and applies them in an innovative way 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 a period of three years, the project will lead to the installation of around 70 charging infrastructures for electric vehicles, the purchase of two electric ships and the development of prototypes, including an emergency charging vehicle, a carport and an electric charging station for facilities in mountainous locations. The spread of e-mobility in the selected territories will contribute to the creation of green regions capable of attracting environmentally aware tourists and educating more traditional tourists. The latter will benefit from dedicated information tools and will be the subject of an awareness-raising campaign focusing on sustainability in the transport and tourism sector;
- the **LIFE Alps** project (Zero Emission Services for a Decarbonised Alpine Economy), 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 6 fast-charging stations in South Tyrol.

Neogy also obtained ISO 9001 and ISO 14001 quality certifications in 2021.

Hydrogen Mobility

The year 2021 was also marked by a new chapter in sustainable mobility, relating to zero-emission freight transport along the Brenner corridor. A fuel cell truck from Hyundai arrived in Bolzano and is carrying out an intensive series of tests with the logistical support of the Bolzano Hydrogen Centre. As part of these tests, the first refuelling of a hydrogen truck in Italy took place. The truck is electric with fuel cells. As part of a series of tests, Hyundai's hydrogen-powered truck drove along the Brenner axis several times. Numerous trucks of this type are already being used in logistics services in Switzerland. Bolzano was chosen as the base for these tests because the filling station is renowned throughout Europe for its high performance.

Strategic objectives: We aim to turn the whole of our business green.

Operational objectives	Measures implemented in 2021	Deadlines	KPI	Target value	2021 Value	Status
Develop new business activities in line with 100% Green DNA principles	<p>* Partnership with Sparkasse, opening new sales channels (Sparkasse)</p> <p>* Collaboration with the local enterprise networks of ARO and Lvh.Apa Confartigianato Imprese to develop tailor-made solutions for South Tyrol for the Superbonus</p> <p>* 1) Bauernbund Energy Community Pilot Project</p> <p>2) Energy Community Pilot Project (at NOI Techpark)</p> <p>3) Implementation of Alperia offers in the field of Residential Photovoltaics & Energy Community</p>	✓	-	-		✓
Develop new business activities in line with 100% Green DNA principles	*The topic was explored in a feasibility study and presented to a technical committee. There is technical potential, but in the opinion of the Technical Committee, it would be difficult to realise due to the existing oligopolies of supply concerning the raw material	✓				✓
Increase the share of sales of sustainable products and services	*Sale of green products through new channels (Corner, Digital) and new green-gas agreement with SWR (the gas product for Alto Atesine companies is always green) and the new gas products for households are 100% green	2017-2021	Share of sales of sustainable products and services (%)		47%	Ongoing
86% of our private customers are supplied with green electricity	*For the Retail and SME segments the product portfolio consists exclusively of green products	2020-2024	% of retail customers served with green electricity	86		Ongoing
45% of our private customers are supplied with green gas	*For the Retail and SME segments the product portfolio consists exclusively of green products. Framework agreement with SWR for green gas.	2020-2024	% of retail customers served with green gas	45		Ongoing
95% of new private customers are supplied with green electricity and gas	*Unilateral changes for the customer base that still has "non-green" contracts. Planning of co-marketing	2020-2024	Percentage of green products for	95	100%	✓

	possibilities also with corporate customers		new customers			
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Strategic objective: We want to promote electromobility and the charging infrastructure in South Tyrol.

Operational objectives	Measures implemented in 2021	Deadlines (new)	KPI	Target value	2021 Value	Status
Installation of 5,000 charging stations	<p>Installed 21 Hyperchargers (>75kW) during 2021: Target achieved</p> <p>Activation of DE and ASS sales channels: All necessary activities have been initiated, but the activation of sales channels has been postponed to 2022</p>	2021	Hyperchargers installed		21	X



Appendix

APPENDIX 1: MANAGEMENT APPROACHES {GRI 103}

TERRITORY

Security of Supply

103-1 Explanation and definition

This topic was identified as essential in the 2019 materiality analysis, both in terms of impact and stakeholders. The direct impact on customers is the result of Alperia's production and distribution of electricity. Alperia limits itself to its core business, namely electricity production and distribution.

103-2 The management approach and its components

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 2050 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 energy distribution system is becoming increasingly complex and decentralised; it needs to respond more flexibly to energy production and demand. Alperia must respond to this evolution, developing an efficient and intelligent network. The Group defines responsibilities internally. The remote monitoring centre in Bolzano is responsible for reporting any malfunction or breakdown in the electricity supply service. 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.

103-3 Evaluation of the management approach

Management systems are regularly reviewed and monitored against set indicators; electricity distribution is subject to the requirements of the national supervisory authority (ARERA). The systems are constantly updated.

Supplier Management

103-1 Explanation and definition

This topic was identified as essential both in terms of impact and by stakeholders. As a complete supplier of energy services, Alperia purchases its products, materials and raw materials from various Italian and foreign suppliers. This leads to direct social and environmental impact throughout the supply chain.

103-2 The management approach and its components

In selecting suppliers and commercial partners, Alperia aims to ensure respect for environmental and safety standards in the workplace. Alperia works with suppliers and commercial partners to make the supply chain increasingly transparent and eco-sustainable by favouring local suppliers wherever possible. To this end, Alperia has implemented a supplier register, which defines the sustainability criteria and standards which suppliers must meet. In addition, all purchase contracts and the general terms and conditions for contracting at a Group level contain a binding human-rights clause. Responsibility for this topic has been defined internally. The volume of purchases from local suppliers is regularly recorded and reported annually in the sustainability reporting.

103-3 Evaluation of the management approach

The effectiveness of the management approach is regularly reviewed and monitored based on set indicators. To ensure the quality of suppliers and to minimise the risk of loss and dependence, Alperia's main suppliers are evaluated according to a vendor rating system. The evaluation criteria also integrate sustainability criteria, a requirement that is included in the tenders. For each contract signed, Alperia can perform an audit and verify the supplier's data by checking the information received; this happens partly through on-site inspections and interviews. In 2019, the Jaegger tender-management system was implemented to make document management with suppliers more efficient.

Economic Value

103-1 Explanation and definition

This topic has been identified as essential in terms of impact but, above all, by stakeholders. Alperia is one of the largest companies in South Tyrol and all its shareholders are public institutions. The Group's economic growth therefore has direct and indirect impact, both internally and externally.

103-2 The management approach and its components

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 recorded annually in the context of sustainability reporting and reported externally.

Omissions: Complaint procedures

103-3 Evaluation of the management approach

Effectiveness is reviewed annually on the basis of previously defined indicators and adjusted if necessary.

Taxes

207-1 Explanation and definition

The topic was identified as relevant in terms of both impact and by stakeholders. By virtue of its nature as a publicly owned company and the sustainability policies adopted, the Group aims to operate in compliance with the current tax framework, to correctly fulfil its duty as a taxpayer.

Omissions: Tax strategy

207-2 The management approach and its components

Subsidiaries or jointly controlled companies of Alperia S.p.A. choose to entrust fulfilment of their tax obligations to structures of the holding company or external consultants. In the first case, the main structures of Alperia S.p.A. concerned are: Administration & Finance Department, in relation to direct taxes and most indirect taxes; Legal & Corporate Affairs; and General Services, Procurement & Logistics, in relation to certain indirect taxes. Certain tax obligations are sometimes fulfilled by the staff of the companies themselves (invoicing, determination of excise duties and surcharges, registration of deeds, etc.). Risks are identified and monitored essentially by means of constant monitoring of the evolution of the current tax framework by the personnel concerned, supported in this by the Group Compliance Area; assessment carried out by the Group Enterprise Risk Function. The management of these is mainly the responsibility of Governance and the Management, supported, where necessary, by external consultants. The Group's compliance with the tax framework is essentially assessed in the light of any disputes by the tax authorities, taking into due consideration the cases arising from different interpretations of the same (very frequent in the case of the Italian tax framework, by virtue of its complexity and structure). The Group has a dedicated internal Whistleblowing policy that also covers possible situations of non-compliance with the current tax framework. It should be noted that: the regular submission of tax declarations and prompt payment of related payments to the Financial Administration are subject to specific verification activities by the Auditing Company and the Company's 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 related tax returns are subject to specific 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. Through this procedure, the Group ensures it is prepared in the event of 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.

207-3 Evaluation of the management approach

The main expectations of corporate governance in terms of compliance with the tax framework are reported in the relevant part of 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).

Asset Integrity

103-1 Explanation and definition

This topic was identified as essential both in terms of impact and by stakeholders, in particular by coastal and host municipalities, as well as stakeholders. For Alperia, the topic includes the use of security solutions and plant security management to protect employees and residents. Business activity has direct and indirect impact on the environment, the economy and society.

103-2 The management approach and its components

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 itself. Responsibilities have been defined within each business unit.

103-3 Evaluation of the management approach

The evaluation is carried out regularly in the individual business units. Additional external inspections are also carried out regularly, in accordance with legal requirements for plant safety.

Water

103-1 Explanation and definition

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.

103-2 The management approach and its components

Alperia operates 34 large and small hydropower plants that are subject to management and coordination, while five are owned by Alperia (50% San Floriano Energy – 2 plants, 49% TEW, 34% Enerpass and 25% Moos), 13 large dams and 16 smaller works located throughout South Tyrol. 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. The quantities of water withdrawn and turbinated are determined by concession decrees (administrative acts issued by the Province of Bolzano regulating the use of water for hydroelectric plants), which also establish the quantities to be released into the downstream sections (minimum vital outflows) in order to ensure the functioning of the aquatic ecosystem.

Minimum vital water flow (MVW) is defined as the flow that must be maintained in the riverbeds of watercourses affected by a reduction in natural flow due to water withdrawals. The release of the minimum vital water flow prescribed in the concession must be guaranteed by the operator with appropriate devices at the diversion works. The MVW must be of an amount to ensure the ecological functionality of the aquatic environment and its environmental specificities.

Ecological flow: in recent years, the concept of MVW has been replaced by that of "ecological flow" (e-flow), i.e., the "hydrological regime consistent with the achievement of the environmental objectives set by the Water Directive for natural surface water bodies (no deterioration to existing status, achievement of good status in natural surface water bodies, consistency with standards and objectives of protected areas)". The Eastern Alps District Authority is developing guidelines to define ecological flows in the context of the Water Framework Directive, regardless of the terminology used (MVW or Ecological Flow) for the release of water to be guaranteed in the sections of watercourses subject to diversion. For large hydropower plants whose concessions have been renewed since 2011, there is a monitoring programme to establish the MVW required. This testing process was planned to last around eight years. In 2021, the trial will be concluded for six of these plants, as certified by the assessments of the Environmental Services Conference and by resolution of the Provincial Council. The remaining five plants are expected to be completed in 2022.

Sediment management

The management of sediment that accumulates upstream of hydroelectric plant intake works (river dams and artificial basins) 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, some systems are managed by Alperia with barrier structures on the large watercourses of the Adige, Isarco and Rienza valley floors. There has been a discussion for the last twenty years on the issue of management of sediments that accumulate upstream of intake works: fisheries managers would like this sediment not to be released downstream due to the impact of these operations on fish fauna (requiring mechanical removal). The authorities that oversee safety and hydraulic management consider the operations necessary to guarantee the transport

of sediment to the valley. The Concessionaire has the task of guaranteeing the hydraulic safety of the intake works (effectiveness of the discharge components) and of maintaining the useful storage capacity of reservoirs. In the last decade, Alperia presented management projects for reservoirs, which took into account the various ecological, hydraulic and water-resource use needs including for other purposes (e.g., irrigation). The individual management plans were drawn up in a climate of constructive dialogue with the competent authorities, seeking sustainable solutions. The Concessionaire has made every effort to comply with the requirements of these management plans.

For the artificial basins of Rio Pusteria and Fortezza, the management project foresees a release (draining) during the low-water period, generally at three-year intervals; this involves the release of accumulated sediment downstream. Studies carried out in the past – and also confirmed by the annual findings – show that these release operations cause a loss of the youngest fish (fish born in the release year); the adult population, meanwhile, survives the prolonged periods of turbidity. The Concessionaire has tried to extend the time between these releases to the extent possible, carrying them out in periods with high outflows; this guarantees the highest dilution of sediment and good operational effectiveness.

In 2020, Alperia carried out trial suction dredging in the Fortezza reservoir for around two months. 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 operation was also repeated in the Curon and Colma reservoirs with positive results. 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 also tested, thereby also verifying the effectiveness of this method. Further trials are planned in 2022, in particular aimed at sediment management during flood events.

Mitigation and offsetting measures

The operation of hydroelectric power plants in South Tyrol is accompanied by the adoption of environmental measures. For the first time, and the only case in Italy, the granting of concessions for large hydroelectric power plants in 2011 is linked to important environmental measures and the allocation of the necessary financial resources. The adoption of environmental measures is also envisaged for the expired concessions which are currently extended. Alperia has provided environmental funds annually for 19 large hydroelectric plants: Santa Valburga-Pracomune, San Pancrazio, Lana, Sarentino, Cardano, Ponte Gardena, Bressanone, Lappago, Molini di Tures, Lasa, Brunico, Glorenza-Castelbello, Tel, Marleno, Vizze and Barbiano, Curon and Premesa. For the entire 30-year duration of the concession, Alperia will allocate approximately €400 million to environmental projects, to benefit the coastal municipalities affected by the presence of the power plants. In 2021, Alperia made approximately €18 million available for the AGP and AVP plants to implement these projects. In so doing, it implements numerous environmental and landscape conservation and improvement projects previously identified by the boards of the individual hydroelectric plants. Environmental improvement measures are carried out by the coastal municipalities themselves, by the Autonomous Province of Bolzano or by the concessionaire. A part of them deal with water courses (morphological improvements, removal of obstacles to the migration of fish, renaturalisations, measures promoting indigenous species of fish fauna, etc.). For some plants, the responsible province offices and fishing associations provide for the breeding of fry every year, in accordance with the Concession Regulations, in order to rebalance the distribution of fish species and to allow fishing. To encourage the improvement of the life of fish species, artificial passages (fish ladders) to the intake structures are planned for some plants. In particular, in 2021, a fish deterrent system was installed at the Fontana Bianca dam in Santa Valburga. 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. However, monitoring will continue in the year 2022.

Water as a shared resource and impact on discharges

Alperia has signed an agreement with the Vinschgau Land 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. This is an example of the type of collaboration that Alperia intends to develop with stakeholders in the management of water resources. Alperia is well aware of how important it is to implement proper water resource management, defining precise criteria to identify any critical situations linked to climate risks. This issue will become increasingly important in the future and is closely related to water stress, which in South Tyrol is in the 10-20% range. The issue of flooding is equally related to climate change. These are exceptional events that Alperia managed through a special procedure followed by Alperia Greenpower. Specifically, to improve the management of flood events, a memorandum of understanding has been signed with the Civil Protection Agency of the Autonomous Province of Bolzano, and a flood forecasting system is being researched that would allow preventive actions to be implemented. 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, in part, any damage caused by natural flows. Flood development is continuously monitored by the staff of the Cardano Remote Control Centre, to which all meteorological data collected at the dams is fed. In the event of major weather events, Alperia Greenpower provides reinforced dam monitoring with specialised technical staff.

Omissions: Complaint procedures

103-3 Evaluation of the management approach

For the large branches, the concession for which was renewed in 2011 (a total of eleven 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.

Emissions

103-1 Explanation and definition

This topic was identified as essential in the 2017 materiality analysis in terms of impact but, above all, by stakeholders. Alperia's direct impacts are generated by the operation of hydroelectric and district heating plants and electricity distribution infrastructures.

103-2 The management approach and its components

Alperia aims to minimise noise pollution, electromagnetic fields and CO₂ emissions deriving from its activities. Alperia has had an Energy Manager since 2020, and an analysis has been carried out for each company to see the level of emissions generated and what they are derived from. 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 manages hydroelectric power plants) run all the sites certified according to the ISO 14001:2015 standard. They are also EMAS registered. This topic is coordinated centrally by the HSE department and then implemented in the individual BUs. The relative budgets are drawn up internally.

103-3 Evaluation of the management approach

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 Business Plan. Achievement of the target values will be monitored on an annual basis.

Energy consumption

103-1 Explanation and definition

This topic was identified as core in the 2017 materiality analysis in terms of impact but, above all, by stakeholders. Alperia's direct impact is generated by the operation of hydroelectric and district heating plants and electricity distribution infrastructures.

103-2 The management approach and its components

Alperia aims to promote energy- and system-efficiency (e.g., reduction of grid losses) and climate-friendly energy use within the company itself. 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) run all the sites certified according to the ISO 14001:2015 standard and they are also EMAS registered. This topic is coordinated centrally by the HSE department and then implemented in the individual BUs. The relative budgets are drawn up internally.

103-3 Evaluation of the management approach

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 Business Plan. Achievement of the target values will be monitored on an annual basis.

CUSTOMERS

103-1 Explanation and definition

This topic has been identified as essential, especially in terms of impact. Clearly, this is also very important for stakeholders, but it is not among the top ten key issues. Alperia's direct impact derives from the sale of electricity, gas and district heating. 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.

103-2 The management approach and its components

Alperia pursues the goal of improving and expanding customer service and service quality, minimising complaints. The complaint mechanism made available to customers is a toll-free phone number answered by bilingual local operators. Customers can also contact 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. Responsibilities have been defined within the company. A complaint control centre has been set up to ensure that complaints are dealt with promptly. A conciliation service is also available.

103-3 Evaluation of the management approach

ARERA, the national supervisory authority, regularly reviews and monitors the achievement of the aims and compliance with its requirements. 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.

Marketing and transparent communication

103-1 Explanation and definition

This topic was identified as essential in the materiality analysis both by stakeholders and in terms of impact. The direct impact generated by Alperia's energy sales is **369,406** customers served.

103-2 The management approach and its components

Alperia aims to carry out marketing in a responsible, authentic and adequate way. This implies a transparent and understandable pricing structure and customer communication, the guarantee of adequate and fair offers and transparent and verifiable sponsorship. Only projects that comply with the guidelines published online are considered for sponsorship. In terms of customer communication, Alperia is committed to providing clear and comprehensible information and energy bills. Any margin of manoeuvre is very limited due to the numerous requirements imposed by the national authority for the sector (AEEGSI). For example, the information that needs to be included in the electricity bill is prescribed in detail and leaves little room for creativity. Customer service consultants receive complaints on the toll-free telephone number, by email or directly at customer office counters. Estimates were also made available to customers to allow them to monitor their energy consumption more clearly. Activities were also developed, respecting legal requirements, to encourage customers to adopt paperless billing. In 2021 we opened a new store and two new Energy Points in Verona, with the aim of opening more in 2022. In addition, in 2021, we recruited and trained around 70 agents, creating a nationwide network. Responsibilities have been defined within the company. The budget for marketing and sponsoring activities is defined annually.

103-3 Evaluation of the management approach

The evaluation is carried out regularly. Effectiveness is monitored several times a year on the basis of set indicators and, where necessary, adjustments are made.

Omissions: Complaint procedures

Cyber Security

103-1 Explanation and definition

The topic of IT security was identified as relevant by the DPS (Data Protection & Security) Department in the context of the materiality analysis. In its own markets, Alperia contributes directly to collected data-security management through its commercial activity. In relation to data security and protection, the Group has set up a specific unit (DPS Data Protection & Security) which defines guidelines, monitors compliance and security and reports on its activities and measures. 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, Wi-Fi, mobile and local networks, Internet of Things, production plants, distribution plants, telecommunications, smart grids, transmission systems and fixed-line and mobile devices. Specific limitations derive from the business organisational structure of the various BUs and areas each with their own specific needs.

103-2 The management approach and its components

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-220.11 IT Vulnerability Management), 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.

103-3 Evaluation of the management approach

Evaluation of the management approach. 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.

EMPLOYEES

Employee development

103-1 Explanation and definition

This topic was identified as essential both in terms of impact and by stakeholders. 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.

103-2 The management approach and its components

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. In addition, the Family and Work audit was renewed. Responsibilities have been defined within the company.

A complaint tool is available on the company intranet page: MyIdeas gives all employees the chance to submit suggestions for improving a service, a work process, occupational health and safety, or measures 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.

103-3 Evaluation of the management approach

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 9 percentage points compared to the previous result. In addition, feedback interviews continued in 2021 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). During 2021, there were some reports, but no major ones.

Diversity & Equal Opportunity

103-1 Explanation and definition

In the 2021 materiality analysis, the topic was identified as essential, particularly by stakeholders. Direct impact for Alperia – with around 1,087 employees, one of South Tyrol's largest employers – mainly comes from the moderately high average age and the relatively low percentage of women due to the specificity of the technical sector in which Alperia operates.

103-2 The management approach and its components

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.

103-3 Evaluation of the management approach

The effectiveness of the management approach is evaluated regularly. The Welfare and Equal Opportunities Committee was set up, made up of four members appointed by the trade unions and four members appointed by the company. Adjustments can be made continuously throughout the year.

Occupational Health & Safety

103-1 Explanation and definition

This topic was identified as core both in terms of impact and by stakeholders. There is certainly a direct impact for Alperia, whose around 1,087 employees make it one of South Tyrol's largest employers.

103-2 The management approach and its components

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.

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 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 offer 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 of 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.

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.

103-3 Evaluation of the management approach

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.

RESEARCH AND INNOVATION

Innovation, Research & Development

103-1 Explanation and definition

This topic was identified as essential both in terms of impact and by stakeholders, especially owners and investors, as well as research bodies. Alperia promotes innovation in the energy sector through numerous research projects. The fact that it runs several hydroelectric and district heating plants, as well as the electricity grid, enables Alperia to test and apply the most innovative technologies. This has a direct and indirect impact on society, the environment and the economy.

103-2 The management approach and its components

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 internally with the involvement of all business units. Expenses are reported annually in sustainability reporting.

103-3 Evaluation of the management approach

The evaluation is carried out through regular project controls. In the future, effectiveness will be monitored annually on the basis of key data.

Sustainable Products and Services

103-1 Explanation and definition

This topic was identified as essential, above all by stakeholders, in particular customers. Direct impact is mainly generated for private customers and Alperia business; indirect impact on the environment, meanwhile, is in relation to the development of sustainable products and services.

103-2 The management approach and its components

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. 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.

103-3 Evaluation of the management approach

We have set ourselves 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.

APPENDIX 2: LEGISLATIVE DECREE 254/16 MAPPING AND RISK MANAGEMENT {GRI 102-15}

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've created a portal for businesses (LineRegister) where they can register to view the status of underground line 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. The control panels are equipped with supervision systems that automatically sound alarms in the event of malfunctions, and there is also an on-call service for any malfunctions. To improve the quality of service, modernise the network infrastructure and make it more stable, 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 - scheduling the overhaul of overhead lines and inspections of electrical installations <p>MITIGATION / CONTROL ACTION 3 – We've planned €535 million in investments into generation and distribution (2020-2024 Strategic Plan – 2021 review) over a period of five years, to improve the availability, reliability and efficiency of plants; we're also expanding the district heating network in Bolzano and Merano.</p>
	Economic development	Strategic/Operational/Financial	<p>RISK 1: OPERATIONAL – Risk of failure to achieve the strategic objectives of infrastructure evolution and development of the Smart Region due to inadequate management of partnerships linked to innovation and technological development.</p> <p>RISK 2: OPERATIONAL – Risk of failure to implement both the environmental obligations of the concession contract and spending commitments with potential impact on the failure to improve the surrounding environment and the degree of satisfaction of riparian municipality communities.</p>	<p>MITIGATION / CONTROL ACTION 1 – To contribute to the creation of a South Tyrolean Smart Region, we collaborate with important research bodies to develop new smart grid solutions.</p> <p>MITIGATION / CONTROL ACTION 2 – We want to ensure the well-being of the riparian municipalities. For this reason, we build public works to support the environment and implement dedicated projects, directly involving the riparian municipality communities and respecting all the obligations laid down by provincial legislation.</p>
	Marketing and transparent	Strategic/Operational	RISK 1: STRATEGIC – Risk of lack of/inadequate transparency of information	MITIGATION / CONTROL ACTION 1 – We are committed to implementing transparent, up-to-date and stakeholder-oriented marketing and internal

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
	communication		<p>and non-stakeholder-oriented communication resulting in unfavourable perception of consumers, investors and other stakeholders on sustainability issues, with possible impacts in terms of: reduction in customer satisfaction, increase in complaints, loss of customers, non-compliance with regulations and codes of conduct.</p> <p>RISK 2: OPERATIONAL – Risk of failure/non-definition of motivational measures for customers to increase the number of customers receiving paperless bills.</p>	<p>communication. We do this through the sustainability report, by involving stakeholders in various initiatives, with the website and with numerous other communication tools. In 2021 we began to implement a structured and proactive Stakeholder & Reputational Risk management.</p> <p>MITIGATION / CONTROL ACTION 2 – 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	RISK 1: OPERATIONAL – Risk of inadequate management, in terms of speed and efficiency, of customer/user service and complaints with possible impact on customer satisfaction and loss.	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 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 and failure to manage information and protect sensitive data and intellectual property due to the infrastructure (technical and organisational) inadequacy with possible data loss or disclosure. Risk of possible OT and IT infrastructure malfunctions with possible impact on the service delivery continuity due to the failure/inadequate development of IT infrastructure and preparation of emergency, management</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 - Continuous monitoring of information systems (including data flows) - 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, record of processing activities, processing authorisations, etc.) <p>MITIGATION / CONTROL ACTION 2 – We want to ensure the protection of data and systems from security incidents or attacks and ensure Business Continuity in the event of IT incidents (e.g., server failures, power outages, cyberspace events). To achieve this, we use efficient protection systems against internal and external attacks and intrusions, have renewed ISO 27001 certification and developed business continuity plans (e.g., INS-212.01 Business Continuity – IT Disaster Recovery). The possible introduction of a new procedure to manage events related to cyberspace, as well as new and emerging cyber threats and vulnerabilities (Cyber Incident Response Plan) is also being defined and assessed.</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			and response plans for new and emerging threats.	
	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 and R&D activities 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 want to contribute actively to South Tyrol's energy future and develop new technology solutions with innovative research projects. We are preparing Group-wide innovation guidelines to support the activities of the Innovation Board, and we are continuing the projects selected in previous years, including through the Alperia Startup Factory, the fourth edition of which we launched in 2021.</p> <p>MITIGATION / CONTROL ACTION 2 - We compare each new innovation project opportunity and R&D activity 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>
	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 aim 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 of failure to manage climate change and the growth of weather phenomena (e.g., floods, droughts, etc.) with impact on the water cycle and reservoirs with related implications for plant productivity.</p> <p>RISK 2: OPERATIONAL – Risk of non-implementation of compensatory measures (e.g., fish ladders) and loss of biodiversity.</p> <p>RISK 3: OPERATIONAL - Risk management of flood events in large dams.</p>	<p>MITIGATION / CONTROL ACTION 1 – We invest in the safety and resilience of our plants to make sure we are prepared for the possible impact of climate change. Furthermore, we promote research and development activities (for example, with the Alperia Startup Factory project and in collaborations with universities and innovative companies across the world) to improve the safety of our infrastructure.</p> <p>MITIGATION / CONTROL ACTION 2 – We actively protect the environment as well as the biological diversity of waterways. We do this by using funding provided by the environmental fund to implement various morphological improvement measures for waterways affected by hydroelectric shunts. Furthermore, to define the most suitable compensation measures, we organise working groups involving various stakeholders.</p> <p>MITIGATION / CONTROL ACTION 3 – We defined the Large Dam Flood Management procedure and developed a tool that simulates flood events.</p>
	Emissions	Operational	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:	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

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			<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 fleet in relation to reducing emissions.</p>	<p>Alperia carries out to reduce its carbon footprint. By participating in the SBTi, Alperia will define KPIs in the field of environmental sustainability that will be monitored and pursued. Alperia supports the South Tyrol 2050 Climate Plan by reducing our greenhouse gas emissions. To achieve increased effectiveness, the Sustainability and Net Zero objectives will be integrated into Alperia's Business Plan.</p> <p>MITIGATION /CONTROL ACTION 2 – We aim to reduce mobility-related emissions. We already have over 172 electric or hybrid vehicles and maximum possible electrification has been achieved based on currently available technologies.</p>
	Energy consumption	Operational	<p>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.</p>	<p>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. The activities planned and decided by the individual companies of the Alperia Group are coordinated 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.</p>
	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 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 other stakeholders, a respect for human rights clause is included in the</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
				Group's general terms and conditions for contracting.
	Asset Integrity	Operational	<p>RISK 1: OPERATIONAL – Risk associated with the operation and maintenance of the hydraulic works of plants (dams, diversion tunnels, penstocks, etc.), the partial or total failure of which may have consequences for people living near them.</p> <p>RISK 2: OPERATIONAL – Risk of damage to local communities due to accidents at plants in locations potentially sensitive to natural disasters or terrorist attacks.</p>	<p>MITIGATION / CONTROL ACTION 1 – In accordance with the relevant legislative provisions in force, diversion 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. 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 to install differential protection devices on plant penstocks was completed. In addition, the complete replacement of the penstock at the Lasa plant is underway, as well as a major and highly innovative relining of a long section of the Gloreza plant's bypass tunnel. Finally, the replacement of penstocks at some hydroelectric plants whose concessions were renewed in 2011 was planned, where required.</p> <p>MITIGATION / CONTROL ACTION 2 – To improve the management of flood events, we have signed a memorandum of understanding with the Civil Protection Agency of the Autonomous Province of Bolzano. In addition, we want to ensure business continuity of all IT systems and plants and minimise risks associated with sensitive terrorism targets (e.g., cyber security and sensitive locations). To this end, we have developed a special business continuity and disaster recovery plan.</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 aim 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 and environment, 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. In addition, the installation of semi-automatic defibrillators was completed during 2021. As a manager of critical infrastructures, we have consolidated our partnership with the Civil Protection Agency of the Autonomous Province of Bolzano.
		Compliance/Operational	RISK 1: COMPLIANCE & OPERATIONAL – COVID-19 Risk of incorrect implementation of requirements or inadequate definition of additional actions	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

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			to reduce/avoid the risk of infection in the workplace.	remote working and the necessary hardware, limits for worker presence at sites, limits for stores and front offices). This was all audited by the IMQ certification body, after which a certificate was issued for each organisation.
	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>RISK 5: OPERATIONAL – Risk of inadequate definition of retention measures and new recruitment planning to replace retiring key staff with a potential impact from loss of know-how, expertise, including technical.</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 aim 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 aim 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> <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 back-ups for key positions. <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>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			<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 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 aim 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 programmes with the aim of increasing diversity in governance.</p> <p>MITIGATION / CONTROL ACTION 2 – We aim 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've adopted, we've 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.</p>
Combat corruption	Anti-corruption	Operational	<p>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.</p>	<p>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.</p>
Respect for human rights	Supplier management Diversity and equal opportunity	Operational	<p>RISK 1: OPERATIONAL – Risk of violating human rights.</p>	<p>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</p>

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
	Occupational health and safety Employee development			<p>binding clause of respect for human rights (beginning with the respect and protection of human rights, occupational health & 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.</p> <p>Every Alperia employee has the right to keep themselves informed and freely express their opinions, without being discriminated against for any reason (racial, political or religious).</p>

APPENDIX 3: GRI CONTENT INDEX

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General disclosures 2016	Organisational profile				
	102-1 Name of the organisation	See chapter 'Who We Are'	none		
	102-2 Activities, brands, products, and services	See chapter 'Our Corporate Structure', and chapter 'Integrated Strategy'.	none		
	102-3 Location of headquarters	See chapter 'Who We Are'	none		
	102-4 Location of operations	See chapter 'Who We Are'	none		
	102-5 Ownership and legal form	See chapter 'Who We Are'	none		
	102-6 Markets served	See chapter 'Who We Are'	none		
	102-7 Scale of the organisation	See chapter 'Who We Are' and Appendix 'Figure 1' and 'Figure 7'	none		
	102-8 Information on employees and other workers	See chapter 'Employees', and Appendix 'Figure 26'	102-8-b	not applicable	Split by region: Alperia is a national company
	102-8-d: No significant portion of the organisation's activities are performed by workers who are not employees.				
	102-8-e: No significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries).				
	102-8-f: Data based on actual employee numbers registered in the HR software.				
	102-9 Supply chain	See chapter 'Value Chain', and chapter 'Supplier Management'	none		
	102-10 Significant changes to the organisation and its supply chain		none		There has not been any significant change in the supply chain.

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	102-11 Precautionary principle or approach	See chapter 'Risks and Opportunities'	none		
	102-12 External initiatives	See chapter 'Selected External Initiatives', chapter 'Investment in Infrastructure', chapter 'Sponsorship', and chapter 'Innovation, Research and Development'.	none		
	102-13 Membership of associations	See chapter 'Associations'	none		
	EU1 Installed capacity	See Appendix 'Figure 5'	none		
	EU2 Net energy output	See chapter 'Green Energy Supply', and Appendix 'Figure 6'	none		
	EU3 Number of residential and commercial customer accounts	See chapter 'Customer Satisfaction', and Appendix 'Figure 18'	none		
	EU4 Length of above and underground transmission and distribution lines by regulatory regime	See chapter 'Our Distribution Network' and Appendix 'Figure 8'	none		
	Strategy				
	102-14 Statement from senior decision-maker	See chapter 'Letter to the Stakeholders'	none		
	102-15 Key impacts, risks, and opportunities	See chapter 'Risks and Opportunities' and chapter 'Legislative Decree 254/16: Mapping and Risk Management'	none		
	Ethics and integrity				
	102-16 Values, principles, standards, and norms of behaviour	See chapter 'Who We Are' chapter 'Corporate Governance' and chapter 'Disciplinary Code and Golden Rules'	none		
	Governance				
	102-18 Governance structure	See chapter 'Corporate Governance' and chapter 'Governance Tools'.	none		
	Stakeholder engagement				
	102-40 List of stakeholder groups	See chapter 'Stakeholder Management'	none		
	102-41 Collective bargaining agreements	100% of total employees are covered by collective bargaining agreements.	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	102-42 Identifying and selecting stakeholders	See chapter 'Stakeholder Management'	none		
	102-43 Approach to stakeholder engagement	See chapter 'Stakeholder Management' and chapter 'Transparent Marketing and Communication'	none		
	102-44 Key topics and concerns raised	See chapter 'Stakeholder Management'	none		
	Reporting practice				
	102-45 Entities included in the consolidated financial statements	See Appendix 'Note on Methodology'	none		
	102-46 Defining report content and topic boundaries	See chapter 'Materiality Matrix'	none		
	102-47 List of material topics	See chapter 'Materiality matrix'	none		
	102-48 Restatements of information	See Appendix 'Note on Methodology'	none		
	102-49 Changes in reporting	See chapter 'Materiality Matrix' and chapter 'Note on Methodology'	none		
	102-50 Reporting period	See Appendix 'Note on Methodology'	none		
	102-51 Date of most recent report		none		April 2021
	102-52 Reporting cycle	See Appendix 'Note on Methodology'	none		
	102-53 Contact point for questions regarding the report	See Appendix 'Contacts'	none		
	102-54 Claims of reporting in accordance with the GRI Standards	See Appendix 'Note on Methodology'	none		
	102-55 GRI content index	See Appendix 'GRI content index'.	none		
	102-56 External assurance	See Appendix 'Independent auditors' Report'	none		
Material topics					
GRI 200 Economic Standard Series					
Economic performance					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Economic Value'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	See chapter 'Economic Value' pp. 42-43 and Appendix 'Figure 2' and 'Figure 3'	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
Indirect economic impacts					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Economic Value'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 203: Indirect economic impacts 2016	203-1 Investment in infrastructure and services supported	See chapter 'Investment in Infrastructure', chapter 'Innovation, Research and Development', and Appendix 'Figure 4'	none		
Procurement practices					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Supply Chain Management'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	See chapter 'Supplier Management' and Appendix 'Figure 12'	none		The organisation's geographical definition of "significant location of operations" refers to the Province of South Tyrol.
Tax					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Tax'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 207: Tax 2019	207-1 Approach to tax	See chapter 'Taxes'	207-1-a-i	not available	Alperia does currently not have a formalised tax strategy.
	207-2 Tax governance, control, and risk management	See chapter 'Taxes'			
	207-3 Stakeholder engagement and management of concerns related to tax	See chapter 'Taxes'	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 300 Environmental Standards Series					
Energy					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Energy Consumption'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	See chapter 'Energy Consumption' and Appendix 'Figure 7' and 'Figure 16'	none		
	302-4 Reduction of energy consumption	See chapter 'Investment in Infrastructure', 'Energy Consumption' and chapter 'Sustainable Products and Services'	none		
	302-5 Reductions in energy requirements of products and services	See chapter 'Sustainable Products and Services'	none		
Water					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Water'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
Alperia own 2017	ALP 6 Water released for minimum flow	See chapter 'Water' and Appendix 'Figure 15'	none		
	ALP 7 Incidents of non-compliance with MVF requirements	See Appendix 'Figure 15'	none		
Emissions					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Emissions'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	See chapter 'Emissions' and Appendix 'Figure 17'	none		
	305-2 Energy indirect (Scope 2) GHG emissions	See chapter 'Emissions', and Appendix 'Figure 17'	none		
	305-3 Other indirect (Scope 3) GHG emissions	See chapter 'Emissions' and Appendix 'Figure 17'	none		
	305-4 GHG emissions intensity	See chapter 'Emissions' and Appendix 'Figure 17'	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	305-5 Reduction of GHG emissions	See chapter 'Emissions' and Appendix 'Figure 17'	none		
	305-7 Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	See chapter 'Emissions'	none		
Supplier environmental assessment					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Supplier Management'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 308: Supplier environmental assessment 2016	308-1 New suppliers that were screened using environmental criteria	See chapter 'Supplier Management' and Appendix 'Figure 13'	none		
GRI 400 Social Standards Series					
Employment					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Employee Development'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	See chapter 'Employee Development' and Appendix 'Figure 27'	401-1-a / 401-1-b	not applicable	Split by region: Alperia is a national company.
	401-3 Parental leave	See Chapter 'Diversity and Equal opportunity' and Appendix 'Figure 32'	none		
Occupational health and safety					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Occupational Health and Safety'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 403: Occupational health and safety 2018	403-2 Hazard identification, risk assessment, and incident investigation	See chapter 'Occupational Health and Safety'	none		
	403-9 Work-related injuries	See Appendix 'Figure 34'	none		
	403-10 Work-related ill health	See Appendix 'Figure 33'	none		
Training and education					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Employee Development'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	See chapter 'Occupational Health and Safety', chapter 'Employee Development', and Appendix 'Figure 28'	none		
	404-2 Programs for upgrading employee skills and transition assistance programs	See chapter 'The Evolution of Leadership and Personnel'			
	404-3 Percentage of employees receiving regular performance and career development reviews	See chapter 'The Evolution of Leadership and Personnel' and Appendix 'Figure 29'	none		
Diversity and equal opportunity					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Diversity and Equal Opportunity'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	See chapter 'Corporate Governance', chapter 'Diversity and Equal Opportunities', and see Appendix 'Figure 30'	none		
	405-2 Ratio of basic salary and remuneration of women to men	See chapter 'Diversity and Equal Opportunities', and Appendix 'Figure 31'	none		Significant locations of operations: all our consolidated companies are included.
Human rights assessment					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	See Appendix 'Management Approach: Supplier Management'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 412: Human rights assessment 2016	412-3 Significant investment agreements and contracts that include human-rights clauses or that underwent human-rights screening	See Appendix 'Figure 14'	none		Significant contracts are defined as "contracts managed centrally at group level by procurement and which exceed a value of €100,000".
Supplier social assessment					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Supplier Management'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	See chapter 'Supplier Management' and Appendix 'Figure 13'	none		
Marketing and labelling					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Transparent Marketing and Communication'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 417: Marketing and labelling 2016	417-1 Requirements for product and service information and labelling	See chapter 'Transparent Marketing and Communication',	417-1-b	not available	Requirements are mainly related to information contained on our invoices.
	417-2 Incidents of non-compliance concerning product and service information and labelling		none		There has been one incident resulting in a warning.
	417-3 Incidents of non-compliance concerning marketing communications	See Appendix 'Figure 23'	none		There were no known incidents in 2021 of non-compliance with voluntary sponsoring and donation codes.
Customer privacy					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Cybersecurity'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	See chapter 'Cybersecurity' and Appendix 'Figure 24' and 'Figure 25'	none		
Availability and reliability					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Security of Supply'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
G4 Electric utilities sector disclosures 2013	EU10 Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	See chapter 'Green Energy Supply' and Appendix 'Figure 5'	split by regulatory regime	not applicable	Split by regulatory regime is not applicable.
	EU29 Average power outage duration	See chapter 'Our Distribution Network' and Appendix 'Figure 9'	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	EU28 Power outage frequency	See chapter 'Our Distribution Network', and Appendix 'Figure 8'	none		
	EU30 Average plant availability factor by energy source and by regulatory regime	See Appendix 'Figure 10'	split by regulatory regime	not applicable	Split by regulatory regime is not applicable.
Customer satisfaction					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Customer Satisfaction'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
Alperia own 2017	ALP1 Monthly average of calls answered – green number	See chapter 'Customer Satisfaction', and Appendix 'Figure 19'	none		
	ALP2 Customer complaints	See chapter 'Customer Satisfaction', and Appendix 'Figure 20'	none		
	ALP3 Customer satisfaction index	See chapter 'Customer Satisfaction', Appendix 'Figure 21'	ALP3		The customer satisfaction survey was postponed due to the COVID-19 pandemic.
Research and development					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Innovation, Research and Development'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
G4 Electric utilities sector disclosures 2013	EU8 Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	See chapter 'Innovation, Research and Development', and Appendix 'Figure 35'	none		
Sustainable products and services					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its Boundary	See Appendix 'Management Approach: Sustainable Products and Services'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
G4 Electric utilities sector disclosures 2013 / Alperia own 2017	ALP4 Share of revenues from sustainable products and services	See chapter 'Sustainable Products and Services', and Appendix 'Figure 36'	none		
	ALP5 Description of new business initiatives with sustainable products and services	See chapter 'Sustainable	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
		Products and Services'			
Disaster/emergency planning and response					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management Approach: Asset Integrity' and chapter 'Asset Integrity'	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
G4 Electric utilities sector disclosures 2013	EU21 Disaster/emergency planning and response	See chapter 'Asset Integrity'	none		

APPENDIX 4: FULL INDICATOR LIST

Note: For numeric data, the dot is used as a decimal separator.

Territory

Economic development

Table 1: Financial indicators {GRI 102-7}

	Unit	2021	2020	2019 ^{*1}	2018	YtY variation
Revenues	EUR	2,082,824,896	1,437,718,992	1,546,878,354	1,272,182,146	45%
Net financial position	EUR	-746,900,000	-373,000,000	-382,000,000	-392,000,000	100%

^{*1} Data have been restated to align them to the new accounting method introduced in 2020.

^{*2} Methodology of the calculation of the net financial position was changed from European Investment Bank to Fitch methodology.

Table 2: Direct economic value generated and distributed {GRI 201-1}

	Unit	2021	2020	2019 ^{*5}	2018	YtY variation
Direct economic value generated:	EUR	2,082,824,896	1,437,718,992	1,546,878,354	1,272,182,146	45%
<i>Revenues</i>	EUR	2,082,824,896	1,437,718,992	1,546,878,354	1,272,182,146	45%
Economic value distributed:	EUR	2,002,687,126	1,375,769,723	1,490,245,497	1,228,491,345	46%
<i>Operating costs^{*1}</i>	EUR	1,814,571,098	1,196,350,493	1,327,594,723	1,067,875,802	52%
	% ^{*4}	87.1	83.2	85.8	84.0	
<i>Employee wages and benefits</i>	EUR	71,792,398	77,068,468	73,093,184	68,525,722	-7%
	% ^{*4}	3.4	5.3	4.7	5.4	
<i>Payments to providers of capital</i>	EUR	11,472,319	9,514,673	9,250,687	13,443,507	21%
	% ^{*4}	0.6	0.7	0.6	1.1	
<i>Payments to government^{*2}</i>	EUR	102,703,726	90,180,251	78,524,074	76,939,902	14%
	% ^{*4}	4.9	6.3	5.1	6.0	
<i>Community investments^{*3}</i>	EUR	2,147,587	2,655,837	1,782,828	1,706,412	-19%
	% ^{*4}	0.1	0.2	0.1	0.1	
Economic value retained	EUR	80,137,770	61,949,269	56,632,857	43,690,801	29%
	% ^{*4}	3.8	4.3	3.7	3.4	

^{*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 royalties; free energy; environmental funds, etc.).

^{*3} This item includes sponsoring costs and donations.

^{*4} Percentage of direct economic value generated.

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

Table 3: Value for South Tyrol^{*1} {GRI 201-1}

	Unit	2021	2020	2019	2018	YtY variation
Employee wages and benefits	EUR	62,614,966	70,264,455	69,682,656	66,384,082	-11%
	%	24	27	30	30	
Payments to government	EUR	103,920,113	90,951,387	78,524,074	76,939,902	14%
	%	40	35	33	35	
Dividends to local governments	EUR	30,000,000	33,300,000	26,000,000	24,000,000	-10%
	%	12	13	11	11	
Community investments	EUR	2,147,587	2,655,837	1,782,828	1,706,412	-19%
	%	1	1	1	1	
Local procurement	EUR	61,415,472	60,286,081	59,833,219	53,343,496	2%
	%	24	24	25	24	
Total value for South Tyrol	EUR	260,098,138	257,457,761	235,822,778	222,373,892	1%
	%	100	100	100	100	

^{*1} Alperia Bartucci, Gruppo Green Power, Alperia Sum and Hydrodata are excluded from the count because they are located outside South Tyrol.

Table 4: Infrastructure investments and services supported {GRI 203-1}

Type:	Unit	2021	%	2020	2019	2018	YtY variation
Energy distribution	EUR	50,914,000	28.2%	46,390,000	41,571,000	36,520,000	10%
Teleheating and services	EUR	12,100,000	6.7%	11,251,000	13,059,000	6,866,000	8%
Energy production – mandatory	EUR	57,487,751	31.9%	27,529,000	19,078,000	17,147,000	109%
Energy production – stay in business	EUR	5,679,626	3.1%	4,804,000	10,777,000	9,009,000	18%
Smart Region	EUR	27,321,000	15.1%	14,003,000	9,235,000	7,718,000	95%
IT infrastructure and digital projects	EUR	21,909,834	12.1%	20,783,000	7,836,000	4,294,000	5%
Supply and trading	EUR	0	0.0%	1,095,000	1,430,000	412,000	-100%
Facility investments	EUR	537,736	0.3%	773,000	588,000	1,587,000	-30%
Other investments	EUR	4,419,319	2.5%	72,000	1,126,000	828,000	6038%
Total	EUR	180,369,266	100%	126,700,000	104,700,000	84,381,000	42%

Security of supply

Table 5: Energy capacity {GRI EU1; GRI EU10}

	Unit	2021	2020
Projected energy demand in South Tyrol in 2050 ^{*1}	GWh	4,261	4,303
Produced electricity from renewable sources by Alperia	GWh	4,084	5,061
Hydroelectric capacity ^{*2}	GW	ca. 1.4	ca. 1.4
Capacity under construction ^{*3}	GWh	3	3

^{*1} Data calculated based on data taken from the 'Piano Clima Energia-Alto Adige-2050' and 'dati statistici TERNA 2020'.

^{*2} Number only covers the total hydroelectric installed capacity of the plants managed by Alperia.

^{*3} New capacity under construction: new MVF plant Tel of 700 kW installed capacity with a future production capacity of ca. 3 GWh.

Table 6: Net energy output broken down by primary energy source^{*1} {GRI EU2}

		Unit	2021	%*3	2020	2019	2018	YtY variati on
Total net produced electric energy		GWh	4,135		5,108	4,373	4,256	22.25%
thereof:	Hydro	GWh	3,814	87	4,772	4,044	3,961	23.70%
	Photov oltaic	GWh	9	0	19	22	21	-13%
	Cogen eration (gas/g asoline)	GWh	51	1	47	47	53	0%
	Biofuel	GWh	262	6	270	260	221	4%
Total net produced energy for heating*2		GWh	248	6	222	217	199	2%
Total net energy output		GWh	4,383		5,330	4,590	4,455	16%

^{*1} Net energy output includes energy produced in our consolidated plants (34 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

	Unit	2021	2020	2019	2018
Net produced energy from renewable sources	GWh	4,084	5,061	4,326	4,203
	%	93	95	94	94

Table 7: Quantity of products provided {GRI 102-7; GRI 302-1}

	Unit	2021	2020	2019	2018	2017	YtY variation
Electricity sold to end customers	GWh	6,636	5,372	5,423	3,994	3,212	24%
<i>thereof green-labelled electricity sold to end customers</i>	GWh	2,140	2,015	1,813	1,891	657	6%
	%	32	38	33	47	20	
Trading	GWh	1,834	3,166	4,788	1,907	2,310	-42%
Thermal energy sold to end customers	GWh	246	222	217	199	195	11%
Natural gas sold to end customers	MSmc	450	421	464	367	328	7%
<i>thereof green-labelled gas sold to end customers</i>	MSmc	12	3	1	0	0	318%
	%	3	1	0	0	0	

Table 8: Distribution network^{*1} {GRI EU4}

Electricity distribution network		2021				2020				2019			
	Unit	Above ground	Under-ground	Total	% of under-ground lines	Above ground	Under-ground	Total	% of under-ground lines	Above ground	Under-ground	Total	% of under-ground lines
Length of transmission and distribution lines	km	220	21	241	9%	239	21	260	8%	233	19	252	8%
High voltage	km	1,086	2,405	3,491	69%	1,129	2,298	3,427	67%	1,171	2,144	3,315	65%
Medium voltage	km	1,068	4,290	5,358	80%	1,097	4,167	5,264	79%	1,126	4,043	5,169	78%
Low voltage	km	2,374	6,716	9,090	74%	2,465	6,486	8,951	72%	2,530	6,206	8,736	71%
Total	km												

^{*1} Distribution network includes the network of Edyna S.r.l., Edyna Transmission S.r.l., Municipality of Parcines, and Municipality of Laces.

Gas distribution network	Unit	2021	2020	2019	2018
	km	114	113	113	113

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities

	Unit	2021	2020	2019	2018
No. Municipalities		96	96	96	98

Customers connected to the electricity grid

	Unit	2021	2020	2019	2018	YtY variation
No. PODs ^{*2}		237,423	235,585	233,335	232,207	1%

^{*2} Only end customers included in the years 2017-2019. As of 2020 all PODs (including interconnected distributors) are included.

Electricity distributed in South Tyrol^{*3}

	Unit	2021	2020	2019	2018	YtY variation
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TWh ^{*3}	2.6	2.7	2.6	2.6	-4%
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^{*3} Only energy distributed to end customers included in the years 2017-2019. As of 2020 all energy distributed is included.

Substations ^{*4}	Unit	2021	2020	2019	2018	YtY variation
Primary HV/MV substations	No.	38	37	37	36	3%
Secondary MV/LV substations	No.	4,156	4,131	4,121	4,112	1%
MV switching substation	No.	44	45	46	48	-2%

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

Table 9: System Average Interruption Frequency/Duration Index (SAIFI/SAIDI) {GRI EU28; GRI EU29}

	Unit	2021	2020	2019	2018	YtY variation
SAIFI (Frequency of interruptions per customer)	No.	1.68	1.91	1.51	1.73	-12%
SAIDI (Power outage duration per customer)	Minutes	24.56	29.82	28.07	27.36	-18%

Asset integrity

Table 10: Energy availability {GRI EU 30}

Availability factor ^{*1}	Unit	2021	2020	2019	2018
Energy source					
Hydro	%	84.49	88.88	86.43	87.67
Photovoltaic	%	not available	not available	not available	not available

Table 11: Environmental incidents

	Unit	2021	2020	2019
Number of environmental incidents	No.	2	2	0
Number of significant environmental incidents	No.	0	0	0
Financial impact of environmental incidents ^{*1}	EUR	0	0	0

^{*1} This includes fines paid and costs for cleanup.

Supplier Management

Table 12: Proportion of spending on local suppliers^{*1} {GRI 204-1}

	Unit	2021	2020	2019	2018
Percentage of products and services purchased locally (based on expenditure in EUR)	%	28	36	35	27
Percentage of works purchased locally (based on total works expenditure)	%	77	72	42	36
Percentage of services purchased locally (based on total service expenditure)	%	30	20	39	22
Percentage of products purchased locally (based on total product expenditure)	%	5	21	18	19
Percentage of contracts awarded locally (based on number of contracts)	%	59	58	62	60

^{*1} The organisation's geographical definition of "local" refers to the province of South Tyrol. Data does not include procurement data for Alperia Bartucci, Alperia SUM and GGP, as they are located outside of the province of South Tyrol.

Table 13: Significant investment agreements and contracts that include human-rights clauses or that underwent human-rights screening^{*1} {GRI 412-3}

	Unit	2021	2020	2019	2018
Number of significant investment agreements and contracts that include human-rights clauses	No.	information unavailable	information unavailable	information unavailable	0
Percentage of significant investment agreements and contracts that include human-rights clauses	%	information unavailable	information unavailable	information unavailable	0

^{*1} Clause was included in the General Terms and Conditions of contracts as of May 2019. All new significant contracts include this clause, however there may still be active contracts signed prior to 2019, which did not include this clause, thus the exact number and percentage cannot be reported. Significant contracts are defined as "contracts that are managed centrally at group level by procurement and which exceed a value of €100,000".

Table 14: New suppliers that were screened using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2021 ^{*1}	2020	2019	2018
Percentage of new suppliers that were screened using environmental and or social criteria	%	100	100	100	100

^{*1} All suppliers must pass the screening of pre-established requirements (e.g., minimum certification requirements such as EMAS, ISO 14001, OHSAS 18001 o ISO 9001).

Green Mission

Water

Table 15: Water {ALP6; ALP 7}

	Unit	2021	2020	2019	2018	YtY variation
Water released for minimum flow	litres per second	38,925	38,919	38,926	38,883	0%
Incidents of non-compliance with MVF (minimum vital flow) requirements	No.	1	1	0	0	0%

Table 16: Energy consumption within the organisation {GRI 302-1}

	Unit	2021	%	2020	%	2019	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,262.65	35%	1,168	32%	1,204	34%	8%
Gasoline	TJ	32.03	1%	25	1%	78	2%	26%
Natural gas	TJ	822.55	23%	738	20%	751	21%	11%
Electricity for own consumption (produced and acquired)	TJ	408.07	11%	404	11%	375	11%	1%
Total energy consumption within the organisation from renewable sources:	TJ	2,297.53	65%	2,478	68%	2,340	66%	-5%
Palm oil	TJ	2,025.78	57%	2,125	58%	1,997	56%	-5%
Wood chips	TJ	159.97	4%	168	5%	173	5%	-5%
Electricity for own consumption (produced and acquired)	TJ	111.78	3%	185	5%	170	5%	-13%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	0%
Total energy consumption within the organisation	TJ	3,560.18	100%	3,646	100%	3,544	100%	-1%

Table 17: GHG emissions^{*1} {GRI 305}

	Unit	2021	2020	2019	YtY variation
Gross direct (Scope 1) GHG emissions ^{*2}	tCO ₂ e	50,820	45,483	52,709	12%
Biogenic CO ₂ emissions ^{*2}	tCO ₂ e	10,922	11,364	3,551	-4%
Gross location-based energy indirect (Scope 2) GHG emissions ^{*3}	tCO ₂ e	25,474	34,878	34,662	-27%
Gross market-based energy indirect (Scope 2) GHG emissions ^{*4}	tCO ₂ e	21,841	25,596	39,393	-15%
Gross other indirect (Scope 3) GHG emissions ^{*5+7}	tCO ₂ e	2,871,885	2,833,961	32,096	1%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	87,217	91,725	90,882	-5%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO ₂ e	83,583	82,443	95,653	1%
Total GHG emissions location-based	tCO ₂ e	2,959,102	2,925,686	122,978	1%
Total GHG emissions market-based	tCO ₂ e	2,955,469	2,916,404	127,749	1%
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	-12%
Operational GHG emissions intensity (Scope 1 & 2, market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.02	0.01	0.02	67%
Total GHG emissions intensity (Scope 1, 2 & 3, location-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced	0.68	0.55	0.03	23%

	energy (gross)				
Total GHG emissions intensity (Scope 1, 2 & 3, market-based) ratio for the organisation ^{*6}	tCO ₂ e /MWh of produced energy (gross)	0.68	0.55	0.03	23%

^{*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 2020. The increase in emissions is due to an update in the emission factor.

^{*3} Location-based emission factor used for purchased electricity: ISPRA (2018) 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 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 (845.739 tCO₂e) and non-renewable energy electricity (1.931.484 tCO₂e). Emission factors used: DEFRA and cargo manifest.

^{*6} Biogenic emissions are included in ratio.

^{*7} The increase in 2020 of Scope 3 emissions is due to the accounting of downstream emissions relating to the sale of non-green products (gas and electricity).

Proportion of emissions	Unit	2021	2020
Scope 1	%	2.1%	2%
Scope 2	%	0.9%	1%
Scope 3	%	97.1%	97%

Emissions avoided	Unit	2021	2020
Scope 1 ^{*1}	tCO ₂ e	1,834	1,935
Scope 2 ^{*2}	tCO ₂ e	668	674
Scope 3 ^{*3}	tCO ₂ e	1,689,609	2,159,539
Total emissions avoided ^{*4}	tCO ₂ e	1,692,112	2,162,148

^{*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 18: Number of customer accounts^{*1,2} {GRI EU 3}

Type	Unit	2021	2020	2019	2018	YtY variation
Electricity customer accounts	No.	296,877	275,000	261,000	236,000	8%
Heating customer accounts	No.	1,896	1,844	1,772	1,716	3%
Gas customer accounts	No.	70,633	64,000	61,000	60,000	10%
Total customer accounts	No.	369,406	340,844	323,772	297,716	8%

^{*1} Customer accounts = active connections to the grid (POD) as per 31 Dec.

^{*2} Smart Region customer accounts are not included.

Table 19: Monthly average of calls answered at toll-free number^{*1} {ALP 1}

	Unit	2021	2020	2019	2018
Monthly average of calls answered – green number	%	94	96	97	97

^{*1} Includes only calls made to the green number of ASS.

^{*2} In 2021, we recorded a 52% increase in calls received at the call center (compared to 2020).

Table 20: Customer complaints^{*1} {ALP 2}

	Unit	2021	2020	2019	2018	YtY variation
Number of complaints within the reporting period	No.	433	448	403	533	-3%
i. number thereof of complaints registered within the reporting period ^{*2}	No.	434	448	402	533	-3%
ii. number thereof of complaints addressed within the reporting period ^{*3}	No.	433	446	401	533	-3%
Number of unaddressed complaints including prior periods ^{*4}	No.	0	0	2	0	#DIV/0!
Resolution rate customer complaints within the reporting period, addressed within 30 days ^{*5}	%	99.5	99	100	100	
Complaint rate (no. of complaints per 100 clients)	Rate	0.12	0.13	0.13	0.18	

^{*1} Includes complaints from ASS, Alperia Sum, Ecoplus, GGP

^{*2} One complaint was launched in 2020, but only registered in 2021.

^{*3} Four complaints were registered in 2020 and addressed in 2021.

^{*4} Four complaints which were registered in December 2021 and were addressed in January 2022.

^{*5} As of 2019 response time is 30 days; for 2018, response time was 40 days.

Table 21: Customer Satisfaction Index {ALP 3}

	Unit	2021 ^{*3}	2020	2019	2018 ^{*2}
Customer Satisfaction Index ^{*1}	%	not available	not available	not available	87
Customer Satisfaction Index – Clients Business	%	not available	not available	not available	85
Customer Satisfaction Index – Clients Private	%	not available	not available	not available	89

^{*1} Percentage of clients (business and retail) who are overall satisfied with Alperia's services.

^{*2} Survey was performed for the first time in 2018 and will be performed bi-annually.

^{*3} Survey was postponed due to the COVID-19 pandemic.

Transparent Marketing and Communication

Table 22: Incidents of non-compliance concerning product and service information and labelling^{*1} {GRI 417-2}

Number of incidents of non-compliance concerning product and service information and labelling	Unit	2021	2020	2019	2018	YtY variation
with regulations resulting in a fine or penalty	No.	0	0	0	0	0%
with regulations resulting in a warning	No.	1	0	0	0	100%
with voluntary codes	No.	0	0	0	0	0%

^{*1} Hydrodata S.p.A., Gruppo Green Power S.r.l., Bluepower Connection S.r.l. and Green Energy Group S.r.l. are not included.

Table 23: Incidents of non-compliance concerning marketing communications^{*1} {GRI 417-3}

Number of incidents of non-compliance concerning marketing communications	Unit	2021	2020	2019	2018	YtY variation
with regulations resulting in a fine or penalty	No.	0	0	0	0	0%
with regulations resulting in a warning	No.	0	0	0	0	0%
with voluntary codes ^{*2}	No.	0	0	0	0	0%

^{*1} Hydrodata S.p.A., Gruppo Green Power S.r.l., Bluepower Connection S.r.l. and Green Energy Group S.r.l. are not included.

^{*2} Sponsorship and Donation Guideline of Alperia.

Cybersecurity

Table 24: Customer Privacy {GRI 418-1}

	Unit	2021	2020	2019	2018	YtY variation
Total number of substantiated complaints received concerning breaches of customer privacy	No.	0	0	0	0	0%
I. complaints received from outside parties and substantiated by the organisation	No.	0	0	0	0	0%
II. complaints from regulatory bodies	No.	0	0	0	0	0%
Total number of identified leaks, thefts, or losses of customer data	No.	0	0	0	0	0%

Table 25: Other indicators related to cybersecurity

	Unit	2021	2020	2019	2018	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
malicious emails	No.	11,200	2,000	4,000	3,000	460% ^{*1}
% of malicious emails vs total mail processed	%	29	24	-	-	5%
malicious connection attempts	No.	1,500	1,000	6,000	22,000	50%
Each month, Alperia identifies and blocks an average of:						
viruses on local devices	No.	55	530	2,930	70	-90% ^{*2}
pieces of spyware on local devices (software that collects information about a user's online activity)	No.	19	27	31	40	-30%
malicious, suspicious or prohibited internet activities	No.	17,000,000	2,800,000	2,000,000	1,000,000	507% ^{*3}

malicious or unauthorised applications	No.	270,000	360	200	120	74900% ⁴
malicious or prohibited items of content	No.	84,000	54,000	250,000	250,000	56%

Each year, Alperia Security Awareness Program results:

Security Awareness: % security training participation rate	%	90% of 1,159 users
Security Awareness: % overall result final test score	%	80
Phishing Simulation: % of clicked links Click Rate	%	20
Phishing Simulation: Logins compromised	%	7
Data Protection: % privacy training participation rate	%	88% of 1,211 users
Data Protection: % overall result final test score	%	89

¹ In 2021, categories of malicious e-mails in general were added, i.e., not just spam. This decision was taken in order to harmonise the term 'malicious' also with data from other systems.

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

^{3/4} As a result of the generational change in firewalls, blocking rules were rewritten and the level of detection of malicious activity was raised.

Employees

Employee development

Table 26: Information on employees and other workers^{*1 *2 *3 *4} {GRI 102-8}

Diversity employees	Total number of employees	Employment contract												Employment type							
		Permanent								Temporary				Full-time				Part-time			
Unit		2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018
Women	Persons	294	261	230	195	274	244	211	182	20	17	19	13	193	173	147	121	101	88	83	74
	%	25	24	23	21	23	22	21	19	2	2	2	1	16	16	14	13	9	8	8	8
Men	Persons	882	826	787	750	830	779	750	708	52	47	37	42	859	807	769	729	23	19	18	21
	%	75	76	77	79	71	72	74	75	4	4	4	4	73	74	76	77	2	2	2	2
Total ¹	Persons	1,176	1,087	1,017	945	1,104	1,023	961	890	72	64	56	55	1,052	980	916	850	124	107	101	95
	%	100	100	100	100	94	94	94	94	6	6	6	6	89	90	90	90	11	10	10	10

^{*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 2020 data.

^{*2} Employees who left the organisation on 31 Dec are included in the total number of employees per 31 Dec.

^{*3} Directors are included in employee numbers.

^{*4} The percentages communicated from 2019 are calculated for total employees, whereas in the 2018 Sustainability Report they were calculated for employment contract/type.

Table 27: New employee hires and employee turnover*1 {GRI 401-1}

New employee hires		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	35	26	21	13	35%	13	17	2	3
	%	32	30	28	22					
Men	Persons	76	62	54	46	23%	24	28	22	2
	%	68	70	72	78					
Total new employee hires	Persons	111	88	75	59	26%	37	45	24	5
Total headcount per 31 Dec.	Persons	1,176	1,087	1,017	945	8%				
New employee hire rate	%	9	8	7	6					

*1 Hydrodata S.p.A. is not included in the 2020 data. Gruppo Green Power was not included in the 2019 data. Alperia Bartucci was not included in the 2018 data. The total number of employees of the Alperia Group in 2020 can thus not be compared to the total number of employees indicated for 2019 net of employees leaving plus new employees hired in 2020. This misalignment is due to a different scope of reporting for 2020 compared to 2019 (entry of new companies).

Employee turnover*2		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	15	19	7	10	-21%	0	7	1	7
	%	25	24	12	19					
Men	Persons	45	60	52	44	-25%	7	9	6	23
	%	75	76	88	81					
Total employee turnover	Persons	60	79	59	54	-24%	7	16	7	30
Of which retired		24				0%				
Total headcount per 31 Dec.	Persons	1,176	1,087	1,017	945	8%				
Employee turnover rate	%	5	7	6	6					

*2 Employee turnover: employees who leave the organisation voluntarily or due to dismissal, retirement, or death in service; turnover as of 31 Dec; employees who leave the organisation on 31 Dec are not included in employee turnover.

Table 28: Average training hours {GRI 404-1}

Average training hours per employee – Gender						
	Unit	2021	2020	2019	2018	YtY variation
Women	Hours	28.8	17.1	15.9	14.9	69%
Men	Hours	25.7	20.4	21.6	19.7	26%
Total	Hours	26.5	19.6	20.3	18.7	35%

Average training hours per employee – Employee category ^{*1}	Unit	2021	2020	2019	2018	YtY variation
Directors	Hours	26.7	34.1	28.2	31.5	-22%
Managers	Hours	38	33.2	25.3	28.4	14%
White-collar employees	Hours	24.7	16.4	19.2	16.5	51%
Blue-collar employees	Hours	26.4				0%

*1 Before 2020 the following breakdown was applied: top management (directors+direct reports); middle management (2+3 level); employees.

As from 2021 the following breakdown is applied: directors; managers; white-collar employees; blue-collar employees

Table 29: Percentage of employees receiving regular performance and career development reviews^{*1} {GRI 404-3}

Percentage of employees receiving regular performance and career development reviews - gender

	Unit	2021	2020	2019	2018
Women	%	2	3	3	4
Men	%	4	2	3	3
Total	%	3	2	3	4

Percentage of employees receiving regular performance and career development reviews – Employee category^{*2}

	Unit	2021	2020	2019	2018
Directors	%	92	5	19	36
Management	%	2	11	15	9
White-collar employees	%	2	1	0	1
Blue-collar employees	%	0			

^{*1} From 2021, only newly approved Career Development Reviews are included, as well as MBO Reviews. Since 2018, regular employee feedback reviews have been rolled out. Due to the fact that automated data on the % of feedbacks concluded is not yet available, these are currently not included in the indicator.

^{*2} Before 2020 the following breakdown was applied: top management (directors+direct reports); middle management (2+3 level); employees.

As from 2021 the following breakdown is applied: directors; managers; white-collar employees; blue-collar employees

Diversity and equal opportunity

Table 30: Diversity of governance bodies and employees {GRI 405-1}

Diversity of governance bodies*1		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	5	5	5	4	0%	0	0	1	4
	%	42	42	42	33		0	0	8	33
Men	Persons	7	7	7	8	0%	0	0	1	6
	%	58	58	58	67		0	0	8	50
Total	Persons	12	12	12	12	0%	0	0	2	10
	%	100	100	100	100		0	0	17	83

*1 Only governance bodies of parent company Alperia S.p.A. included.

Diversity of employees		Total					under 30	31-40	41-50	51+
	Unit	2021	2020	2019	2018	YtY variation	2021	2021	2021	2021
Women	Persons	294	261	230	195	13%	38	103	79	74
	%	25	24	23	21		3	9	7	6
Men	Persons	882	826	787	750	7%	86	249	219	328
	%	75	76	77	79		7	21	19	28
Employees with disabilities	Persons	34	24	23	24	42%	0	8	12	14
	%	3	2	2	3		0	1	1	1
Total	Persons	1,176	1,087	1,017	945	0.08	124	352	298	402
	%	100	100	100	100		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*1

	Unit	2021	2020	2019
Directors*2	Ratio	not applicable	not applicable	not applicable
Management	Ratio	0.91	0.90	0.88
White-collar employees	Ratio	0.93	0.93	0.96
Blue-collar employees*2	Ratio	not applicable	0 donne	not applicable

Percentage of female employees per category*1

	Unit	2021	2020	2019
Directors	%	5%	4%	5%
Management	%	21%	22%	20%
White-collar employees	%	35%	35%	33%
Blue-collar employees*2	%	0%	0%	0%

Percentage of employees per category based on total number of employees^{*1}

	Unit	2021	2020	2019
Directors	%	2%	2%	2%
Management	%	10%	9%	9%
White-collar employees	%	65%	63%	62%
Blue-collar employees	%	24%	26%	27%

*1 Restatement of the data 2019 and 2020, due to the following changes in the breakdown of the employee categories: top management (directors+direct reports); middle management (2+3 level); white-collar employees and blue-collar employees. As from 2021 the following breakdown is applied: directors; managers; white-collar workers; blue-collar workers

*2 The data for directors and employees are not representative because there is only one woman in each category

Table 32: Parental leave^{*1} {GRI 401-3}

	Unit	Men				Women			
		2021	2020	2019	2018	2020	2020	2019	2018
Total number of employees that were entitled to parental leave ^{*2}	Persons	20	30	25	16	10	11	12	7
Total number of employees that took parental leave ^{*3}	Persons	19	19	21	14	10	11	12	7
	%	95	63	84	88	100	100	100	100
Total number of employees planned to return to work in the reporting period (2021) after parental leave ended	Persons	19	17	21	14	5	3	6	7
Total number of employees that returned to work in the reporting period (2021) after parental leave ended	Persons	19	17	21	14	4	2	2	6
Return-to-work rate ^{*4}	%	100	100	100	100	80	67	33	86
Total number of employees that returned to work in 2020 after parental leave ended that were still employed twelve months (ending in the reporting period 2021) after their return to work	Persons	17	19	14	15	2	3	6	6
Retention rate ^{*5}	%	100	90	100	88	100	150	100	75

*1 Based on the entitlements with starting date after 1/1/2021.

*2 Based on total entitlements known to the employer with starting date after 1/1/2021.

*3 Includes compulsory leave (only for mother) and optional leave (usable also by the father).

*4 Total number of employees that did return to work after parental leave / total number of employees due to return to work after taking parental leave*100.

*5 Retention rate = total number of employees retained 12 months after returning to work following a period of parental leave / total number of employees returning from parental leave in the prior reporting period(s) *100. The percentage in 2020 was higher than 100% due to the fact that an employee from a newly acquired business was included in 2020 and not in 2019.

Health and safety at work

Table 33: Work-related injuries {GRI 403-9}

Employees ^{*1}	Unit	2021	2020	2019	2018	YtY variation
Fatalities	No.	0	0	0	0	0%
High-consequence work-related injuries (excluding fatalities) ^{*2}	No.	0	0	0	0	0%
Injuries that result in days away from work	No.	21	14	14	13	50%
Injuries that result in restricted work or transfer to another job	No.	NA	NA	NA	NA	0%
Injuries that result in medical treatment ^{*3}	No.	0	0	0	0	0%
Other significant injuries diagnosed by licensed healthcare professional ^{*4}	No.	0	0	0	0	0%
Hours worked	No.	1,891,290	1,721,452	1,613,516	1,454,474	10%
Lost work days ^{*5}	No.	472	320	427	293	48%
Rate of fatalities as a result of work-related injury (per 1.000.000 h)	Rate	0,0	0,0	0,0	0,0	0%
Rate of high-consequence work-related injuries (per 1.000.000 h)	Rate	0,0	0,0	0,0	0,0	0%
Rate of recordable work-related injuries (per 1.000.000 h)	Rate	11.10	8.13	8.68	8.94	37%
Lost day rate (per 1.000 h)	Rate	0.25	0.19	0.26	0.20	34%

Contractors ^{*1}	Unit	2021	2020	2019	2018	YtY variation
Fatalities	No.	0	0	0	0	0%
High-consequence work-related injuries (excluding fatalities) ^{*2}	No.	0	0	0	0	0%
Injuries that result in days away from work	No.	2	16	2	1	-88%
Injuries that result in restricted work or transfer to another job	No.	NA	NA	NA	NA	0%
Injuries that result in medical treatment ^{*3}	No.	0	0	0	0	0%
Other significant injuries diagnosed by licensed healthcare professional ^{*4}	No.	0	0	0	0	0%
Hours worked	No.	731,328	770,223	656,616	584,353	-5%
Lost work days ^{*5}	No.	57	73	86	13	-22%
Rate of fatalities as a result of work-related injury (per 1.000.000 h)	Rate	0.0	0.0	0.0	0.0	0%
Rate of high-consequence work-	Rate	0.0	0.0	0.0	0.0	0%

related injuries (per 1.000.000 h)						
Rate of recordable work-related injuries (per 1.000.000 h)	Rate	2.73	20.77	3.05	1.71	-87%
Lost day rate (per 1000 h)	Rate	0.08	0.09	0.13	0.02	-18%

*1 Injuries as a result of commuting incidents have only been included where the transport has been organised by the organisation.

*2 Work-related injury that is an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.

*3 Beyond first aid, or loss of consciousness.

*4 Does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.

*5 When calculating "lost days", "days" means calendar days; lost-day count begins the day after the accident.

Table 34: Work-related ill health {GRI 403-10}

Employees	Unit	2021	2020	2019	2018	YtY variation
Fatalities as result of work-related ill health	No.	0	0	0	0	0%
Work-related ill health that results in days away from work	No.	0	0	0	0	0%
Lost work days due to absences of all kind*1	No.	12,566	16,698	11,729	10,033	-25%
Work-related ill health that results in restricted work or transfer to another job	No.	0	0	0	0	0%
Work-related ill health that results in medical treatment*2	No.	0	0	0	0	0%
Other work-related ill health diagnosed by licensed healthcare professional	No.	0	0	0	0	0%
Cases of recordable work-related ill health	No.	0	0	0	0	0%
Hours worked	No.	1,891,289	1,721,452	1,613,516	1,454,474	10%
Hours scheduled to be worked	No.	2,243,027	2,086,963	1,950,015	1,822,584	7%
Absentee rate (absentee days per 1.000 hours worked)*3	Rate	5.6	8.0	6.0	5.5	-30%

*1Lost-day count begins the day after the absence; increase of lost work days due to an increase in absences related to the COVID-19 pandemic.

*2Beyond first aid, or loss of consciousness.

*3Absences exclude permitted-leave absences such as holidays, study, maternity or paternity leave and compassionate leave.

Contractors	Unit	2021	2020	2019	2018	YtY variation
Fatalities as result of work-related ill health	No.	0	0	0	0	0%
Work-related ill health that results in days away from work	No.	0	0	0	0	0%
Work-related ill health that results in restricted work or transfer to another job	No.	0	0	0	0	0%
Work-related ill health that results in medical treatment*1	No.	0	0	0	0	0%
Other work-related ill health diagnosed by licensed healthcare professional	No.	0	0	0	0	0%
Cases of recordable work-related ill health	No.	0	0	0	0	0%

*1 Beyond first aid, or loss of consciousness.

Development and Innovation

Innovation, research and development

Table 35: Innovation, research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development {GRI EU 8}

	Unit	2021	2020	2019	2018	YtY variation
Number of employees working on R&D projects	Persons	44	110	88	46	-60% ^{*1}
Employee hours on R&D Projects	Hours	not available	not available	not available	not available	
Total R&D expenditure thereof	EUR	2,206,119	2.148.484	1.560.934	1.056.717	3%
EU projects	EUR	143,790	185.223	167.293	393.169	-22%
Other Innovation projects	EUR	2,062,329	1.963.262	1.393.641	663.548	5%

^{*1}From 2021 onwards, only people who actually recorded hours in the management system on innovation projects were considered.

Table 36: Sustainable products and services^{*1} {ALP 4}

	Unit	2021	2020	2019	2018
Share of revenues with sustainable products and services	%	47	46	40	49

^{*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.

Table 38: Sustainable products and services supplied to new clients^{*1}

	Unit	2021	2020	2019	2018
Percentage of green products supplied to new clients ^{*1}	%	100%	85%	80%	

^{*1} Percentage includes retail and corporate clients.

APPENDIX 5: INDEPENDENT AUDITORS' REPORT



AIPERIA 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 2021



***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 2021 prepared in accordance with article 4 of the Decree, and approved by the Management Board on 14 April 2022 (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 2020, 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 Alperia Greenpower Srl and Alperia Smart Services 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, Alperia Greenpower Srl and Alperia Smart Services 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 2021 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, 6 May 2022

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 2021 of Alperia Group.

APPENDIX 6: EU 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. Protecting 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) and;
- share of operating expenses (OpEx) related to assets or processes associated with economic activities aligned to the taxonomy.

The objective of the Taxonomy Regulation is to increase market transparency, i.e., to increase the quantity, quality and comparability of information on sustainability issues concerning companies, operators and financial products. In addition, it allows each operational line and production plant to be examined – in the context of investment analysis or evaluating the company's positioning in relation to competitors – using performance indicators (KPIs). 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. The adoption of the Taxonomy is relevant as it allows the following different objectives to be pursued:

- to provide adequate and uniform guidance to companies and investors on which economic activities can be considered environmentally sustainable;
- to be an enabling factor in achieving the goals set out in the Green Deal, as a strategy for turning climate and environmental challenges into opportunities for growth in all economic sectors;
- to limit the risk of greenwashing;
- to help companies plan their transition to business models in line with a low-carbon economy.

The Alperia Group business

Alperia SpA 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 SELFİN SRL, which groups together municipalities and district communities in South Tyrol. The head office 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. In 2020, Alperia was recognised as the best Green Brand in the International Charge Energy Branding Award 2020, and also took first place in *Altroconsumo*'s ranking of electricity providers.

2.1.1 PRODUCTION AND MANAGEMENT OF HYDROELECTRICITY

Within the Alperia Group, the production and management of hydroelectric power, as a sustainable and renewable energy source, is entrusted to **Alperia Greenpower** and **Alperia Vipower**.

Alperia Greenpower manages the production of electricity from renewable sources through 34 hydroelectric power plants of different types: flowing water, catchment (or regulated runoff) and storage. The hydroelectric plants are located in South Tyrol, along the main watercourses. To plan the actions necessary to ensure proper management of the environment in the various stages of production, Alperia Greenpower has adopted an Integrated Management System in line with that of the Group, thanks to which it has identified the environmental risks associated with its activities and triggered corrective and/or preventive measures. All sediment management activities carried out by Alperia Greenpower are subject to EMAS (Eco-Management and Audit Scheme) assessment, a Community eco-management and audit scheme to which companies and organisations, both public and private, based in the European Community or outside it, that wish to commit themselves to assessing and improving their environmental efficiency can voluntarily adhere. The Company is also certified according to UNI ISO 9001:2015 and UNI ISO 45001:2018. Alperia Greenpower's mission is to produce energy, which is then sold for the most part to Alperia Trading, which sells it on the markets (at low voltage) or to other interlocutors (mainly consortia and GSE institutional operators).

Alperia Vipower is responsible for the production and operation of two hydroelectric plants (Castelbello and Glorenza), whose concessions are due to expire in 2031. The Alperia Vipower sites are also certified according to UNI ISO 9001:2015, UNI ISO 45001:2018, UNI ISO 14001:2015 and have EMAS registration.

2.1.2 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 photovoltaic system saves a substantial amount of money and reduces electricity costs by producing its own energy. To demonstrate the Alperia Group's commitment to the production of this type of energy, a photovoltaic park has been built in Sardinia. **Ottana Solar Power** is the largest photovoltaic power plant on the island. In addition to the production and management of hydroelectric power, **Alperia Greenpower** also manages a number of photovoltaic plants on public buildings in the city of Bolzano.

2.1.3 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 8,900 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. 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 are safer in the event of extreme weather events, although more difficult to manage in the event of malfunctions. With a view to innovation, in 2020, Edyna further developed the Edyna Smart platform, with which it monitors consumption in four areas: Smart Water, Smart Vehicle, Smart Lighting and Smart Access.

Edyna Transmission Srl 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 Spa's instructions.

2.1.4 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 Srl is the Group company that deals with the construction, production, distribution and maintenance of the thermal energy network. 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. The company operates five plants for the generation and distribution of thermal energy – Bolzano, Merano, Sesto, Chiusa and Lazfons – and has 2,335 heat exchangers, while in 2021, there number

increased to 2,412, including Silandro. The heat leaves the power plant and is sent directly to homes through an underground network of pipes. Emission savings are due to the type of fuel used. To produce thermal energy, Alperia Ecoplus uses biomass (60% local), natural gas and heat from the Bolzano municipal waste incinerator. Alperia Ecoplus is the fifth largest national operator with approximately 313 GWh produced and distributed during 2021. More than €11 million was invested in this sector during 2020. This involved the expansion of the district-heating network in Bolzano, the construction of a biomass district heating plant in Merano and, also in Merano, the installation and testing of phase change tanks for thermal energy storage. These investments will be renewed in the next four years, as foreseen in the Strategic Plan, for a total value of €71 million. The Alperia Ecoplus Integrated Management System is certified according to the UNI ISO 9001:2015, UNI ISO 14001:2015, UNI ISO 45001:2018 standards. 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 Srl.

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 start-up and shut-down 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.

2.1.5 ENERGY EFFICIENCY IN BUILDINGS

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 for this purpose by the European Commission and the national government. This includes, for example, the Superbonus scheme. To this end, investments are being planned for energy-related building upgrading initiatives. The projects will be implemented thanks to the know-how of **Alperia Bartucci**, **EfficienteRete** and **Gruppo Green Power**.

From January 2022, these companies will be integrated into the company **Alperia Green Future Srl**.

Alperia Bartucci specialises in the design and implementation of energy efficiency measures and integrated energy services for industrial and civil/residential applications (e.g., 110% bonus). For industry, it carries out advisory activities of planning and analysis of energy data and develops energy efficiency measures by investing directly in projects. For the civil/residential world, it deals with all fulfilments and building efficiency measures concerning Superbonus and other building bonuses. It develops cross-cutting AI systems with an advanced algorithm based on predictive models. This allows optimised water pumping from wells to tanks and minimises network pressure, ensuring more efficient management with lower resource loss and waste levels. It has also developed Sybil®, a patented system based on artificial intelligence, which is able to respond to the specific characteristics of each building, optimising energy consumption and allowing significant energy savings. It is an environmentally friendly solution with a focus on living comfort and user needs. Alperia Bartucci also carries out various activities in the form of Energy Performance Contracts, monitors energy efficiency in Alperia's offices and dedicates part of its work to decarbonisation projects, helping companies to design an energy sustainability strategy for the period up to 2030. It also developed projects to promote greater awareness among the staff of customer companies, forming a team of Energy Ambassadors, who promoted activities aimed at intelligent energy use. It also deals with energy efficiency activities such as energy diagnoses, monitoring systems, certification according to UNI ISO 50001:2018 and UNI ISO 14064:2019, compressed air-leak detection and thermography. It applies for Energy Efficiency Certificates as an ESCo.

EfficienteRete is a company set up for the Bonus 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 Bartucci, 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 Bartucci staff. The company also deals with completion works that are not covered by Bonus 110, such as, for example, the Bonus Facciate (exterior areas not affected by energy efficiency).

Gruppo Green Power also provides domestic energy efficiency. Integrated into the Group in 2019, it deals with the collection, design, physical installation and sales to the end customer of electrical and heating systems. Its core business is energy efficiency for domestic consumption, mainly in the Triveneto region. It also sells bundled products including photovoltaics with boiler/heat pump/accumulators or boilers and air conditioners. Gruppo Green Power has been active for many years in the supply of domestic solutions for photovoltaic production and energy storage, as well as heat pump systems and energy recovery boilers. It has more than 18,500 customers, a structured network of single-brand agents and a structure of installers that allows it to manage around 300 sites per month.

Bluepower connection is the Gruppo Green Power's call centre based in Timisoara. It offers sales and support services to companies that use technology to find solutions for home, work and everyday life.

2.1.6 CONSULTING and RESEARCH & DEVELOPMENT

Hydrodata: The Alperia Group operates a huge stock of renewable energy production facilities. The sustainable maintenance and modernisation of these plants to the highest standards of energy efficiency, eco-sustainability and safety is based on a strong engineering commitment. Hydrodata S.p.A. is a leading technical consultancy company on the national scene, specialising in the development and provision of engineering services, technical-economic consultancy and applied research in the field of water management. It is able to develop advanced and innovative design solutions both from a technical and environmental sustainability point of view.

Alperia Innoveering: provides engineering services to Group companies. It deals with the promotion, organisation and operation of initiatives and activities in the fields of engineering, especially hydraulics, technical and scientific research applied to geology with hydraulic field measurements, consulting, monitoring and technical assistance.

Alperia Fiber: founded in 2016 with the aim of making the most advanced digital services accessible to the citizens and businesses of South Tyrol, it manages the ultra-broadband network throughout South Tyrol, allowing people to benefit from ultra-fast data and internet connections. The company digitised the process of installing and maintaining the fibre-optic access network in South Tyrol.

2.2.1 SALES 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 is the Group's sales company that carries out marketing activities, handles customer complaints and in 2021, its sales and after-sales processes were updated with the introduction of the new Salesforce CRM, the world's leading provider. It has a dedicated infrastructure for data collection, harmonisation and analysis. Alperia Smart Services provides services in the energy sector across the board, from production to marketing.

Alperia SUM was founded in November 2018 as a result of the collaboration between Alperia, an energy services provider based in South Tyrol, and Sum (Servizi Unindustria Multiutilities), a direct reference point for the Confindustria (Confederation of Italian Industries) of Treviso, Padua, Venice and Rovigo. A Confindustria spin-off, the company aims to create value for companies by offering tailored and transparent advice in the field of electricity and gas.

The role of Alperia in achieving objective 1: climate change mitigation

The Alperia Group has decided to embrace the provisions of the EU Taxonomy Regulation 2020/852, which has the ambitious aim of supporting the Union's economic activities to adopt a common ESG language and to promote the decarbonisation of the European economy by 2050. The Group has decided to work on several fronts to achieve climate change mitigation, the first of the six objectives currently regulated by the Taxonomy. In particular, the reference chapters in the Technical Annexes published by the European Commission in June 2021 and in which the Group has recognised its activities are:

- **4.1 Production of electricity using solar and 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. *Ottana Solar Power* and *Alperia Greenpower* are active in this sector;
- **4.5 Production of electricity 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 Production of electricity 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**, which consists in 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 Trasmission*;
- **4.15 District heating** 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 Srl*;
- **7.2 Renovation of existing buildings** involving the preparation and implementation of building and civil engineering initiatives. Within the Group, *EfficienteRete* is engaged in this activity;
- **7.3 Installation, maintenance and repair of energy efficiency devices**, which are carried out by *Alperia Bartucci*, *EfficienteRete* and *Gruppo Green Power*, through renovations involving new installations, maintenance and repair of

devices with the ethical objective of increasing energy efficiency. This chapter refers to all the initiatives proposed by the European Union related to the ecological transition;






- **7.5 Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy performance of buildings** in which *Alperia Bartucci* is engaged;
- **7.6 Installation, maintenance and repair of renewable energy technologies**, where *EfficienteRete* is active;
- **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. These types of ICT solutions may 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 Fiber Srl* and *Alperia Bartucci*;
- **9.1 Near-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 company involved in this area is *Alperia Bartucci*;
- **9.3 Professional services related to the energy performance of buildings** are entrusted to *Alperia Bartucci*.
-

The methodology adopted by Alperia

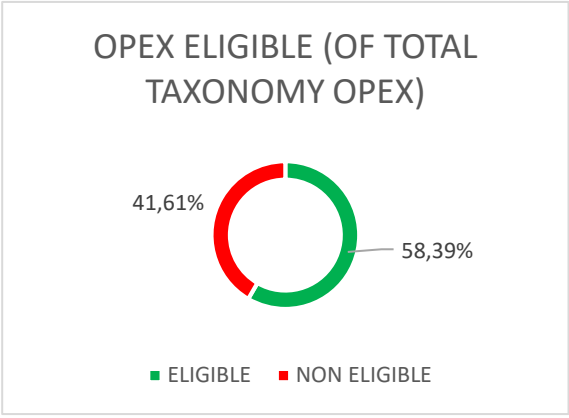
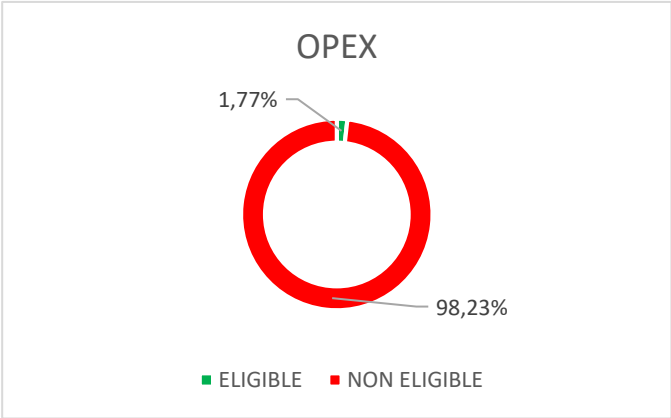
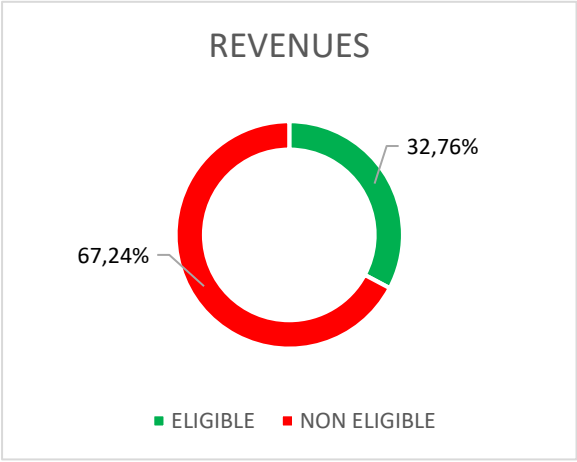
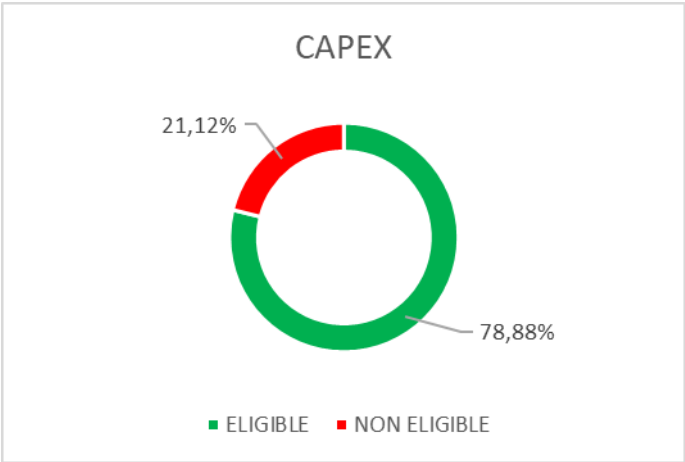
The economic activities of the Alperia Group, for the purposes of the analyses for the Taxonomy, have been divided into two different categories, defined by the regulations, as noted below:

ELIGIBLE: any economic activity described by the Taxonomy Regulation, described 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;

NON-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. However, it should be noted that some economic activities belonging to this category contribute substantially to the achievement of at least one of the environmental objectives proposed by the European Union. These are, for example, activities related to the sale of green energy. This section includes subsidiaries: **Alperia SpA, Alperia Trading Srl, Alperia Smart Services Srl, Alperia Sum SpA, Hydrodata SpA, Alperia Innoveering Srl.**

Alperia Group's Commitment					
Value chain	Energy production	Trading	Electricity distribution	Energy efficiency	Advisory & R&D
					
Technical criteria	Thermal, Solar energy	Energy trading, Call center, Marketing	Management of the distribution network	Energy efficiency of buildings	Consulting, Research & development, Other services
Eligible - Non eligible					

Results of the group’s economic activities based on the taxonomy



Description of the KPIextraction method

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. With the aim of guaranteeing maximum correlation of the information used to build the KPIs with the consolidated financial statements, it was decided, for the purposes of supplying the tool, in the first instance and where possible, to refer directly to the account balances of the individual companies subject to full consolidation in the aforementioned financial statements. This working method subsequently made it possible to identify the "eligible" or "non-eligible" amounts with greater precision¹⁵ on the basis of the information received from the technical working group, 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" 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);
- to the 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, as regards that relating to turnover and operating expenses, and of the tables in the consolidated explanatory notes, with reference to that 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).

¹⁵ the amounts identified as "non-eligible", reported in the KPI collection tool, also include amounts resulting from that reported by the technical working group in the "out of scope" row.

APPENDIX 7: METHODOLOGICAL NOTE

This Sustainability Report is a consolidated non-financial report as defined in Italian Legislative Decree No. 254/2016, which examines the activities and indicative figures of the Alperia Group according to the reporting limits and reporting period of the 2021 consolidated financial statements. Deviations, with reference to the perimeter, are indicated next to the data in question with footnotes.

List of companies consolidated under the 2021 Consolidated Financial Statements

Business Unit	Company	Investment (%)	Plants (No.)
Parent company	Alperia SpA		
Energy Production	Alperia Greenpower Srl	100	32 hydroelectric power plants 7 photovoltaic systems (Bolzano)
	Alperia Vipower SpA	77	2 hydroelectric power plants
Sales & Trading	Alperia Trading Srl	100	
	Alperia Smart Services Srl	100	
	Alperia Sum SpA	70	
Networks	Edyna Srl	100	
	Edyna Transmission Srl	100	
Heat & Services	Alperia Ecoplus Srl	100	5 district heating plants
	Biopower Sardegna Srl	100	1 biomass power plant
Smart Region	Alperia Fiber GmbH	100	
	Alperia Bartucci SpA	100	
	Hydrodata SpA	50.51	
	Alperia Innoveering Srl	51	
	Gruppo Green Power SpA	100	
	Bluepower Connection Srl	100	

In 2021, Alperia S.p.A. acquired the remaining 40% of the share capital of Alperia Bartucci S.r.l.

The same year, Alperia Greenpower S.r.l. sold its stake in Ottana Solar Power S.r.l. and Unix Group S.r.l. and Green Energy Group S.r.l merged into Gruppo Green Power S.r.l.

The classification for equal-pay data for 2020 has been changed to make the data consistent with that for 2021. For this reason, these values have been recalculated in the chapter Diversity and equal opportunities.

The Alperia Sustainability Report is published annually. This report has been prepared in accordance with the GRI Standards: Core option.

APPENDIX 8: CONTACTS

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