alperia

Looking forward confidently
Sustainability Report 2020

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

energizing
south tyrol

CONTENTS

LETTER TO THE STAKEHOLDERS {GRI 102-14}

Dear Readers,

2020 was an unusual year for everyone. The COVID-19 pandemic has changed the way we live and work, reshaping priorities and expectations. It has highlighted our fragilities and exacerbated inequalities, but at the same time it has forced the whole world to look at strategic issues such as climate change and social cohesion – issues to which Alperia has long been committed. And this Sustainability Report, now in its fourth edition, is testament to that.

Over the coming pages, we will illustrate how our organisation has dealt with the pandemic emergency, but also how it has chosen to look to the future. A future that we imagine to be greener, more innovative and more cohesive. These are the factors that guide "One Vision", the Strategic Plan that will steer us until 2024 and that is born from the desire to have an integrated vision, in which sustainability plays a central role. As an energy service provider, we know how crucial our actions can be in contributing to the development of a more sustainable and smarter province. A province where clean and accessible energy is a widespread and inclusive driver of wellbeing.

Our "One Vision" Strategic Plan

"One Vision" is the new Strategic Plan that will guide the Alperia Group until 2024, combining sustainability targets with significant growth in all Business Units. We have incorporated the UN Sustainable Development Goals (SDGs) into the plan, with a commitment to **direct 80% of planned investments towards work on at least 10 SDGs**. This is an important commitment and a decisive stance on the issue of sustainability, which has always been central to Alperia.

The three pillars on which the plan is based are **customer focus, territorial aggregations and the energy transition**. We want to offer increasingly efficient, safe, accessible and cutting-edge services, renewing our close relationships with customers and putting in place new business models to communicate with them through both new physical and digital channels.

We want to strengthen our presence both in our own territory and in others, including through important partnerships, such as the one with Sparkasse, a leading banking group that partners with us in South Tyrol and Triveneto, and with which we have also opened a new Energy Point in Vicenza – a space added to the Energy Corners opened by Alperia over the last year in shopping centres in Treviso, Venice and Padua, offering only 100% green energy services.

The energy transition is an issue that can no longer be postponed. We know 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, such as the Superbonus scheme. We are planning to **invest as much as €500 million in energy-related building renovation initiatives**. These projects will also be realised thanks to the know-how of Alperia Bartucci and Gruppo Green Power, specialised Group companies in this sector.

Alperia has also set itself another ambitious goal, to be **carbon-neutral by 2024**, making a significant contribution to the objectives of the South Tyrol Energy 2050 climate strategy and saving emissions in the amount of over 303 kt of CO_2 equivalent. We will pursue this goal by **reducing emissions**, implementing new technologies and offsetting any remaining operational emissions through climate protection projects. In 2020, we avoided emissions in the amount of 2,162 kt of CO_2 equivalent by implementing a series of measures to reduce our carbon footprint.

We will also increase sales of our green products and services (today, 100% of our new private customers are already supplied only with Green Energy and Gas) and expand district heating, and we will continue to promote electric mobility (in relation to this, we would like to draw attention to the fact that Neogy, a joint Alperia and Dolomiti Energia venture, is the second leading national operator in smart mobility).

Overall, with "One Vision", we therefore expect **investments of €1.7 billion**, with Group EBITDA growing by around €130 million, equally distributed between organic and external investment initiatives.

COVID-19: health, safety and social cohesion

According to the UN, the pandemic has had a negative impact on 13 of the 17 Sustainable Development Goals (SDGs). This includes weakened healthcare systems, increased inequalities and vulnerabilities, and limited efforts to combat climate change, to name but a few. For this reason, Alperia looked to tackle the coronavirus emergency from all angles. First and foremost, we strengthened our commitment to protecting the health of workers. We did this by immediately setting up an **Emergency Board** that met every day during the most critical period of the health emergency, and then once a week, to monitor the progress of infections and make shared decisions. We not only put in place all the measures required by national and provincial regulations, but also additional safety measures, obtaining the CSQ COVID-19 Restriction certification from IMQ. 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.

Specifically, we immediately set up **remote working for all 750 employees in our administrative offices**, we reorganised operative shifts to avoid contact as much as possible, and we gave those with positive cases in their family the chance to take a **rapid COVID test at Alperia's expense** before returning to work with other colleagues. And we went further.

Aware of the economic and social damage caused by the pandemic, we decided to grant **South Tyrolean businesses a three-month moratorium** on payments worth around €50-70 million and offer **private customers** who had lost their jobs or had been laid off in the period from 5 March to 31 May 2020 **two months of free electricity**. We also supported associations, especially those working for the most vulnerable groups, such as the elderly, women and children, or relief organisations, **by donating a total of €1 million**. We also decided to keep all the **sponsorships** we had planned for 2020 for sports and cultural associations in place, despite the fact that many of these activities had to be stopped as a result of the pandemic. This is in addition to the support offered to the local economy during the year.

Supporting the local economy

Alperia has always directly and indirectly supported the local area in which it operates. And this was also the case in 2020. We generated a **local added value of more than €257 million**, with the aim of reaching €1.2 billion by 2021. Of this, €91 million was through taxes, €70 million through salaries, €60 million through the purchase of products and services from local suppliers and more than €2 million through donations and sponsorships.

The range of **innovation, research and development** activities we are implementing also have a significant impact on the area. Having identified global trends, we held international competitions for ideas, such as **Alperia Startup Factory**, now in its third edition. We not only involve innovators and start-ups from outside our company, but also from within and among our own employees, such as in the **INNOVATE**! project, enabling partnerships with renowned academics and research centres. And that is not all: with **Alperia Innoveering**, a company established through the joint venture with Hydrodata, we are ready to introduce new solutions related to IoT, artificial intelligence, blockchain and Industry 4.0 in the field of hydropower, thereby preparing for concession renewals. In 2020, the budget for innovation activities amounted to €1.9 million, out of a total of **more than €2 million invested in research and development**.

Another central aspect for 2020 – and increasingly for the future – is **digitisation**. A challenge for many companies that Alperia was able to tackle immediately, thanks to our prior focus on these issues, even before the pandemic arrived. Over a very short period of time, Alperia gave its employees the chance to work from home under the same conditions and with the same equipment they used in the office (more than 200 new laptops were supplied in record time to enable remote working). But even beyond COVID-19, digital transformation will be key to improving the efficiency and effectiveness of Alperia's operations and enabling new innovative services. This is one of the reasons why Alperia is investing **more than €50 million** in its digitisation plan with "One Vision". Funds that will be used to fully migrate all the company's data centres to the cloud and digitise the key processes of the various business functions.

Alperia and the UN Sustainable Development Goals

Our commitment to sustainability is therefore at the value, environmental, social and business levels. We decided to involve all the people who work at Alperia in pursuing sustainability goals, and we also linked the **production bonus for employees and the Management by Objectives** (MBO) for the company's senior management to this goal. Sustainability must be a shared and coherent path at all levels. Only in this way can we achieve significant results. Thanks to everyone's efforts, **by 2020 we had achieved 70% of the targets set in the Sustainability Plan**.

But we want to do even more. Recognising that energy can play an essential role in meeting new global challenges, Alperia has decided to commit to working towards at least 10 of the United Nations Sustainable Development Goals. This includes promoting health and wellbeing, promoting gender equality, ensuring sustainable water management, ensuring clean and affordable energy, stimulating economic growth and decent work, stimulating innovation, making cities and communities more sustainable and resilient, taking action to combat climate change, promoting responsible consumption and production, and ensuring the conservation of ecosystems and the protection of biodiversity for life on earth.

We have already begun to translate many of these objectives into concrete actions. For example, with Edyna, our distribution subsidiary, we have planned for the replacement of more than 200,000 customers' meters with new-generation **Smart Meters**, which will allow for a more efficient management of energy resources. To support gender equality, we are promoting workshops on **female leadership** and have begun to develop a succession plan to deal with generational change in the company. To minimise the impact of our hydroelectric power plants on the environment and to protect the biological diversity of the waterways, we have designed and begun to build innovative fish ladders. To promote a **conscious use of water resources**, we have also implemented innovative projects for the local population, for example by signing an agreement with the Venosta Valley Land Reclamation Consortium to guarantee the quantity of water necessary to protect the orchards from night frosts during the spring flowering period. We have continued to invest in maintaining our infrastructure to make it more resilient and sustainable. And there is much more.

Sustainability, our driving force

The common thread running through all these measures is **sustainability**, understood as a cross-cutting driver of all our actions, which we monitor with **clear governance and measurable objectives**. For example, we plan to formalise the Diversity Policy and look at adopting a Corporate Governance Code to strengthen the corporate culture. To achieve this, it is essential, above all, to **monitor and manage risks**, especially reputational, cyber- and climate risks, which are particularly pertinent for Alperia. In 2020, the Enterprise Risk Management function defined a management process, so that targeted safeguards could be put in place. Specifically, we are controlling the reputational risk with the launch of a stakeholder management project, the IT risk with numerous measures implemented by the Data Protection Officer and the security advisor, and the climate risk, with specific measures to reduce the negative impact of our activities and to diversify the business, steering it towards sustainable services and products. We want to increase the number of companies adopting completely green products, such as **Green Gas and Green Energy**, and raise awareness among users and employees about sustainability issues.

Thanks to this plurality of actions, 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. But it does not end there. Altroconsumo, Italy's largest consumer protection association, has recognised Alperia as the **best electricity supplier in Italy**. We are extremely proud of these two awards; they are the result of everyone's hard work and spur us on to work even harder to offer the best service to our customers. They 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**. A path that has made sustainability and innovation two key levers for inclusive and balanced growth.

HIGHLIGHTS 2020

BUSINESS

In 2020, we approved the **"One Vision" Strategic Plan** that will steer the Alperia Group until 2024, combining sustainability targets with significant growth in all Business Units. The plan looks to the future by focusing on the centrality of the customer, territorial aggregations and the energy transition and provides for investments of €1.7 billion.

2020 also saw various corporate transactions carried out. Looking at the important objective of renewing hydroelectric concessions, Alperia **acquired Hydrodata S.p.A.** – a leading technical consulting company specialised in water management – with which it then set up the Alperia Innoveering S.r.l. joint venture.

We also sold our investments in Selsolar Rimini S.r.l. and Selsolar Monte San Giusto S.r.l.

We signed binding agreements for the sale of our investments in PVB Power Bulgaria AD and Ottana Solar Power S.r.l. and sold the telecommunications business of Alperia Fiber S.r.l. to Infranet S.p.A.

Finally, after acquiring a majority stake in Gruppo Green Power S.r.l. in 2019, Alperia implemented a series of rationalisation actions involving the purchase of the entire share capital, the delisting of the company from the Italian Stock Exchange and the incorporation of its investments, which, by January 2021, will be reduced from four to one (Bluepower Connection S.r.l.).

STRATEGY AND GOVERNANCE

We achieved 70% of the 2020 targets in the 2017-2021 Sustainability Plan and integrated the UN SDGs into the new 2020-2024 Strategic Plan. **80% of the plan's investments** will be dedicated **to working towards 10 SDGs**. Sustainability will therefore become increasingly integrated into risk management, policy and procedure setting, reporting and performance, and will be bolstered by strengthening the corporate culture. With the aim of involving all the people who work at Alperia in the pursuit of these goals, we have linked the employee production bonus and the Management by Objectives (MBO) of the company's senior management to the achievement of sustainability goals.

COVID-19 PREVENTION MEASURES

For the management of the COVID-19 risk, we set up an **Emergency Board** that met every day during the most critical period of the health emergency, and then once a week. In addition to applying the provisions of national and provincial legislation, Alperia also took additional safety measures, organising operational shifts 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. Remote working was enabled for all those working in offices, and those with positive COVID cases in their family have the opportunity to take rapid tests at Alperia's expense before returning to work with colleagues. 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 to providing employees with protective masks, we have also introduced special disposal systems at sites, raising awareness on environmental sustainability. All decisions taken by the Emergency Board were communicated to employees via the myAlperia intranet and through targeted communication activities. These measures have proven effective, since there has been no outbreak in any of the Group's companies, and Alperia has further ensured this by obtaining the **CSQ COVID-19 Restriction certification from IMQ**. 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.

EMPLOYEES

2020 was an exceptional year for human resources management. Not only did we integrate an HR management section into the Strategic Plan, but with the onset of the pandemic, we launched **remote working** in record time for 750 employees. A way of working that was assessed very positively, according to a satisfaction survey we carried out during the year. For those who were not able to take advantage of remote working, we put in place special shifts to ensure maximum work safety. And for those who had to use the furlough scheme, Alperia guaranteed to make up any shortfall to **100% of their salary**. We continued to pursue career development plans and launched the process to identify backup persons, as foreseen in the succession plan. We delivered 21,268 hours of online training and continued our leadership development activities, with activities aimed at **developing female talent**. Finally, a Diversity Policy and Diversity Manager are planned, as provided for in the 2020-2024 Strategic PlanStrategic Plan.

SECURITY OF SUPPLY

The monitoring and maintenance of infrastructures is essential to ensure a more modern, efficient and secure energy supply. That is why, in 2020, we invested **€127 million to modernise our assets**. In addition, climate change and the increase in extreme weather events are new challenges for Alperia. To ensure the safety of our plants, the resilience of our grids and the security of supply even in emergency situations, in 2020, we simulated **a general blackout with** Edyna, which was also very helpful in managing the record snowfall at the end of the year. Many overhead lines were severely damaged and more than 2,000 households were left without power. In particular, in the Pusteria Valley, it was possible to avoid a blackout for tens of thousands of users thanks to Alperia Greenpower's Brunico power plant. Damage to TERNA's high-voltage lines caused a power failure at the primary substations in Brunico and Dobbiaco. However, thanks to the two power stations it was possible to avoid a blackout.

ADDED ECONOMIC VALUE

In 2020, we **created €257 million of added value for South Tyrol**, through payments to public bodies, staff salaries and benefits, contracts for local companies (reaching a 58% 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. Our goal is to generate an added value of €1.2 billion by 2021, also through investments made in previous years.

SUSTAINABLE PRODUCTS AND SERVICES

In 2020, Alperia generated a 46% revenue share through sustainable products and services. We want to increase this figure by investing increasingly more in **green gas, green energy, district heating, energy efficiency and electric mobility.** In the coming years, the energy efficiency work we will carry out under the Superbonus will be central, thanks to the know-how of Alperia Bartucci and Gruppo Green Power. For the South Tyrolean market, we have also developed tailor-made solutions in cooperation with the local enterprise networks of ARO and Lvh.Apa Confartigianato Imprese. The "One Vision" Strategic Plan itself focuses heavily on the **Superbonus,** with planned investments of around €500 million.

CUSTOMER SATISFACTION

In 2020, we supplied electricity, natural gas and district heating to 340,844 customers and promptly dealt with 99% of the complaints received. We also boosted our call centre by hiring more staff to answer the high number of calls coming in because of COVID-19, and we integrated it into Salesforce. To extend our reach, we signed an important commercial partnership with Sparkasse with whom we have opened a **new Energy Point in Veneto**, in Vicenza, which is added to the three other Energy Corners already opened in shopping centres in Venice, Padua and Treviso. Our efforts to be ever more connected to our customers in a serious, reliable and transparent way have also been recognised by **Altroconsumo**, Italy's largest consumer protection association, which recognised Alperia as the best electricity supplier in Italy. And we were also recognised **as the world's best "Green Brand"** in the International Charge Energy Branding Award 2020, beating competing energy companies from the US, Norway and Germany.

EMISSIONS

In 2020, we **saved emissions in the amount of 2,162 kt of CO_2 equivalent**. We achieved this by implementing a series of measures to reduce our carbon footprint. These included energy efficiency measures for our sites, connecting the Edyna site to district heating, producing electricity from renewable sources, promoting sustainable mobility by increasing the number of electric company cars, providing our employees with electric bicycles to travel between the Group's sites and offsetting the emissions from the printing of our publications. Our goal is to become **carbon-neutral by 2024,** additionally saving emissions in the amount of over 303 kt of CO_2 equivalent. To achieve this goal we will improve the efficiency of calculating our emissions, define targeted actions (e.g. converting existing plants to biomass) and offset the remaining emissions with specific climate protection programmes. During 2020, we further streamlined and rationalised the monitoring and reporting process for our Scope 1, Scope 2 and Scope 3 emissions.

RESEARCH AND DEVELOPMENT

In 2020, we invested around €2 million in research and development. This area is also central to the new Strategic Plan. In total, we plan to invest more than €680 million in innovation, digitisation and business development for all the Group's Business Units. In R&D in particular, investments will be guided by a new internal procedure with which we want to standardise and strengthen the management of innovation projects, introducing a set of standard analyses to assess their effectiveness. In 2020, we continued to support the winning projects of the **Alperia Startup Factory**, with a new edition also launched, and set up the new INNOVATE! competition for our employees. In addition, we decided to equip ourselves with a tool to monitor the main innovation trends in our sectors of interest to enable us to react more rapidly to market changes.

DIGITISATION

The **digital transformation** process is central to Alperia and, as set out in "One Vision", will see **investments of €50 million** over the next four years. The objective is to optimise processes, facilitate skills development and enable data-driven decision-making by making the customer more central. Various measures were already implemented in 2020. These included adopting an agile approach for all accounting, purchasing and management control processes relating to Edyna by bringing them together in a single application, thereby providing the Group's structures with common procedures. Alperia Smart Services' marketing processes were also updated and a dedicated infrastructure for data collection, harmonisation and analysis was created. Added to this was the provision of remote working, which was implemented in record time for 750 employees.

KEY SUSTAINABILITY FIGURES

	2020	2019
TERRITORY		
Value generated for South Tyrol	€257,457,761	€235,822,778
Total investments	€126,700,000	€104,700,000
Net energy produced from renewable sources	95%	94%
Underground lines	72%	71%
Average number of power-supply interruptions per customer	1.91	1.51
Average duration of interruption per customer (min)	29.82	28.07
Energy availability index (hydro plants)	88.88%	86.43%
Environmental incidents	2	0
Percentage of contracts awarded locally (based on number of contracts)	58%	62%
GREEN MISSION		
Percentage of energy consumption from renewable sources within the company	68%	66%
Intensity of market-based operational GHG emissions – Scope 1 & 2 (tCO_2e/MWh of energy produced (gross)	0.01	0.02
Total market-based operational GHG emissions – Scope 1 & 2 (tCO_2e)	82,443	95,653
Total avoided emissions (tCO_2e)	2,162,148	-
CUSTOMERS		
Percentage of calls to the toll-free number answered	96%	97%
Number of complaints per 100 clients	0.13	0.13
EMPLOYEES[*]		
Number of employees	1,087 people	1,017 people
New employee hires	8%	7%
Turnover of personnel	7%	6%
Average training hours per employee	19.6 h	20.3 h
Percentage of female employees	24%	23%
Percentage of women in middle management	18%	17%
Average pay gap between men and women in the category white-collar workers	8%	5%
Percentage of fathers who took parental leave	63%	84%
Return-to-work rate (women)	67%	33%
Rate of absence from work (days of absence per 1,000 hours worked)	8	6
Accident rate (per 1,000,000 hours worked)	8.13	8.68
Accident severity rate (per 1,000 hours worked)	0.19	0.26

*data without Hydrodata S.p.A.

RESEARCH AND INNOVATION		
Investment in research and innovation	€2,148,484	€1,560,934
Percentage of employees involved in research and innovation projects	10%	9%
Percentage of revenues from sustainable products and services[2]	46%	40%

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 one of the most important sustainable-energy companies in Italy.

Our energy comes from renewable sources. We hold the majority of shares in 34 hydroelectric plants, which are accompanied by seven photovoltaic plants and one park, five district heating plants and one biomass plant in Ottana, Sardinia. In total, we manage a network of 8,951 km. We are involved in energy sales and distribution, district heating systems, energy efficiency and the development of electric mobility. All our efforts are geared towards creating a **greener and smarter future**. To this end, we develop innovative technological solutions that enable better management of resources and work with full respect for territories and communities.

Our home is South Tyrol, but we also operate in Veneto and Piedmont, regions where we are expanding with new significant acquisitions. In all these areas, we put sustainability at the heart of everything we do, both environmentally and socially.

Alperia S.p.A. is the joint-stock parent company created on 1 January 2016 from the merger of the two largest energy companies in the province of Bolzano. The Autonomous Province of Bolzano currently holds 46.38% of the company. Selfin, which is owned by 100 municipalities in South Tyrol, holds 11.62%; 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.
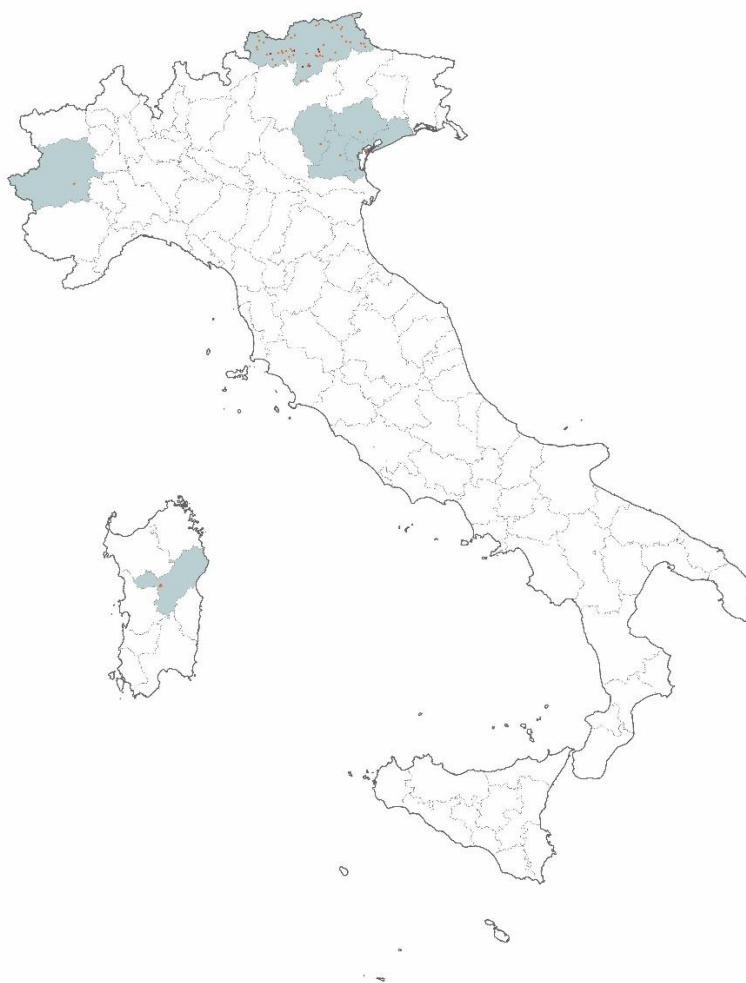
Image 1: Area in which Alperia operates (source: Alperia)

1.1 Alperia at a glance {GRI 102-7}

Revenue	€1,437,718,992 (+7% compared to 1.6 billion in 2019)
Net energy produced	5.3 TWh (2019: 4.6 TWh)
Workforce	1,087 people
Net financial position	-394,993,918 (2019: -384 million)
Electricity sold to end customers	5,372 GWh (2019: 5.4 TWh)
Natural gas sold to end customers	421 MSmc (2019: 464 MSmc)
Electricity trading	3,166 GWh (2019: 4.8 TWh)
Heat distributed	222 GWh (2019: 217 GWh)
Hydroelectric production	4,772 GWh (2019: 4,044 GWh)
Energy availability index (hydro plants)	88.88% (2019: 86.43%)

1.2 Our corporate structure {GRI 102-1, 102-2, 102-6}
New acquisitions for sustainable growth

Alperia S.p.A. is divided into **five Business Units:** Generation, Sales & Trading, Grids, Heat & Services and Smart Region, within which Alperia's 32 subsidiaries and affiliates are incorporated (data referring to 31 December 2020).

2020 saw various corporate transactions in line with the provisions of the Alperia Group's new **"One Vision"** 2020-2024 Strategic Plan (the Strategic Plan) approved at the end of November 2020 as well as with the previous plan.

Looking at the crucial objective of renewing both some hydroelectric concessions granted in the province, whose expiry date is currently set at 31 December 2023, and hydroelectric concessions granted in the remaining national territory with expiry dates after that date, in August 2020, Alperia signed an agreement for the transfer from Intecno S.p.A. of 50.51% of the shares of Hydrodata S.p.A., a leading national technical consultancy company based in Turin and specialised in the development and provision of engineering services, technical-economic consultancy and applied research in the field of water management. The acquisition of Hydrodata S.p.A. is part of the initiatives to support the achievement of the important corporate objectives set out in the Strategic Plan.

In November 2020, Hydrodata S.p.A. and Alperia S.p.A. established a joint venture called Alperia Innoveering S.r.l. (99% owned by Hydrodata S.p.A. and 1% by Alperia S.p.A.), a company that will provide engineering services to Group companies and allow, among other things, for the introduction of new solutions in the field of Internet of Things, artificial intelligence, blockchain and Industry 4.0, in the Group's hydroelectric power plants.
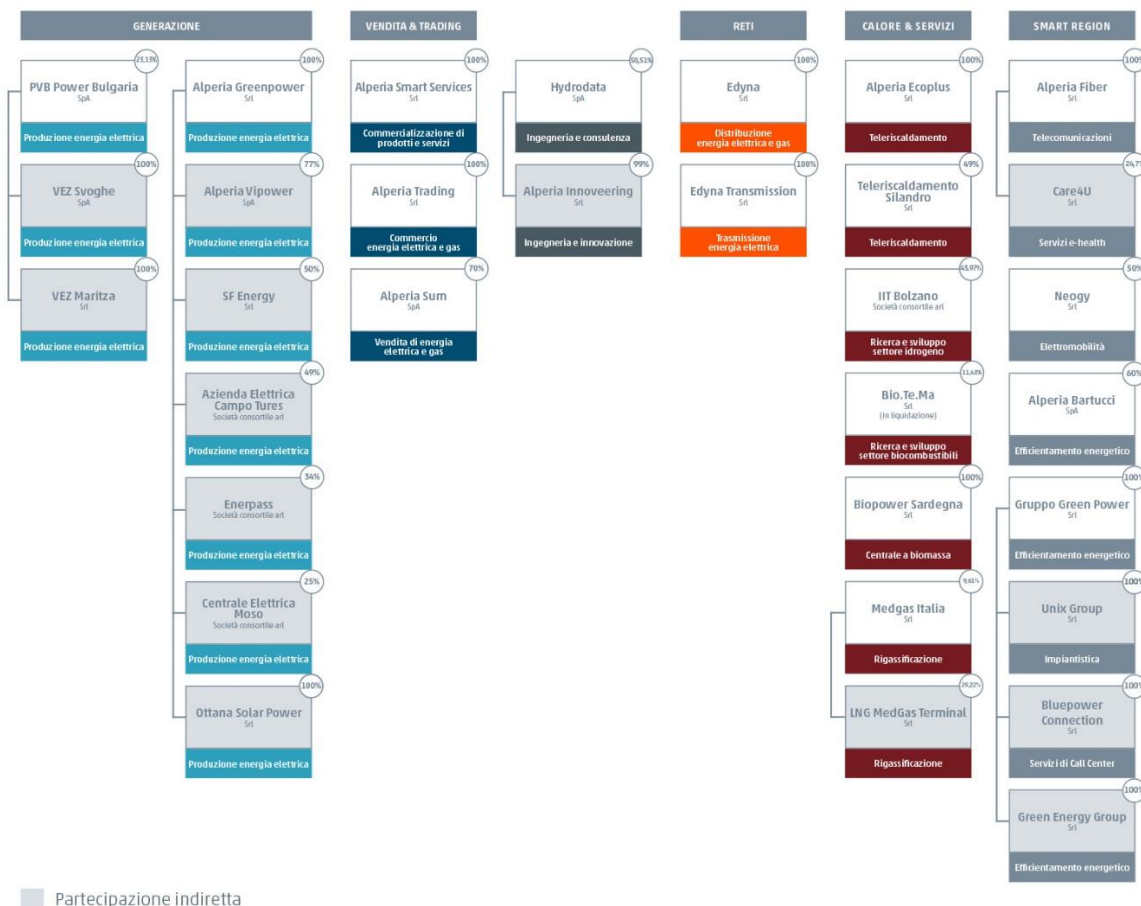
Image 2: Corporate structure (source: Alperia)

Hydrodata, reasons for the acquisition

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. For Alperia, having this kind of know-how within the Group has always been an organisational and human capital development objective, also highlighted by the internal Engineering & Consulting structure specialising in energy issues. For this reason, the acquisition of Hydrodata, an engineering company with experience in the energy, hydraulic and environmental sectors that has been in operation for over 40 years, proved to be strategic, also in view of the new operations envisaged in the 2020-2024 Strategic Plan, in particular the renewal of expiring hydroelectric concessions. Hydrodata S.p.A., founded in Turin in 1976, has enabled Alperia to strengthen its internal structure in the field of technical services, relating both to the development of its hydroelectric assets in South Tyrol and to the launch of a new innovation and research project focused on the field of water. With Hydrodata, Alperia will be able 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. In addition, the acquisition of Hydrodata S.p.a. further reinforces the decision to internalise key engineering services for the company.

In addition, after acquiring in 2019 the majority of Gruppo Green Power S.r.l. – a company operating in the sector of services for energy efficiency in the domestic sector – in 2020, Alperia S.p.A. implemented a series of rationalisation activities that involved the purchase of the entire share capital, the delisting of the company from the Italian Stock Exchange and the incorporation of its investments, which, by January 2021, will be reduced from initially four to one (Bluepower Connection S.r.l.).

Gruppo Green Power
New management, new vision
The acquisition of Gruppo Green Power by Alperia is part of the company's strategy to expand its presence in the energy efficiency market, diversifying its core business and aiming to broaden its customer base, with a significant economic return and high added value, also in terms of induced employment.

With this in mind, in 2020, Gruppo Green Power drew up and developed its Strategic PlanStrategic Plan, with a time horizon up to 2024, based on various strategic pillars. These include the complete integration of Green Power within the Alperia Group, reinforcing the values of fairness and transparency that have always characterised Alperia's actions and obviously the development of turnover in line with the Group's Strategic PlanStrategic Plan.

Gruppo Green Power has therefore worked in various areas. Firstly, it began the transition to a new business model, with the direct management of external call centres and the sales network, which now consists of more than 170 agents.
It will also commission a number of external technical studies that will enable it to make a further qualitative leap forward in the management of the design phases of installations and will enter into a number of commercial agreements with construction and fixture manufacturing companies.
The evolution of the business model will go hand in hand with the strengthening of the corporate structure and the completion of the integration into the Alperia Group, starting with the systems, administrative and financial area and ending with the human resources area.

The aim is to enable Gruppo Green Power to achieve the ambitious target of increasing its turnover from €17 million before 2020, to around €50 million by 2021, mainly through the activities related to the 110% Superbonus.

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 the world interested in the success of electric mobility, with the aim of setting standards, carrying out network activities, defining best practices to promote the topic in Italy and supporting government policy. The General Manager of Alperia, 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.

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 working group on sustainable finance. The association has a total of more than 500 stakeholders operating in the water, environment, electricity and gas sectors. Alperia and the other associated companies have signed the Pact for the Development of the Country, a three-year planning document that involves the Italian state, local institutions, local communities, businesses and citizens. It is based upon four points: management of the energy and environmental transition towards the Green Economy, development of an efficient infrastructure system, economic, social and environmental sustainability and the enhancement of the territories and communities served.
- **AGAW (Arbeitsgemeinschaft Alpine Wasserkraft):** AGAW's activities aim to encourage the exploitation of hydroelectric resources according to the highest technical and ecological standards. In addition to concrete projects in the hydroelectric field, the goal is to raise the community's awareness regarding the essential contribution of hydroelectric energy, which, being a clean source, is essential to achieve the European climate objectives.
- **Italian National Committee for Large Dams (ITCOLD):** ITCOLD is the Italian national committee headed by ICOLD (International Commission on Large Dams), which works with international partners to ensure that new dams are safe, efficient, economically advantageous and without a negative environmental impact. In addition to Alperia, some of the major national concessionaires are members of the committee, including A2A, Edipower, Edison and Enel.
- **Euroheat & Power**: Alperia is part of Euroheat & Power, an international association representing Europe's district heating and cooling sectors. Euroheat promotes sustainable heating and cooling by bringing together industry players, policymakers and academia.
- **Assoesco**: 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 the 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.
- *CSR Manager Network*: This national association brings together professionals from a range of organisations (companies, business foundations, professional companies, P.A., non-profit organisations) who work in the management of socio-environmental and sustainability issues related to corporate activities.

1.5 Value chain {GRI 102-9}
Local, sustainable and tracked resources to generate a positive impact

The products and services provided by Alperia, from electricity to gas, from sustainable mobility to energy efficiency, aim to propel our reference territories into a **future of innovation and sustainability**. Therefore, our supply sources are mainly from renewable and local sources. As defined by our first materiality analysis survey in 2017, we want to create a responsible and safe relationship with **communities**, involving our suppliers in this process as well. With our sustainability strategy, we want to create **shared value** in the medium and long term. Therefore, the materials used in the production, transmission, distribution, trading and sale of electricity and gas are part of a precise value chain. Specifically:

Water: we only take water from South Tyrol, to which we return it 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, Qatar, 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 mill, 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 over the last year, there has been a particular focus on reducing the use of fossil fuels (which are indispensable in the frequent start-up and shutdown 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
Our "One Vision" Strategic Plan

In 2020, Alperia integrated the UN **Sustainable Development Goals** (SDGs) into its new Strategic Plan, the achievement of which it intends to contribute to with its activities. This is an important step forward and a decisive stance on the issue of sustainability, which has always been central to the Group. It is no coincidence that the new Strategic Plan, which runs from 2020 to 2024, is called "One Vision", underlining the desire to have an integrated vision, where sustainability plays a central role.

Figure 1: Financial indicators {GRI 102-7}

	Unit	2020	2019[*1]	2018	2017	YtY variation
Revenues	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Net financial position	EUR	-394,993,918	-383,917,923	-387,653,511	-421,765,304	-3%

[*1]Data have been restated to align them to the new accounting method introduced in 2020.

Alperia's Supervisory and Management Boards have approved "One Vision 2020-24", Alperia's Strategic Plan that will steer the Group to 2024, combining sustainability goals with significant growth in all Business Units. Indeed, 2020 has proven to be a crucial year for the energy sector, a year that pushed the world to accelerate on issues of sustainability and innovation. For this reason, the Alperia Group's new pillars are based on territory and sustainability and look to the future, leveraging customers and innovation.

There are three trends in particular on which Alperia intends to work:

- **Customer focus:** COVID-19 accelerated the ongoing change in the way we contact our customer base, renewing the emphasis on the digital channel and physical channel approach. 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 €680 million. In particular, the Digitisation Plan, which will absorb over €50 million of investment, includes the total migration of all corporate data centres to the cloud and the digitisation of all processes. A distinctive offer that will become a key factor in winning over and retaining customers outside the region and with a clear objective, that is to reach the target of 1 million customers by 2024. Still in the field of innovation, the initiatives of Alperia Startup Factory– already in its third year – will continue, and the launch of a venture capital activity to further support the growth of start-ups will also be assessed. Finally, in the hydropower sector, innovation activity will also be developed through the recently established Alperia Innoveering joint venture with Hydrodata, which will enable the introduction of new solutions related to IoT, artificial intelligence, blockchain, Industry 4.0 etc., in the Group's hydropower plants.
- **Territorial aggregations:** Alperia has the potential to become a regional champion, so it will look for new opportunities for growth and partnerships, especially in the North East, making its innovative platform of services based on scalable business models available to be adapted to the needs of territories and future partners.
- **The energy transition**: This is an issue that can no longer be postponed, and Alperia is well aware 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. A key objective of our integrated business strategy is to become a central partner for our stakeholders in advancing the energy transition, an issue rendered even more urgent by COVID-19. To this end, we have decided to **allocate 80% of our investments under the plan to working towards at least 10 UN sustainability targets.** The priority mission is to be **carbon-neutral by 2024**, making a significant contribution to the objectives of the South Tyrol Energy 2050 climate strategy and avoiding emissions in the amount of over 303 kt of CO_2 equivalent. 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 headquarters in Merano, 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 gas;
    - our new private customers are supplied with 100% green electricity and gas;
    - ~100 MW of new thermal power connected to our district heating network.
  - expansion of the Smart Region through:
    - promoting the development of electric mobility and green hydrogen on the national territory;
    - installing more energy-efficient technologies for our customers (building efficiency, photovoltaic systems and sensor technology in agriculture).

The new Strategic PlanStrategic Plan envisages investments of €1.7 billion over the next five years, largely focused on environmental sustainability issues. Specifically, in relation to each Business Unit, the following is envisaged:

BU Generation
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 (after Enel and A2A) with 39 power stations and over 1,400 MW of capacity. In 2024, 8 large derivation concessions for a total of 440 MW will expire. "One Vision" 2020-24 includes the following priorities:

- a task force for the renewal of the 8 expiring concessions (which will involve professionals from the recent acquisition of Hydrodata S.p.A.);
- investment in the reconstruction of the Lasa and S. Pancrazio penstocks;
- the complete 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 €310 million.

Alperia's electricity distribution network covers more than 8,900 km (high, medium and low voltage), with 2.7 TWh distributed in South Tyrol. Edyna, the Group's distribution company, is the fifth largest national distributor and one of the four operators that will be the first to introduce new-generation meters in Italy. For this BU specifically, "One Vision" provides for:

- installation of more than 260,000 new-generation meters, including 20,000 meters for other local distributors;
- continued investment drive to ensure network resilience and increase the quality and continuity of the electricity service;
- expansion and integration of the Bolzano and Merano network;
- construction of major new primary plants and new medium-voltage grid backbones;
- growth in gas networks;
- growth in services to other network operators in the area;
- investments of more than €360 million.

BU Sales & Trading
Alperia is enabling new business models to communicate with customers through digital channels and is revisiting the role of physical channels. Specifically, "One Vision" provides for:

- significant growth in the customer base, both through organic growth and growth through acquisitions;
- development of an omnichannel network, continuing the territorial reinforcement;
- new Full Digital Initiative with challenging new customer acquisition targets;
- development of the asset management portfolio for non-owned plants;
- development of additional trading and demand response services;
- investments of more than €290 million.

BU Heat & Services
Alperia operates 6 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 GWht produced and distributed. Strategic priorities for the BU will focus on:

- continuing the development of district heating in Bolzano;
- improving Merano's energy mix;
- constructing 3 new cogeneration plants in Bolzano;
- consolidating other district heating operators;
- implementing a cooling system in Bolzano;
- investments of more than €85 million.

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. Interesting initiatives are being developed for an offer at the cutting edge of market trends. Incentives for household efficiency (e.g. Superbonus) have already provided significant market returns with a notable growth in the portfolio of opportunities, in which the companies of the Alperia Bartucci Group and Gruppo Green Power play a key role. The role of Neogy, the second-largest national operator in electric mobility in terms of public charging points, is also important.
In particular, the BU will focus on these 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 the Smart Health, Smart Land and Smart City solutions;

- development of energy efficiency and facility management solutions, also for the public administration and health system, through strategic partnerships;
- continuing the development of sustainable mobility (electric and hydrogen) both in terms of infrastructure and innovative commercial solutions;
- total investments of more than €700 million (about €500 million of which are related to the Superbonus).

3. INTEGRATED GOVERNANCE

3.1 Corporate governance {GRI 102-16, 102-18; GRI 405-1}
Stable, effective and balanced management

In 2019, the management and control bodies of the parent company Alperia S.p.A. and those of most of the subsidiaries and investee companies were renewed. With reference to 2020, the most significant renewals of corporate offices related to SF Energy S.r.l. (both the administrative and control body), Edyna S.r.l. and Alperia Ecoplus S.r.l. (for both only the control body). In particular, for the latter two companies, in compliance with the Group's governance guidelines, it was decided to replace the board of statutory auditors with a single statutory auditor.

The parent company Alperia S.p.A. has adopted the **two-tier system**[1] which provides for a Management Board composed of six members and a Supervisory Board also composed of six members, of whom three are appointed by the Autonomous Province of Bolzano and Selfin S.r.l. and three 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. The body is chaired by Chairwoman Flora Emma Kröss and Deputy Chairwoman 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 administration and management of the company and therefore is responsible for the preparation and implementation, once approved by the Supervisory Board, of the general strategic and programmatic policies of the company and the Group.

The Supervisory Board is made up of Mauro Marchi (Chairman), Wolfram Sparber (Deputy Chairman), Paula Aspmair, Manfred Mayr, Maurizio Peluso and Luitgard Spögler. Women make up 50% of the ten external members on the company's two senior bodies. Meanwhile the Supervisory Board monitors compliance with the law and the company's bylaws and the principles of sound administration. It also approves some 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 the Board's decision-making process. The Deputy General Manager, Paolo Acuti, has also been appointed as a member of the Executive Committee and the Energy Management Board of Utilitalia, the Italian federation of energy, water and environmental companies.

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 – which was expanded in 2020 with the addition of two new staff members – 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. Internal Audit will be further structured to strengthen the preventive nature of its control activity in the areas of focus in the new Strategic Plan (among these, the data analytics area), also developing its activities "remotely", as it did in 2020 following the COVID-19 health emergency. In response to the pandemic, Alperia set up an Emergency Board that also dealt with the management of the Supervisory Bodies, involving the directors of the individual Business Units to check the implementation of the Group's safety measures.

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[1] Pursuant to Art. 2409-octies of the Italian Civil Code.

3.2 Governance tools {GRI 102-18}
Our tools for fair and transparent management

Alperia has adopted various governance tools to ensure proper management of both internal and external activities. Some of these tools meet the requirements of national legislation and guarantee specific control of activities, while others have been deliberately implemented by the Group to strengthen the spirit of legality, transparency and fairness.

3.2.1 Anti-corruption measures

The Alperia Group develops initiatives aimed at preventing the commission of crimes of fraud against the state and the public administration, crimes of undue inducement to give or promise benefits, crimes of bribery and corruption, not only in relation to public administrations, but also to private individuals. Legal compliance and the fight against corruption are established in the Alperia Code of Ethics and are embodied in the practices and operating methods that are defined and disseminated through our procedures. The main instrument for preventing corruption is the Organisation and Management Model[2] (231 Model) of Alperia S.p.A. and the 231 Models of the individual Group companies.

3.2.2 The 231 Organisation, Management and Control Model[3]

In consideration of specific organisational and regulatory changes including the regulatory changes made pursuant to the Law of 19 December 2019, No. 157, and Legislative Decree No. 75 of 14 July 2020, which have considerably expanded the catalogue of offences under Legislative Decree 231/01, it has become necessary to update Alperia S.p.A.'s Organisation, Management and Control Model. The 231 Models of subsidiaries will also be updated in 2021. This activity, previously the responsibility of Internal Audit, is now the responsibility of the Compliance area under the Legal & Corporate Affairs department. The same department is also in charge of compliance activities, which are carried out on a monthly basis with reports to those directly concerned and the publication of new legislation and regulations on the myAlperia portal.

Adopting a 231 Model is an act of social responsibility on the part of the company. Its aim is to affirm and spread a corporate culture based on the legality and control of all decision-making and operational activities, with full awareness of the risks deriving from the commission of offences. To increase employee awareness on the value of the 231 Model, e-learning training courses specific to each company area are organised.

In Alperia S.p.A., in 2020, no infringements of the 231 Model were detected, nor any significant events with respect to Legislative Decree 231/01.

Finally, it should be noted that the adoption, even if only partial, of the Corporate Governance Code is being assessed, which could be added to the Group's Code of Ethics, the Disciplinary Code and the Golden Rules. An initial assessment was carried out in 2020 and will be shared and discussed with the Executive Board and the Corporate Strategy department in 2021.

3.2.3 Our Code of Ethics

The Code of Ethics is the instrument Alperia uses to present its values, principles and rules on which the activities and conduct of those working in the Group must be based. It is an integral part of the 231 Model and is addressed, without exception, to the directors and employees of Group companies, and all those who collaborate with the Group in various ways. All the recipients, without prejudice to the respect of religious, cultural and social specificities, are required to conduct themselves in line with the general principles of the Code of Ethics, which integrates the rules of ordinary diligence to which employees are bound, governed by the regulations on labour relations. The Code of Ethics is binding for the conduct of all Alperia personnel and for all those who, for whatever reason and regardless of the type of contractual relationship, contribute to the achievement of the company's aims and objectives. The Alperia Group undertakes to require that the principles of this Code are also observed by all those with whom it comes into contact in relation to the achievement of its objectives. Under no circumstances may the pursuit of Alperia's interests justify behaviour that is contrary to the present Code of Ethics or existing laws. The body in charge of supervising the application of the Group's Code of Ethics is Alperia S.p.A.'s Supervisory Body, established in compliance with the Model, which is suitably coordinated 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 website[4].

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

Creating a positive and equitable working environment where every member of staff can contribute according to their ability and with a sense of responsibility – this is the objective of the "Golden Rules", the ten rules that were drawn up by the Alperia Group's management following a series of workshops. Displayed in all company offices, they are addressed to all staff and apply in addition to the Disciplinary Code, a document that sets out the duties of staff members in the exercise of their work activities, the rules and

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[2] Pursuant to Legislative Decree 231/01.
[3] It is noted that the Organisation, Management and Control Model required by Legislative Decree 231/01 (231 Model) is the set of organisational rules and procedures intended to prevent the committing of the offences governed by Legislative Decree 231/01.
[4] www.alperiagroup.eu/public/user_upload/chi_siamo/mog/2021_01_28_alperia_-_codice_etico_def.pdf

the internal company regulations. In particular, it should be noted that Alperia's employees may not take advantage of their position to take on paid or unpaid work (during or outside office hours) that competes with or conflicts with the company's business, especially for profit, nor may they receive gifts or compensation of any kind. Both documents are available in German and Italian on the Group's intranet page.

3.2.5 Whistleblowing

On 14 December 2017, Law 179/2017 on "Provisions for the protection of persons disclosing crimes or irregularities that they witnessed as part of a public or private working relationship" was published in the Official Gazette No. 291, which came into force on 29 December 2017.

In 2018, Alperia introduced the Whistleblowing Procedure, through which employees have the opportunity to promptly report any risk situations (fraud, crimes and unlawful or irregular conduct on the part of individuals inside the company). This procedure, which is mandatory for all companies with a 231 Model, has been implemented in Alperia through the e-Whistle platform. Again in 2020, the Supervisory Board of Alperia S.p.A. did not receive any reports through this channel. To increase awareness of these issues, the possibility of renewing the Whistleblowing Notice in 2021 is being considered, so as to prevent any mistrust of its use. As highlighted by the competent bodies, these concerns may derive from the specific nature of the legislation, which provides for the application of sanctions for whistleblowers in the event of unfounded reports.

3.3 Sustainability governance
Governance will form the foundation to support the Group's integrated strategy

Management of all Corporate Social Responsibility activities is carried out by CSR Management within the Brand & Communication department. 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**, a body that is, to all intents and purposes, 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 areas.

In 2020, we included the objective of strengthening the integrated governance of Alperia in the new Strategic Plan. The new Strategic Plan, which runs from 2020 to 2024, is called "One Vision", underlining the desire to have a single vision in which sustainability plays a central role. This means ensuring greater integration of sustainability in:

- risk management (e.g. in the management of reputational, climate and cyberrisks);
- defining policies and procedures (e.g. formalising a CSR management procedure to formalise ESG governance, defining a Diversity Policy with a Diversity Manager and considering the adoption of a Corporate Governance Code);
- strengthening the corporate culture (e.g. by activating awareness-raising measures to increase internal communication on ESG issues, for example by creating a video explaining Corporate Social Responsibility in Alperia and defining a plan to include ESG issues in corporate training programmes);
- the definition of reporting and performance to ensure the quality of non-financial data with clear objectives.

In 2020, an internal audit was also carried out on CSR management and the process of collecting non-financial data. The internal audit function produced a report containing the various outputs and aspects for improvement that emerged from the audit carried out, so that the non-financial reporting process can be improved in the future. By 2022, training is planned on non-financial standards (GRI, GHG Protocol), legislation and the data collection process, and the creation of a manual for non-financial reporting. An IT-supported assessment of the collected data is planned to follow.

3.3.1 Sustainability Policy
Five key factors

In 2019, Alperia defined a new Sustainability Policy to approach sustainability issues in a global way, which did not change in 2020 and is still valid in this year.
Alperia intends to act in five strategic areas, as set out in its Sustainability policy:

- **Territory:** we create added value on a local level, also in terms of employment, duties and taxes, supply agreements and social engagement. We do this by ensuring, through appropriate control and compliance instruments, transparency and fairness in our actions. 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. We actively promote the sustainability of the entire supply chain by defining minimum ecological and social requirements for tenders as well as for the process of selecting, evaluating and auditing suppliers. Primary energy sources are identified locally, where possible, and are predominantly renewable. In addition, in 2021, we will work to prevent reputational and operational risks and to involve our stakeholders even more actively;

- **Development and innovation:** we develop new technology to offer energy products and services that have the lowest possible environmental impact and ensure a reliable and sustainable supply. The ultimate goal is to make the company's operations 100% green.

- **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 the 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.

- **Customers**: we want to build a relationship of trust with our customers by providing them with personalised, competitive and sustainable products and services. We engage with them through transparent and up-to-date communication and marketing, with a focus on social and ecological issues. Comprehensive data protection and compliance with current privacy and security regulations are guaranteed at all times.

- **Personnel:** we pursue responsible human resources management, ensuring the highest level of occupational safety for both staff and contractors, which we have further improved in 2020 with special COVID-19 infection prevention measures. We promote an open, family-friendly working environment fostering diversity and equal opportunities with transparent communication and continuous training.

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

Operational objectives	Measures implemented in 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 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)	* 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 2020 deadline of the Sustainability Plan 2017-2021 are met	* Inclusion of long-term MBO and performance targets * Inclusion of ESG targets for middle management	2024	-	-	-	ongoing
Improving the quality of non-financial/ESG data and collection processes	* An internal audit was carried out on CSR management and the process of collecting non-financial data		✓				✓
Improving the quality of non-financial/ESG data and collection processes (new)		* Increasing training on non-financial standards (GRI, GHG Protocol), legislation and the data collection process	2022				new
Improving the quality of non-financial/ESG data and collection processes (new)		* Formalising the manual for non-financial reporting	2022				new
Improving the quality of non-financial/ESG data and collection processes (new)		* Assessment of IT-supported data collection	2023				new
Definition and formalisation of the CSR/sustainability/ESG governance structure	* Launched a CSR Management Procedure to formalise the governance structure for sustainability management * Incorporated the objective of building an integrated governance model into the new 2020-2024 Strategic Plan	* Development of a CSR Management Procedure to formalise ESG governance	2021	-	-	-	✓

Definition and formalisation of the CSR/sustainability/ESG governance structure	* Initial assessment of the adoption of the Corporate Governance Code, drawn up by the Corporate Governance Committee, which could be added to the Group's Code of Ethics, Disciplinary Code and Golden Rules	* Sharing and discussing the results of the assessment with the General Management and the Corporate Strategy department	2021	-			new
Raising awareness on ESG issues and creating a culture of sustainability and corporate social responsibility among our management and employees	*Increased internal communication on ESG issues, for example with a video explaining Corporate Social Responsibility in Alperia	* Creation of a plan for the inclusion of ESG issues in corporate training programmes	2021	-	-	-	new

3.3.2. Materiality matrix {GRI 102-46, 102-47}
Alperia's core topics

To improve sustainability performance within the company, Alperia uses a reporting system based on the Sustainability Reporting Standards defined by the Global Reporting Initiative (**GRI**). The core element of the standards is the **materiality analysis**, which identifies the issues and sustainability indicators that are essential for Alperia. For 2020, the materiality analysis carried out in 2017 and the media and context analysis carried out in 2020 were used, on the basis of which the material topics were approved; the matrix is scheduled to be updated in 2021. To define these core topics, we have:
1. prepared a longlist of sustainability topics based on competitor analysis, megatrends, the media, stakeholders' feedback and Alperia's activities. We have thereby identified 30 topics;
2. defined priorities internally and assessed the impacts of our activities through a workshop with the departments and subsidiaries concerned (on a scale of 1 to 10 depending on the extent of the impacts). Twenty topics emerged;
3. defined priorities with stakeholders in relation to the 20 selected topics, through an anonymous online survey to which 176 people responded;
4. prepared the materiality matrix by ranking the topics according to importance.

A topic is considered core if it:

- is one of the top 10 topics in the stakeholder survey or
- is among the top 10 significant impacts and/or
- scored more than 7 points in both the stakeholder survey and the impact assessment.

The **15 topics relevant** to Alperia thereby emerged.
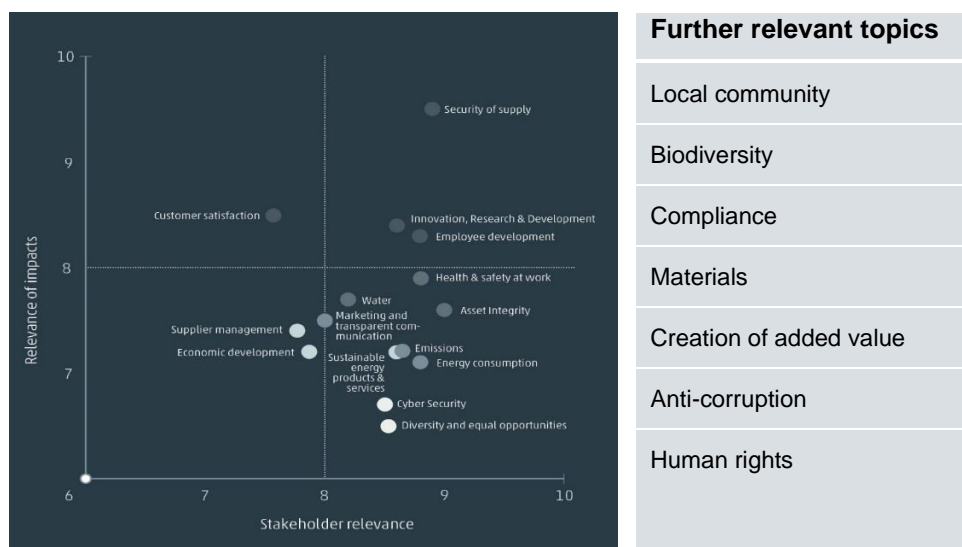
Image 3: Alperia Group materiality matrix (source: Alperia)

3.3.3. Sustainability Plan 2017-2021
Our action plan for an improved performance

The Sustainability Plan, which runs until 2021, was established in 2017 and sets out the environmental, social and economic targets to be achieved. Objectives that Alperia began to monitor in 2018 through the Sustainability Report, a document approved by the Management Board and the Supervisory Board.
On the basis of the materiality analysis, **the 15 topics considered most relevant for Alperia are**: security of supply, innovation, research and development, employee development, customer satisfaction, occupational health and safety, asset integrity, emissions, energy consumption, water, transparent marketing and communication, cybersecurity, diversity and equal opportunities, sustainable energy products and services, supplier management and economic development. These topics also define the **5 action areas** with key aspects that we use to measure progress in implementing our strategy. With regard to this, we set targets and measures in agreement with the management. Specifically, the five areas identified are: Territory, Green Mission, Employees, Customers, Development & Innovation.

Image 4: The Alperia Group's five strategic areas of action (source: Alperia)

The objectives we pursue with our strategy are: the reduction of energy consumption and greenhouse gas emissions, the strengthening of South Tyrol's Smart Region, the increase in customer and employee satisfaction, the increase in the share of turnover from the sale of sustainable products and services and the creation of added value of €1.2 billion for the province over 5 years. Economic interests therefore go hand in hand with ecological and social interests, always putting the protection of the territory and the wellbeing of the community at the heart of what we do, including through investments in research and development that will make it possible to develop cutting-edge energy models that reduce consumption, waste and emissions.

In line with this mission, we have integrated the 2020-2024 Strategic Plan with our sustainability strategy, and, according to the annual audit, **70% of the operational objectives** with a 2020 deadline have been achieved. The degree to which objectives are achieved affects company bonuses. Of the 27 targets we set ourselves for 2020, we have achieved 19, which are:

- **Reduction of power outages and reduction of the duration of outages:**
  the frequency of customer outages recorded in 2020 was 1.91 with a SAIFI (System Average Interruption Frequency Index) increase of 26% compared to 2019; the duration of customer supply outages recorded in 2020 amounted to 29.82 minutes with a SAIDI (System Average Interruption Duration Index) increase of 6% compared to 2019. These increases mainly relate to high concentrations and were caused by works carried out in the city of Bolzano for the installation of various infrastructures, such as district heating and MV lines. These works resulted in a higher number of cables damaged than in previous years;
- **No accidents occurred to employees and contractors:** in 2020 we had 14 incidents involving employees and 16 involving external firms.
- **100% of significant tenders contain minimum sustainability requirements:** In 2020, we reached 80%;
- **100% of complaints promptly processed**: in 2020 we processed 99% of them promptly;
- **99% of calls to the freephone number answered:** we achieved 96% due to an increase in calls of +65% linked to the COVID-19 emergency;
- **Organise regular feedback interviews with 100% of employees:** In 2020, we reached 82.75%;
- **Reduction in the rate of absence:** in 2020 the rate of absence increased from 6.01% to 8% because there was an increase in working days lost due to an absence of 42% due to COVID-19.

Our Sustainability Report is structured according to these action areas and their respective material topics. At the end of each chapter you will find a detailed list of strategic and operational objectives, measures to achieve them and progress.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Integration of the sustainability strategy in the 2017-2021 Strategic Plan	* Publication of the new 2020-2024 Strategic Plan with sustainability integrated in a structured way *Update of the objectives in the Sustainability Plan 2017-2021 with the Strategic Plan 2020-2024	* Define a process/system for monitoring the objectives defined in the Strategic Plan	2021	-	-	-	✓
Allocate 80% of the investments envisaged in the 2020-2024 Strategic Plan to work towards at least 10 UN sustainability targets		* Establish a process for monitoring investments	2020-2024	% of invest-ment aligned with SDGs	80		ongoing

3.3.4. Remuneration linked to sustainability targets

With the aim of involving all the people who work at Alperia in the pursuit of these goals, 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 their MBO.

3.3.5 Stakeholder management {GRI 102-40, 102-42, 102-43, 102-44}
How we communicate with stakeholders

Stakeholder engagement is a priority for Alperia. We know that to create a truly sustainable future we need to work together, with the involvement of everyone. To do this, we communicate with shareholders and investors, customers, employees, the riparian municipalities and other municipalities in whose region our plants are located, suppliers, research institutes and interest groups, such as environmental, business and fishing associations, trade unions and consumer associations, using various channels and involving them on different topics. Stakeholder involvement will be increasingly important to us. As early as 2020, we had planned to launch the Stakeholder Round Tables, but due to the pandemic, this was postponed to 2021.

- **Customers**: as planned, in 2020 Edyna began to install Smart Meters, the latest generation of meters, for its customers. This operation was accompanied by a targeted communication campaign and was preceded by several information evenings during which the new features of the devices and their replacement plan were presented. In addition, Edyna made a presentation directly to the municipalities most affected by extreme weather events about the plan to deal with similar events. Again in 2020, Alperia was recognised as the best "Green Brand"[5], distinguishing itself in the International Charge Energy Branding Award 2020, and also came first in the ranking of electricity providers drawn up by Altroconsumo[6], Italy's largest consumer protection association;

- **Employees**: during 2020, Alperia launched a survey among its employees on remote working, a working method that has been significantly improved as a result of COVID-19. The majority of respondents gave positive feedback: more than 87% believe that remote working can improve the work-life balance, 55% of participants would like to continue with it even after the health emergency for at least 2/3 days a week, and around 33% of employees even said there was an increase in their sense of belonging to the company. Furthermore, despite the pandemic, training activities continued (online), including soft skills and leadership workshops. In addition, during 2020, Alperia employees were also involved in a survey regarding the myAlperia intranet, in view of its renewal. Survey participants were asked to identify what improvements could be made to the new network and what they considered to be the most effective and interesting aspects of the current network. A desire emerged for a network more focused on sociability, information sharing and two-way communication;

- **Suppliers**: again in 2020, Alperia involved its suppliers in the search for eco-sustainable solutions, in particular with the tender for vending machines for drinks and snacks, in which specific criteria were defined for the selection of products to be included (organic, fair trade, whole grain, vegan, with non-PET bottles, etc.);

- **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. An important aspect in 2020 was the integration of sustainability into the 2020-2024 Strategic PlanStrategic PlanStrategic Plan;

- **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**: to overcome the impossibility of organising the traditional "Open Days" following COVID-19, Alperia organised a virtual tour of the hydropower plants via its Facebook page and the website www.alperiagroup.eu. An innovative way to bring people closer to these amazing technologies while staying at home;

- **Schools**: in 2020, we developed projects dedicated to primary and secondary school students. For primary school children, we produced the booklet "Save Energy and Protect the Climate" in which we explained how they can contribute to tackling climate change, and through the story of the firefly Lucy, who fights climate change, we looked at the concepts of energy conservation. All booklets were published in Italian and German and were accompanied by an #Alperiaforschools notebook and pencil. The same notebook was also given to secondary school students, to whom Alperia also gave the opportunity to discover its power stations through a virtual reality tour. Each school was able to borrow a free VR box with 10 viewers. The students were able to visit a hydroelectric power station – including the one in Bressanone – or a dam directly from their classroom. An unforgettable learning experience;

- **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 Bozen-Bolzano, with which it shares the winning project

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of the "Fusion Grant" for the 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 wide-ranging initiatives to support the region. It donated €1 million to local associations, renewed existing sponsorships, gave free electricity for two months to all Alperia customers who had been made redundant or unemployed between 5 March and 31 May 2020 and granted a moratorium on electricity and gas payments to South Tyrolean SMEs for three months. Activities aimed at making a real contribution and an important sign of solidarity to the whole community.

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
Economy, environment, safety and society

COVID-19 has accelerated the emergence of some global risks and intensified sustainability challenges. From a city market in China, the virus spread rapidly around the world, moving along travel routes and supply chains, generating huge social and economic costs. There is scientific evidence that the spread of diseases such as COVID-19 has been exacerbated by rising temperatures[7], deforestation[8], loss of biodiversity[9] and poor sanitation[10]. These are all interconnected and important issues related to sustainability. According to the UN, the **pandemic has had a negative impact on 13 of the 17 Sustainable Development Goals** (SDGs). It has increased inequalities and vulnerabilities, created new pockets of unemployment, weakened healthcare systems, made learning less effective and accessible, exposed the weakest sections of the population to violence and hardship and limited efforts to combat climate change, to name but a few impacts. On the other hand, however, the pandemic may represent a momentous opportunity for change. It is no coincidence that the World Economic Forum has chosen "The Great Reset" as its theme for Davos 2021, with the three pillars of equity, sustainability and innovation. The Forum asked 350 of the world's leading experts to assess the most likely and worrying risks of the COVID-19 relapse in the next 18 months. The main concerns in the results included:

- the economy: a prolonged recession was noted by 2 out of 3 experts;
- IT security: 50% of respondents were particularly concerned about an increase in cyberattacks against their companies;
- the environment: despite the 8% drop in global emissions predicted for 2020, there are concerns that the world will still miss the target of limiting global warming to 1.5°C to avoid a planetary catastrophe. This condition will worsen if countries fail to include sustainability criteria in their recovery plans and if COVID-19 is more present on public agendas than sustainability;
- social anxiety: with social distancing increasing the propensity for depression and suicide[11], young people face a much bleaker economic outlook than during the 2008 financial crisis; the class of 2020 risks becoming the next 'lost generation'. Anxieties that could get even worse in 2021;
- gender inequalities: it was predominantly women who felt the negative effects of lockdown and remote learning. Many of them had to leave their jobs to take care of their children or had to try to manage both family and professional life at the same time. According to a McKinsey survey, women's jobs proved to be 1.8 times more vulnerable to this crisis than men's. Women account for 39% of global employment, but 54% of total job losses[12].

All these risks should be understood as warnings to take action before it is too late. COVID-19 has highlighted the strengths on which to draw to rebuild a better world. With the slowdown in production activities and transport, for example, CO_2 emissions into the

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[7] See Caminade, Cyril et al. (March 2014) "Impact of climate change on global malaria distribution". Proceedings of the National Academy of Sciences of the United States of America, 111 (9).
[8] See Fornace, Kimberly M et al. (February 2016) "Association between Landscape Factors and Spatial Patterns of Plasmodium knowlesi Infections in Sabah, Malaysia". Emerging Infections Diseases Journal, 22 (2).
[9] See Chivian, Eric and Bernstein, Aaron (2008) "Sustaining Life: How Human Health Depends on Biodiversity".
[10] See Lowe, Rachel et al. (January 2018) "The Zika Virus Epidemic in Brazil: From Discovery to Future Implications". International Journal of Environmental Research and Public Health. 15 (1).
[11] COVID-19 Risks Outlook "A Preliminary Mapping and Its Implications". World Economic Forum.
[12] "COVID-19 and gender equality: Countering the regressive effects". McKinsey.

atmosphere have fallen[13]. The global nature of the problem has raised awareness of the need for international cooperation for the health and stability of countries. The economic difficulty generated by the crisis has stimulated a new level of solidarity and inclusiveness. Now businesses, governments and citizens have the opportunity to accelerate 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 new Strategic Plan, in the certainty that we can actively contribute to building this new era. Greener, more responsible, more inclusive.

4.2 Climate change
The hottest year on record

2020 was **the hottest year on record for Europe**, as measured by the Copernicus Climate Change Service, 1.25°C higher than in the pre-industrial period. This record is shared with 2016 and comes at the end of a decade of record temperatures. Moreover, an analysis by Coldiretti based on data from the European Severe Weather Database shows that, in Italy, 2020 was marked by an average of more than four storms (4.1) a day, including hailstorms, tornadoes, freak snowfalls, lightning and water cloudbursts, which caused landslides, flooding and serious damage in cities and the countryside, with dozens of victims. 2020 was the fifth warmest year for Italy since 1800, with a temperature almost one degree above the historical average (+0.96 degrees)[14].

Over the past 150 years, the average global temperature has increased by nearly 0.8°C and by around 1°C in Europe. The Intergovernmental Panel on Climate Change (IPCC) predicts that – without appropriate corrective action – global temperatures could rise by a further 1.8°C to 4.0°C compared to pre-industrial times, with average sea levels rising by between 6 and 9 metres, the loss of all coral reefs due to ocean acidification, and with the Amazon rainforest and several parts of the planet becoming uninhabitable. To avoid a systemic collapse, according to the UN Emission Gap Report, we will first need to reduce CO_2 emissions by 7.6% per year until 2030 to keep global warming within 1.5°C. This reduction will need to be accompanied by an investment of $460 billion per year in clean energy. Europe, meanwhile, approved the Green Deal in January 2020, with the aim of investing €1 trillion in the green economy to reduce greenhouse gas emissions by 40% by 2030 and achieve climate neutrality by 2050. In addition, sustainability will also be central to the Recovery Fund, the recovery plan devised following the pandemic.

PNIEC: the plan for a greener Italy
The Integrated National Energy and Climate Plan[15], approved in December 2019, lays the foundations for Italy to build an economy that is more respectful of people and the environment, with 5 action lines based on decarbonisation, energy efficiency, energy security, development of the internal energy market and research, innovation and competitiveness. According to the document, green energy must contribute 30% of total gross final consumption by 2030. In electricity consumption, the share of renewables is expected to be 55%, while the share of Renewable Energy Sources (RES) in the thermal sector is 33.9% and the share of renewables in transport is 22%. On the subject of transport, the government also plans an increase in new registrations of electric cars, with a target of around 4 million pure electric cars by 2030, which, if added to plug-in hybrids, would bring the total number of electrified cars to around 6 million by 2030. In terms of energy efficiency, a reduction of 43% in primary energy and 39.7% in final energy consumption by 2030 is envisaged, while on the emissions front, the text reports a 33% reduction in greenhouse gases for all sectors not covered by the EU Emission Trading Scheme (ETS), the European market for emission allowances, i.e. transport (excluding aviation), residential, tertiary, non-energy-intensive industry, agriculture and waste.
As for Italy's end to the use of coal by 2025, the document states that this can only be achieved if in the meantime "replacement plants and the necessary infrastructures are built and there is a significant acceleration of renewables and energy efficiency in manufacturing processes". According to PNIEC's own data, there are currently eight coal-fired thermal power stations in operation in Italy.

South Tyrol's commitment and the green hydrogen mission
The Climate Strategy and the Energy Policy Masterplan

In 2011, South Tyrol adopted the South Tyrol Energy 2050 climate strategy. 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

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[13] Global Carbon Budget 2020.
[14] Coldiretti workings on Isac CNR data for the first 11 months.
[15] https://www.mise.gov.it/images/stories/documenti/PNIEC_finale_17012020.pdf

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:

- to limit energy consumption per inhabitant (excluding grey energy)[16] to less than 2,500 watts per year by 2020 and less than 2,200 watts per year by 2050;
- to reduce CO_2 emissions to less than 4 t per year per capita by 2020 and to less than 1.5 t per year at the latest by 2050;
- to increase the percentage of energy needs met by renewable energy up to at least 75% by 2020, and over 90% by 2050.

In addition, to promote sustainable development, the Bolzano provincial government has approved a Masterplan on energy and mobility policies. The plan aims to store sustainably produced electricity with green hydrogen, that can be used in green mobility and improves 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 company Autostrada del Brennero A22, 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 CO_2 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 CO_2 footprint. By 2030, we aim to reduce fossil fuel imports by around €550 million per year, reducing CO_2 emissions by 45%. A significant contribution to protecting the climate, people and nature.

4.3 Digitisation
Interconnected and vulnerable

By 2025, approximately 75 billion devices will be connected to each other and the internet, a market worth $11 trillion. The vulnerability of critical technological infrastructures is a growing concern, accentuated by the lockdown. Attacks on the energy, health and transportation sectors are becoming much more common and serious. The Internet of Things (IoT) is further amplifying the potential of cyberattacks. It is estimated that there are already more than 21 billion IoT devices worldwide (which could double by 2025), and, by 2021, the cost of cybercrime damage could reach $6 trillion. One of the biggest challenges in combatting cybercrime is the adoption of 5G, on which the development of the cloud and artificial intelligence is based. This market is estimated to generate global revenues of €225 billion in 2025, with €114 billion of benefits concentrated in four sectors (cars, health, transport and energy). Moreover, looking specifically at Italy, the 2020 Report from Clusit, the Italian Association for Information Security, has shown how the pandemic has given a decisive boost to cybercrime. In the first six months of 2020 alone, serious attacks grew by 7%, 14% of which were COVID-19-related. The most commonly used techniques included malware, phishing and social engineering. Attacks on critical infrastructures, in particular, increased by 85%. All this makes cybersecurity an even higher priority. An objective that will require increased investment in research and innovation, the creation of modern and reliable infrastructures and the training of citizens in the informed use of IT systems.

4.4 The Sustainable Development Goals
Together for a better world

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. They represent common goals on a range of important development issues, including fighting poverty, eradicating hunger and combatting climate change, to name but a few. 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.

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[16] Is the amount of energy required to extract that product from nature, or to cultivate, manufacture, package and transport it (source: UNESCWA).

4.4.1 Italy and the SDGs
Best practice in the North East

The National Institute of Statistics (ISTAT) monitors their development in Italy with annual reports. The third edition of the 2020 Sustainable Development Goals Report[17] was released in the midst of the COVID-19 pandemic, which accelerated the need for a unified vision, able to devise and implement a sustainability-focused strategy.

The analysis shows a positive picture, with improvements over the previous year in 48.1% of the indicators, compared with 29.7% remaining unchanged and 22.2% worsening. Looking at the dynamics for each goal, compared to the previous year, the percentage of indicators with a positive change is significantly high for Goal 2 (zero hunger, 71.4%) and Goal 13 (climate action, 66.7%), while Goal 12 (responsible consumption and production) and Goal 15 (life on earth) show the highest levels of worsening indicators (54.5% and 41.7% respectively).

Image 5: 2020 Sustainable Development Goals Report (source: ISTAT 2020)

The report also analysed the situation region by region, highlighting areas of excellence in the Autonomous Provinces of Bolzano and Trento, where 48% of the indicators are in the best quintile. Valle d'Aosta also shows a particularly favourable distribution (41.7%). With the exception of these geographical areas, sustainable development indicators are more favourable in the North East and Lombardy regions than in Liguria and Piedmont. In the central regions, the most favourable areas are in Tuscany and Umbria. In the southern regions, the values of the indicators are among the lowest, especially in Sicily, Calabria and Campania (58.3%, 52.2% and 48.5% respectively), while in Abruzzo, Molise and Sardinia the distribution appears less unfavourable.

4.4.2 South Tyrol and the SDGs
Where are we?

The province of South Tyrol has set up a platform[18] where it reports its contribution to achieving the UN sustainability goals. The main source of data for Italy and individual regions is ISTAT. These data, where comparable and available, are supplemented with data from regions in neighbouring countries. South Tyrol is able to measure the degree to which various global indicators of the Sustainable Development Goals have been achieved through statistical data.

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[17] www.istat.it/it/files/2020/05/SDGs_2020.pdf
[18] https://astat.provinz.bz.it/barometro/upload/sdg/html/it/index.html

4.4.3 Alperia and the SDGs
Our solid commitment

Aware of the essential role that energy can play in addressing these global challenges, Alperia is committed to making its contribution to the implementation of some of the UN's 17 SDGs. To reinforce its commitment, Alperia has integrated the SDGs into its 2020-2024 Strategic PlanStrategic Plan, according to which the **Group plans to direct 80% of its investments towards at least 10 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: By 2020, halve the number of global deaths and injuries from road traffic accidents.** → Work to encourage the use of public transport. 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 also 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. The technology is based on an IoT sensor system and has already been tested in a clinic in Bolzano in 2020, with the aim of extending the technology to homes.
- **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 CO_2 and greenhouse gases, produce clean heat with district heating and reduce energy waste, with the ultimate goal of additionally avoiding 303 kt CO_2e.

SDG 5 – ACHIEVING GENDER EQUALITY
We are striving for gender equality and female empowerment

- **Target 5.4: Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate.** → We are a family-friendly company with a Family Audit certification 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. Since 2019, our Management Board is headed by a woman, and the body itself is made up of 50% women. We have also started to develop leadership plans specifically for women. Currently, 24% of Alperia workers are women and the gender pay gap is 8% for female employees.

SDG 6 – ENSURING THE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER FOR ALL
We optimise water network management, reduce the impact of our activities and work to protect the aquatic environment

- **Target 6.5: By 2030, implement integrated water resources 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. This area includes the project developed by Alperia Bartucci with the Novareti company from Rovereto (TN) to optimise the water network through the use of an advanced algorithm based on predictive models, and the Smart Land project, aimed at using IoT technology in agriculture to achieve more efficient water consumption in the irrigation process. We are renewing this project by engineering new water-saving sensors.
- **Target 6.6: By 2020, 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, carry out renaturation and restoration of the original landscape in the presence of decommissioned plants, oversee the reduction of the risk of contamination of recycled water from open-cycle cooling and implement innovation projects for the benefit of the local population, including, for example, anti-freeze initiatives to optimise the use of water in agriculture.

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 and intend to invest €400 million over five years to make our facilities more resilient and reliable, even in the event of emergencies or disruptions. For this reason, we decided to give two months of free electricity to private customers who lost their jobs or were laid off during the period from 5 March to 31 May.
- **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 95% 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, the launch of district cooling in the Bolzano power station); adopting new business models, services and products, such as Green Gas, that help our customers to be more energy-efficient; monitoring and reporting on the amount of energy produced, purchased and consumed by source. In addition, we want to be a partner for the energy transition of our stakeholders.
- **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 planned to replace the meters of more than 200,000 customers with new-generation Smart Meters, which will allow more efficient management of energy resources. This activity involves an investment of over €41 million.

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: By 2020, 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 achieve this, we have implemented internal training activities and developed our Talent and Pillars of Alperia programmes. We are also developing policies aimed at attracting and training new staff in order to support the generational shift. We have begun to develop a succession plan by identifying 'backup' people.
- **Target 8.8: Protect labour rights and promote safe and secure working environments for all workers: this includes all migrant workers, women in particular, and those in precarious employment.** → We actively promote the health of our employees, guaranteeing the highest level of work safety to protect our staff, the general population and the surrounding area. We have adopted plant monitoring and maintenance measures, promoting wellness initiatives in all of our workplaces. We began the installation of 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.

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 wellbeing, 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 have planned investments of €88 million in the Smart Region – self-financed until 2021 (rising to €700 million by 2024) – plus €18 million in additional asset and process digitisation projects. We have decommissioned unreliable MV and LV lines and are using fibre optics for greater reliability in plant control. We have initiated specific Smart City and e-mobility plans and are building new offices in Via Claudia Augusta in Bolzano. In addition, we intend to further improve the quality and efficiency of our one-stop emergency hotline and are developing and testing phase change tanks for thermal energy storage and refrigeration.
- **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. In addition, Alperia's innovation activity will also develop in the hydropower sector through the new joint venture with Hydrodata, recently acquired, and with Alperia Innoveering, which will enable the introduction of new solutions related to IoT, artificial intelligence, blockchain, Industry 4.0, etc., in the Group's hydropower plants.

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 €700 million until 2024, 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, facility management for the PA and the development of sustainable mobility with the consequent infrastructure of the territory. Among the city projects, the Bressanone European Smart City project is particularly noteworthy. The following activities are also being continued: the sustainable expansion of district heating networks; the Smart Land project, with which we installed intelligent moisture sensors in the fields of 60 South Tyrolean farmers that record and monitor data to make the irrigation process more efficient; investments in the Green Mobility and the Regalgrid project dedicated to energy communities and virtual aggregation units where consumers become prosumers, i.e. "co-producer consumers".

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 new Sustainability Policy[19]. We have integrated at least one sustainability objective into the Management by Objectives (MBO) scheme for group executives and put sustainability at the heart of the new Strategic Plan, linking it to the UN SDGs. Furthermore, we want to make our communications, both external and internal, increasingly transparent, updated, stakeholder-oriented and sustainable from a social and economic standpoint. In relation to action in the environmental field, 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 will be carbon-neutral by 2024, contributing significantly to the objectives of the South Tyrol Energy 2050 climate strategy. 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 department. We have equipped ourselves with a video surveillance system

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[19] https://sostenibilita.alperia.eu/alperia-si-presenta/corporate-governance/sustainability-policy

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: By 2020, 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, by 2020, protect and prevent the extinction of threatened species. // Target 15.6: Ensure fair and equitable sharing of the benefits arising from the utilisation of genetic resources, and promote appropriate access to genetic resources.** → We strive to protect the environment and its biodiversity in compliance with the compensation measures laid down by the Autonomous Province of Bolzano. For this reason, we carry out various activities to consolidate fish stocks, build ladders for fish in intake works, improve water courses and oversee the monitoring and management of Minimum Vital Flow. In addition, we have begun to implement measures to promote sustainable water use in collaboration with local farmers and municipalities.

4.5 Human rights
People are our strength

Alperia believes in a supportive, open and welcoming working environment and promotes conduct based on respect for dignity, equality and freedom. Respect for human rights in all our activities is a value that also guides us in our choice of suppliers, in purchasing contracts and in the General Terms and Conditions for contracts at Group level, through a specific clause. 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. They are:

- **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 expanded, and will continue to expand, conciliation and flexibility measures, including remote working, which received a decisive boost as a result of COVID-19 and will continue to be in place even after the emergency phase, albeit with a different system. We have developed women's leadership programmes which we will further strengthen in the coming years, empowering the women of Alperia. In 2020, we again confirmed our Family Audit certification from the Family Agency of the Autonomous Province and Chamber of Commerce. In addition, we are planning to bring in a Diversity Manager, with whom we will develop a plan dedicated to enhancing 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, including in digital mode, our dedicated 'Talent' plan to promote targeted career development. The plan will also identify key figures to deal with the generational change. To this end, in 2020, we identified backup persons, i.e. people we can refer to in the event of unforeseen absence of managers. We offer our employees specific training activities, based on both hard and soft skills. We are constantly working on developing an integrated corporate culture among all Alperia companies and their people. 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 wellbeing**: we monitor and maintain our offices and plants, complying with regulations and encouraging research and development of innovative energy efficiency solutions. 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. During the year we began to install 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.

5. RISKS AND OPPORTUNITIES {GRI 102-11, 102-15}
Risk monitoring, management and control

Since it began activity in 2016, Alperia has been developing a business risk management system, with the aim of making it an essential, systematic component of decision-making processes. In 2019, Alperia added the Group's non-financial risks to its assessments, in relation to the actions area set forth in the Sustainability Report (Employees, Green Mission, Community, Customers, Development & Innovation) and the identified objectives. Each risk, classified by type (Compliance, Operation, Strategic and Financial), was assessed by impact and probability of occurrence.

Thanks to the introduction of the safeguards adopted by the Group, the majority of the most significant risks have been mitigated in terms of impact or probability of occurrence. Below are the three most significant non-financial risks:

- ageing workforce: this is an issue that the Group and the HR department are already addressing by defining a succession and talent development plan;
- development of electric mobility: which, following the establishment of the company Neogy S.r.l. with Dolomiti Energia, will be subject to an objectives review through a possible partnership with a leading national player aimed at developing a wide-ranging project in the field of electric mobility;
- stakeholder engagement on environmental and social sustainability issues: an area where Alperia is strengthening its efforts through the implementation of reputational risk management. Reputation is becoming increasingly important for Alperia, as is the involvement of stakeholders, with whom we want to strengthen relationships and develop more proactive communication.

In 2020, Alperia appointed an Enterprise Risk Manager whose main task is to implement and develop risk management, both financial and non-financial. After an initial assessment of the activities already developed, ERM governance was defined, based on the COSO Framework and ISO 31000 standards. This process is based on the principle of 'business inclusion', which, above all, takes place through periodic interviews carried out by ERM. In addition, specialised ERM software was implemented, also related to the ISO 31000 standard. This system allows the complete management of a risk, from identification through assessment to mitigation and reporting. A system of periodic reporting to senior management has therefore been introduced to facilitate the monitoring of business risks. Enterprise Risk Management takes place both at Group level and at Business Unit level. In 2021, Alperia intends to develop a specific **Risk Policy** for the Alperia Group.

Image 6: ESG risks (source: Alperia)

RISK TYPE

STRATEGIC
Risks connected to high-level corporate strategies that top management must try to anticipate and govern: business changes, context changes, business and corporate development, sustainability plans

OPERATIONAL
Risks connected to the energy sector, business operations, organisational structure, IT systems and control and reporting processes

COMPLIANCE
Risks connected to a failure to comply with the laws and regulations applicable to the business

FINANCIAL
Risks connected to the Group's financial management

For each of these categories, Alperia has begun to set up targeted safeguards. For **reputational risk**, Alperia launched a project dedicated to the topic of **stakeholder management** in 2021. Cybersecurity is the focus of the **Data Protection Officer** (DPO) and the security advisor. With regard to climate change Alperia is working to increasingly reduce the negative impact of its activities and diversify its business towards sustainable services and products. As reported on the previous pages, a further rise in temperatures would have a dramatic impact. This is why the priority is to limit **global warming to 1.5°C**. According to the UN Emission Gap Report, this can only be achieved if CO_2 emissions are reduced by 7.6% per year until 2030.

Similarly, cybercrime, which is becoming increasingly more widespread, is of great concern. Attacks on critical infrastructures have increased by 85%, and it is estimated that by 2021 the damage caused by cybercrime could reach $6 trillion, resulting in enormous levels of damage to administrations, businesses and individuals. That is why it is crucial to have the best protection systems in place.

However, it does not end there. 2020 also required the risk associated with the occurrence of the pandemic to be taken into account. COVID-19 has impacted the Alperia world in two ways, from a financial point of view, with a drop in consumption combined with a reduction in energy prices, and from an HSE point of view, the risks of which were all managed and contained by the Emergency Board. The Board met 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.

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

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

Operational objectives	Measures implemented in 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 value	Status
Introduction of a standardised, Group-wide system for handling complaints	* Stakeholder Management and Reputational Risk Management project launched to create a structured process for stakeholder and reputational risk management	* Introduction of a standardised, Group-wide system for handling complaints (e.g. riparian and hosting municipalities) with clear processes and responsibilities	2018-2021	-	-	-	ongoing

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

Operational objectives	Measures implemented in 2020	Measures planned	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	* Definition of the Enterprise Risk Management operational framework (monitoring and periodic reporting process for risk management of the Alperia Group), implementation of a central risk management tool with identification and assessment of non-financial risks	* Establishment of an integrated and periodic monitoring and reporting process for risk management at Group level * In-depth analysis of reputational, climate and cyberrisks	2024	-	-	-	ongoing

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

Value generated for South Tyrol	**€257,457,761**	Duration of outage per customer (in minutes)	**29.82**
Net energy produced from renewable sources	**95%**	Energy availability index (hydro plants)	**88.88%**
Underground lines	**72%**	Total investments	**€126,700,000**
Number of outages per customer	**+26% (1.91)**	Percentage of contracts awarded locally (based on number of contracts)	**58%**

6.1 Economic development
What we have done and what we want to do

2020 was a year of change that led to a worldwide acceleration on the issues of sustainability, multi-channel and customer focus. These topics will form the basis of Alperia's strategy for the coming years, as indicated in the 2020-2024 "One Vision" Strategic Plan. The urgent issue of the energy transition requires all players to rethink their strategy with sustainability in mind. The next few years will be crucial in changing energy consumption habits, which can also be achieved thanks to the significant levels of funds allocated for this purpose by the European Commission and the Italian government. For this reason, all operations of the BUs (Business Units) and Alperia Group companies will focus on this, with the aim of generating tangible results for the territory. The main measurable impacts at the end of the plan will be:
- over **303 kt CO₂e** will have been additionally avoided;
- more than **95% of new customers** will be provided with sustainable products (both electricity and gas);
- more than **22 million cubic metres of water** will be saved (equivalent to the annual consumption of 100,000 households).

Measures implemented to achieve the objectives of the Strategic Plan are available under the Newsroom tab on the company's website at www.alperiagroup.eu.

6.1.1 Economic value {GRI 201-1}

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

	Unit	2020	2019[*5]	2018	2017	YtY variation
Direct economic value generated:	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Revenues	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Economic value distributed:	EUR	1,375,769,723	1,490,245,497	1,228,491,345	1,121,559,780	-8%
*Operating costs[*1]*	EUR	1,196,350,493	1,327,594,723	1,067,875,802	962,787,064	-10%
	%[*4]	83.2	85.8	84.0	85.8	
Employee wages and benefits	EUR	77,068,468	73,093,184	68,525,722	67,720,277	5%
	%[*4]	5.3	4.7	5.4	6.0	
Payments to providers of capital	EUR	9,514,673	9,250,687	13,443,507	19,524,556	3%
	%[*4]	0.7	0.6	1.1	1.7	
*Payments to government[*2]*	EUR	90,180,251	78,524,074	76,939,902	69,869,747	15%
	%[*4]	6.3	5.1	6.0	6.2	
*Community investments[*3]*	EUR	2,655,837	1,782,828	1,706,412	1,658,137	49%
	%[*4]	0.2	0.1	0.1	0.1	
Economic value retained	EUR	61,949,269	56,632,857	43,690,801	1,930,980	9%
	%[*4]	4.3	3.7	3.4	0.2	

[*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** Alperia generated in 2020 was **over €1.4 billion** (-7% compared to 2019), with around €1.2 billion of the total covering operating costs. Over €257 million were allocated to South Tyrol in terms of direct added value (+9% compared to 2019), of which €91 million were paid to public bodies in the form of taxes, environmental funds, concession fees and electricity supplied free of charge to the province, €70 million were for wages and social security contributions paid to employees and €2.7 million were provided in the form of sponsorships with benefits for the local community and donations. The latter, when compared to 2019, increased by more than 45%, thanks to additional donations for social initiatives launched to support the community affected by the COVID-19 pandemic (see chapter 6.1.3). The owners received €33 million in dividends in 2020 (+28% compared to 2019). Finally, procurement contracts with South Tyrolean companies amounted to around €60 million (in line with 2019). 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.

Figure 3: Value for South Tyrol[*1] {GRI 201-1}

	Unit	2020	2019	2018	2017	YtY variation
Employee wages and benefits	EUR	70,264,455	69,682,656	66,384,082	67,720,277	1%
	%	27	30	30	37	
Payments to government	EUR	90,951,387	78,524,074	76,939,902	69,869,747	16%
	%	35	33	35	39	
Dividends to local governments	EUR	33,300,000	26,000,000	24,000,000	15,200,000	28%
	%	13	11	11	8	
Community investments	EUR	2,655,837	1,782,828	1,706,412	1,658,137	49%
	%	1	1	1	1	
Local procurement	EUR	60,286,081	59,833,219	53,343,496	26,501,483	1%
	%	24	25	24	15	
Total value for South Tyrol	EUR	257,457,761	235,822,778	222,373,892	180,949,643	9%
	%	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, 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.

All tax obligations related to the Bluepower Connection company, based in Romania, are entrusted to leading professional firms with international experience, with the aim of ensuring compliance with the reference tax framework. The issue is also the subject of a specifically dedicated part of the Organisational, Management and Control Model pursuant to Legislative Decree 231/2001, which

the individual companies adopt. The need for correct and structured interaction with the tax authorities is also reflected in an internal policy (Procedure for Inspections and Controls Carried out by the Public Administration).

6.1.3 Social responsibility
Looking after the weakest

In 2020, a year made particularly difficult by COVID-19, Alperia implemented numerous social responsibility activities. It decided to grant South Tyrolean companies a three-month **moratorium** on payments and private customers who lost their jobs or were furloughed in the period from 5 March to 31 May two months of free electricity. Alperia applied this to the energy part of bills and the fees due for its sale and service, but it had no influence on other billed items, which are determined by the state and the Regulatory Authority for Electricity and Gas. For the same reason, the initiative has not been applied to customers in the protected market, as for them the price is defined directly by the authority at national level. These measures had a significant impact. The moratorium for SMEs alone amounted to liquidity support of around €50-70 million. In addition to supporting South Tyrol's small and medium-sized enterprises and families in difficulty, Alperia also supported the **associations** that suffered the direct consequences of the pandemic on a daily basis, sending a message of solidarity especially to the elderly, women and children. The pandemic not only had persistent health and economic impacts, but also serious social repercussions. This is why Alperia stood by the South Tyrolean organisations and associations that found themselves facing exceptionally serious difficulties, including those of a financial nature. In particular, Alperia donated a total of €1 million to:

- Association of retirement homes in South Tyrol
- Südtiroler Vinzenzgemeinschaft, a charitable organisation
- White Cross
- Red Cross
- GEA Women's House Association
- KFS sheltered housing
- "Women against Violence – Frauen gegen Gewalt" Association
- "La Strada - Der Weg" Association
- Südtiroler Kinderdorf Cooperative, a family support organisation

These are associations working to help the elderly, women, children and disadvantaged young people. Organisations that often do not get the attention they deserve and whose work is more important now than ever. The health emergency has further widened inequalities and worsened already difficult conditions, for example, for the many women and children who were in violent family situations during lockdown. With these donations, Alperia decided to support the weakest and those who help them every day in a silent but essential way. In addition, the Board of Management also wishes to express its gratitude and solidarity to the relief organisations, which day after day work tirelessly on the front line in the fight against the coronavirus.

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

- Propositiv Südtirol AIDS-Hilfe: a voluntary organisation whose main aim is HIV/AIDS prevention and information;
- Südtiroler Jugendring: a youth association in South Tyrol;
- A.S.A.A. Alzheimer Südtirol: an association for information, awareness, care and support for Alzheimer's patients and their families;
- Canalescuola: a training agency accredited by MIUR offering educational and didactic services, training and refresher courses for teachers and educators;
- Eltern Kind Zentrum‐Meran: a family-friendly meeting place with activities for children and families;
- Jugendzentrum Jungle: Merano's youth centre, which provides meeting spaces for the city's young people;
- Fabe Familienberatung: family counselling;
- Detection Dog. Training System: a centre for dog trainers;
- Elternverband hörgeschädigter Kinder: an association for parents of hearing-impaired children which supports and cares for children, young people and families with deafness;
- Frauendienst Bezirksgemeinschaft Brixen: a Bressanone district community;
- Frauendienst Bezirksgemeinschaft Pustertal: a Val Pusteria district community;
- Hotel Masatsch‐Lebenshilfe: Masatsch hotel

Finally, in cooperation with the RHVÖ (Austrian Rescue Dog Association), Alperia supported the training of avalanche dogs. RHVÖ organised a basic course for avalanche dogs and their handlers from 16 to 23 February 2020 in Val Martello. Alperia provided the location for the course, specifically the area downstream of Lake Gioveretto, part of the Lasa hydroelectric power station. The focus of the course was searching for and rescuing people partially buried in the snow. The handlers also learned how to work with avalanche search equipment and how to walk in snowshoes. The training course was also supported by Egon Eberhöfer of the Val Martello Mountain Rescue Service and the Val Martello Biathlon Centre.

Finally, we would like to note that, in 2020, Alperia met with the Volontarius association to assess possible internship opportunities. As it was difficult to find people with the required skills, it was decided to support the "Aid Without Waste" project, which aims to help the weakest and most deserving, with a contribution of €20,000.

6.1.4 Investment in infrastructure {GRI 203-1}

The monitoring and maintenance of infrastructures is essential to ensure a more modern, efficient and secure energy supply. Therefore, in 2020, we invested more than **€126 million** to **modernise our assets**, 37% in distribution grids, 26% in production, 9% in district heating, 11% in the Smart Region and 17% in IT infrastructure, facilities, supply and trading and other areas. This is a course of action that we follow year after year. Between 2016 and 2019, we invested a total of €321 million, and we had set ourselves the target of investing €400 million over five years. We have achieved this objective and are now relaunching our aims with the new 2020-2024 Strategy.

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

Type:	Unit	2020	%	2019	2018	2017	YtY variation
Energy distribution	EUR	46,390,000	37	41,571,000	36,520,000	29,663,000	12%
Teleheating and services	EUR	11,251,000	9	13,059,000	6,866,000	8,596,000	-14%
Energy production – mandatory	EUR	27,529,000	22	19,078,000	17,147,000	13,663,000	44%
Energy production – stay in business	EUR	4,804,000	4	10,777,000	9,009,000	3,420,000	-55%
Smart Region	EUR	14,003,000	11	9,235,000	7,718,000	0	52%
IT infrastructure and digital projects	EUR	20,783,000	16	7,836,000	4,294,000	1,135,317	165%
Supply and trading	EUR	1,095,000	0.5	1,430,000	412,000	825,000	-23%
Facility investments	EUR	773,000	0.5	588,000	1,587,000	1,646,225	31%
Other investments	EUR	72,000	0	1,126,000	828,000	2,751,106	-94%
Total	EUR	126,700,000	100	104,700,000	84,381,000	61,699,648	21%

Investments in the electricity grid

The electricity distribution grid of Edyna, a subsidiary of Alperia, is **more than 8,900 km** long (high, medium and low voltage), with more than **2.7 TWh** of electricity distributed in South Tyrol. 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 project is worth a total investment of more than €41 million and, over the next few years, will see the installation of more than 260,000 new-generation meters, including 20,000 for other local distributors. These Smart Meters increase the efficiency and 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. Installations began in September 2020, and the first municipalities to receive the new meters were Egna, Ora and Caldaro. On its website, Edyna has published the timetable for completing the installation in the 96 South Tyrolean municipalities under its jurisdiction by 2024.
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 and to install low-noise transformers for primary substations. It has carried out aerial inspections (an activity that in the future could also be carried out using drones, with advantages in terms of environmental pollution and noise abatement), resulting in the cutting of trees and the burying of power cables, which are safer in the event of extreme weather events, although more difficult to manage in the event of malfunctions. It also installed five new primary substations, unified the medium-voltage grids in Bolzano and Merano and decommissioned the Colma and Marlengo area lines. The Smart Edyna and Smart Land projects also continued, while the Storage4Grid research project came to an end.
Most of these activities will continue in 2021, with planned investments (by 2024) of more than €360 million aimed at:

- installing more than 260,000 Smart Meters, including 20,000 meters for other local distributors;
- ensuring grid resilience and increasing the quality and continuity of the electricity service;
- strengthening and integrating the Bolzano and Merano grid;
- building new primary plants and new medium-voltage grid backbones;
- increasing services to other network operators in the area.

Investments in district heating

Alperia Ecoplus operates district heating at 6 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 150 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 **222 GWh** produced and distributed. More than **€11 million** was invested in this area during 2020. This involved the expansion of the district heating network in Bolzano, the construction of a biomass district heating plant in Merano (to be completed in 2021) and, also in Merano, the installation and testing of phase change tanks for thermal energy storage. These investments will also be renewed in the next 4 years, as foreseen in the new Strategic Plan, for a total value of €85 million, with the priority objectives of:

- continuing the development of district heating in Bolzano;
- improving Merano's energy mix;
- building 3 new cogeneration plants in Bolzano;
- consolidating other district heating operators;
- implementing a cooling system in Bolzano;

Investments in hydroelectricity

Alperia is third in the Italian ranking for renewable hydroelectric generation (after Enel Green Power and A2A) with **around 4,000 GWh/year** produced by 34 large, medium and small derivation hydroelectric plants subject to management and coordination (and 5 plants that are not majority-owned by Alperia) 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 2020, investments amounted to **€32.3 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 for the implementation of the activities planned in 2021 and in the 2020-2024 Strategic Plan, which involve investments of €310 million (97% of which are aimed at achieving the Sustainable Development Goals).

The main extraordinary activities foreseen in the plan include:
- revamping of the Bressanone plant for €37 million;
- revamping of the Lasa plant for €10 million;
- revamping of the Lana plant for €27 million;
- revamping of the Cardano plant for €26 million;
- reconstruction of the penstocks of Lasa and San Pancrazio under the plan ~€33 million (as well as work on 4 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 historic and prestigious engineering company based in Turin, for participation in future tenders for the renewal of the 8 Alperia concessions expiring on 31/12/2023 (~400 MW).

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

Making the region smarter, more connected and more energy-sustainable: Alperia Smart Region has renewed its commitment in this area in 2020 by making investments aimed at:
- spreading **electric mobility** further: today, Neogy (a joint venture of Alperia and Dolomiti Energia) is already the second-largest national operator in smart mobility and South Tyrol is one of the best equipped areas in Europe according to the Smart Mobility Report 2020 drawn up by the Politecnico di Milano;
- carrying out **energy efficiency** work, both in large industrial and commercial groups and in condominiums and homes, also under 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). In South Tyrol, this measure has been specifically developed thanks to the know-how of Alperia Smart Region and in cooperation with the local enterprise networks ARO and Lvh.Apa Confartigianato Imprese and at national level with the Consorzio Efficienza Reti;
- Developing and testing **Energy Communities** in cooperation with the Südtiroler Bauernbund ‐ Union of Direct Farmers and Growers;
- Developing products aimed at the sustainable use of water as a primary resource applied to agriculture in collaboration with the Laimburg Research Centre and the Südtiroler Beratungsring organisation;
- the development of Smart Health projects with the start-up Care4u.

Overall, Alperia Smart Region has invested **€14 million** in 2020, to be followed by a further €700 million (of which €500 million for the 110% Superbonus alone) in the coming years dedicated to:

- energy efficiency projects;
- 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 for the public administration and health system, also through strategic partnerships;
- development of sustainable mobility (electric and hydrogen) both in terms of infrastructure and innovative commercial solutions.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
€1.2 billion added value for South Tyrol in 5 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)	* 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	**€257,457, 761**	ongoing
Assessment of cooperation opportunities for the inclusion of migrants in South Tyrol	* 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 - 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 Burgraviato district community to use for the temporary reception of small immigrant communities. The lease runs until 31 December 2020 * Nothing was implemented in 2020 because of COVID, but Alperia has made several donations to associations that do extensive work with volunteers as support during this difficult period		✔	-	-		✔

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Expansion of the ultra-broadband network and creation of a network that enables access to the Internet of Things in South Tyrol	* All measures planned in 2019 were achieved in 2020	* 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; Smart Land pilot project launched	* Development of new Smart Land products	2021-2022	Number of new products	-	Develop-ment of 2 new products in addition to the T360 tensiome-ter	ongoing
Active collaboration in research projects for the development of new solutions for smart grids	* For "SmartNet Pilot A" the objectives were largely achieved and also recognised by ARERA. For Storage4Grid, the objectives were achieved. FlexiGrid is ongoing	* Continuation of the FlexiGrid research project, which will lead to the development of 'future' secondary electricity substations using new-generation smart meters	2017-2021	Number of completed projects	3	2	ongoing

6.1.5 Green bond
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 or 2020.

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 CO_2 pollution per year in the case of coal plants and in 0.33 Mton of CO_2 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 kt of CO_2 pollution per year in the case of coal plants and in 1.62 kt of CO_2 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 (Eco-Management and Audit Scheme – the European Community Eco-Management System and Audit), this plant saved emissions in the amount of about 5.1 kt per year of CO_2e 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 CO_2 saved from being released into the environment.

3. Finance the modernisation of hydroelectric power stations and the electricity distribution grid, which was continued 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 were available for issuer use. Given Alperia's investment forecasts for the next few years, the intention is to tap into the financial world in 2022, 2023 and 2024, and consider 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 the debt used to acquire 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				Financing the modernisation of hydroelectric plants and of the electricity distribution grid

Image 7: Green bond monetary emissions (source: Alperia)

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Certification of green bonds according to the Climate Bond Standard			✓				✓

6.2 Security of supply
In the field for stable, resilient and efficient energy

Alperia carries out constant monitoring and maintenance to ensure plant safety, avoid breakdowns and inefficiencies for users, and eliminate inefficiencies and the waste of resources and energy.

6.2.1 Green energy supply {GRI EU2; GRI EU10}

Around 90% of the energy produced by Alperia comes from local hydroelectric resources. The quantities produced are higher than the annual energy consumption of the province, which is around 3 TWh. In 2020, Alperia produced **4,791 GWh of hydro and solar energy**, **222 GWh from district heating**, **47 GWh from cogeneration** and **270 GWh from biomass**. An energy mix that defines the green nature of Alperia's business, both in the short and long term. 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 by 2050.

Figure 6: Net energy output broken down by primary energy source[1] {GRI EU2}

		Unit	2020	%[3]	2019	2018	2017	YtY variation
Total net produced electric energy		GWh	5,108		4,373	4,256	3,712	17%
thereof:	*Hydro*	GWh	4,772	90	4,044	3,961	3,344	18%
	Photovoltaic	GWh	19	0	22	21	24	-13%
	Cogeneration (gas/gasoline)	GWh	47	1	47	53	66	0%
	Biofuel	GWh	270	5	260	221	278	4%
Total net produced energy for heating[2]		GWh	222	4	217	199	195	2%
Total net energy output		GWh	5,330		4,590	4,455	3,907	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	2020	2019	2018	2017
Net produced energy from renewable sources	GWh	5,061	4,326	4,203	3,977
	%	95	94	94	94

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

	Unit	2020	2019	2018	2017	YtY variation
Electricity sold to end customers	GWh	5,372	5,423	3,994	3,212	-1%
thereof green-labelled electricity sold to end customers	GWh	2,015	1,813	1,891	657	11%
	%	38	33	47	20	
Trading	GWh	3,166	4,788	1,907	2,310	-34%
Thermal energy sold to end customers	GWh	222	217	199	195	2%

Natural gas sold to end customers	MSmc	421	464	367	328	-9%
thereof green-labelled gas sold to end customers	MSmc	3	1	0	0	330%
	%	1	0	0	0	

6.2.2 Our distribution network {GRI EU4 ; GRI EU28 ; GRI EU29}
From Smart Meters to grounding and emergency management

Edyna, the result of the merger of the two South Tyrolean electricity distribution companies AEW Reti and SELNET, is the Alperia subsidiary responsible for the supply of electricity in South Tyrol and for the distribution of natural gas in four municipalities.
It manages an electricity distribution grid of 8,951 km with **72% of lines underground** (+2% compared to 2019). It supplies 96 municipalities (out of a total of 116), distributing 2.7 TWh of electricity to more than 235,000 users. Edyna's lines are:

- Low voltage: 5,264 km – of which 79% are underground
- Medium voltage: 3,427 km – of which 67% are underground
- High voltage: 260 km – of which 8% are underground

with:

- 37 HV/MV primary substations
- 4,131 MV/LV secondary substations
- 45 MV switching substations

Figure 8 : Distribution network[1] {GRI EU4}

Electricity distribution network	Unit	2020				2019				2018			
Length of transmission and distribution lines		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
High voltage	km	239	21	260	8%	233	19	252	8%	211	13	224	6%
Medium voltage	km	1,129	2,298	3,427	67%	1,171	2,144	3,315	65%	1,237	2,067	3,304	63%
Low voltage	km	1,097	4,167	5,264	79%	1,126	4,043	5,169	78%	1,155	3,945	5,100	77%
Total	km	2,465	6,486	8,951	72%	2,530	6,206	8,736	71%	2,603	6,025	8,628	70%

[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	2020	2019	2018	2017
	km	113	113	113	112

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities	Unit	2020	2019	2018	2017
	No. municipalities	96	96	98	98

Customers connected to the electricity grid	Unit	2020	2019	2018	2017	YtY variation
	No. PODs[2]	235,585	233,335	232,207	229,000	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	2020	2019	2018	2017	YtY variation
	TWh[3]	2.7	2.6	2.6	2.5	-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	2020	2019	2018	2017	YtY variation
Primary HV/MV substations	No.	37	37	36	33	0%
Secondary MV/LV substations	No.	4,131	4,121	4,112	4,025	0%
MV switching substation	No.	45	46	48	47	-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.

All unplanned interruptions of the distribution network are recorded at the remote monitoring centre. Customer outages recorded in 2020 were:

- 1.91, with a **SAIFI** (System Average Interruption Frequency Index) change of 26% from 2019, duration of 29.82 minutes with **SAIDI** (System Average Interruption Duration Index) increasing by 6% from 2019.

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

	Unit	2020	2019	2018	2017	YtY variation
SAIFI (Frequency of interruptions per customer)	No.	1.91	1.51	1.73	1.69	27%
SAIDI (Power outage duration per customer)	Minutes	29.82	28.07	27.36	20.74	6%

The SAIFI and SAIDI values are higher than in 2019 because there were more breakdowns and outages due to a series of works that were carried out in the city of Bolzano for the installation of MV lines and district heating. With careful distribution network planning, expansion of remote monitoring systems, optimisation of service availability and future investments in software, it is expected that SAIDI-SAIFI indicators will be improved, which means better continuity of power supply for Edyna's customers.

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: burying power lines (currently 72%), joining the medium- and high-voltage network in Laives, remote control on secondary substations (in 2020, 113 secondary substations and 2 pole disconnectors already in service or newly built were remote-controlled), modernising infrastructure and installing additional primary substations to continue high- and medium-voltage connections. Gradual transition of the grid operation from isolated neutral to compensated neutral via a Petersen coil is also planned.

To be even more efficient in managing emergencies, Alperia has also signed a memorandum of understanding with the Civil Protection department, with whom it has set up working groups and carried out joint exercises. In 2020, in particular, the communication system with the Civil Protection department was improved, and, in September, a blackout simulation was carried out – thanks also to the cooperation of the national operator TERNA, the Azienda Pubbliservizi Brunico, Alperia Greenpower, local electricity 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 Lappago and Brunico hydroelectric power stations. In November 2019, a blackout caused by bad weather resulted in substantial damage to businesses in the area, as production activities were interrupted. The solution developed and tested in September aims to prevent this from happening again. Evidence gathered during the trial made it possible to avoid a total blackout in the area around Brunico, even during the heavy snowfall at the beginning of December 2020. The isolated power supply therefore proved to be an effective solution in the event of interruptions to power lines to Cadore and Bressanone. In addition, to further strengthen the grid, new strategic investments will be made on the lines. Energy security is essential both for the population and for ensuring the efficiency of companies' production processes. It is therefore a crucial factor in creating added value in the area.

Furthermore, during 2020, Edyna also met with municipalities that were most recently affected by extreme weather phenomena (storm Vaia, for example) to explain how it would like to intervene in the event of new emergencies.

In 2020, dealing with plant and supply safety also meant taking special measures to prevent the spread of COVID-19 infections. Edyna followed the measures identified by Alperia's Emergency Board for the management of the pandemic, implementing an operator rotation schedule that limited different groups meeting as much as possible, so that contacts could be promptly traced. All workers were provided with personal protective equipment and those with positive COVID-19 cases in their families were given the opportunity to take a free test before returning to work. In addition, for those workers put on a period of furlough, there was no reduction in salary as Alperia fully made up for the difference.

Edyna is also working to modernise energy management. It is replacing old-generation meters with the more modern Smart Meters, which provide a detailed and up-to-date display of the consumption curve. The new meters also identify how much energy individual appliances use, an important development from the Smart Home perspective.

In addition, Edyna is contributing to the development of smart grids to manage production, storage, grids and consumption with a single system by participating in 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 has identified eight case studies, one of which involves South Tyrol and Edyna.

Also with a view to innovation, in 2020, Edyna further developed the "Edyna Smart" platform, with which it monitors consumption in four areas:

- Smart Water: for rainwater collection for irrigation, measurement of water transit and detection of soil moisture and intelligent irrigation based on forecasts 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;
- Smart Access: automatic access recognition system.

A further field of application, Smart Waste, dedicated to intelligent waste management, is also being studied. Once the development phase is complete, the platform will be brought to market to encourage better energy resource management.

Finally, Edyna also acts as a mediator between the Autonomous Province of Bolzano, the South Tyrolean municipalities and TERNA, taking part in working groups, where it puts forward the needs of the territory.

Christmas snowfalls
To ensure the availability of energy even during extreme weather events, Edyna and the Civil Protection department carried out a trial, simulating a complete blackout. It proved very useful, especially during the heavy snowfall at the end of the year. Many overhead area lines were severely damaged and more than 2,000 households were left without power. In particular, in the Pusteria Valley, it was possible to avoid a blackout for tens of thousands of users thanks to Alperia Greenpower's Brunico power plant. Damage to TERNA's high-voltage lines caused a power failure at the primary substations in Brunico and Dobbiaco. However, thanks to the two power stations, it was possible to avoid any inconvenience to the public.

6.2.3 District heating
A larger network for safer and greener heat

Alperia Ecoplus is the Alperia subsidiary that provides district heating in South Tyrol. It operates 5 plants – Bolzano, Merano, Sesto, Chiusa and Lazfons – and has **2,335 exchangers** serving thousands of South Tyrolean households (of which 291 in Bolzano).

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 the homes through an underground pipe network, resulting in annual savings in CO_2 emissions of several thousand tonnes.

To produce thermal energy, Alperia 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 cogenerators (plants that produce electricity and heat at the same time and therefore ensure extremely high energy efficiency levels) that are fuelled by natural gas.

The network continues to expand every year. In Bolzano, where a Maxiplan worth €70 million is planned, there is a 26 km network, plus 5 km of pipes for condominium connections. Via Resia, Via Druso, a large part of the industrial area and the hospital, which was connected in 2019, are already covered. Alperia Ecoplus supplies 100 MW of energy, which will be doubled by 2025. The next planned works involve Corso Italia, Corso Libertà up to Piazza Gries, where both the Gries Village, the new district built by Signa Holding, and the Muri Gries abbey and convent will be connected. Even the WaltherPark, the shopping centre being built in Via Alto Adige, will be heated with water heated by the Bolzano incinerator and cooled in summer by the waters of the Isarco river. The water will come in at 12 degrees Celsius and leave at 12 and a half degrees Celsius, with no negative impact on the river. Currently, 262 apartment blocks are connected in the city, and another 250 will be connected to the network by 2025. Ecoplus' technicians, together with those of ASS, also 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 two thousand hectares appearing in the city. The new cogeneration plant that Alperia Ecoplus is building for Infranet will be completed in spring 2021. It is a 140 kW plant that will provide electricity and heat. A trigeneration plant (electricity, heat and refrigeration) will be built by 2023 to be equipped in case of incinerator failure.

In Merano, Alperia supplies 491 substations with district heating, providing green heat to more than 5,660 families and approximately 420 additional company, school and office users. A phase change storage tank has been installed here 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 CO_2 emissions every year, roughly equivalent to the CO_2 absorption of a 5-square-kilometre forest. This represents 1/5 of the Municipality of Merano's surface area. Also in Merano, the biomass plant will be completed in summer 2021. This thermal plant will not only facilitate the switch from gas to biomass, but also continue the expansion of the district heating network. The aim is to contribute to the reduction of CO_2 emissions from heating as early as winter 2021. The new plant will be able to produce 27,000 MWh of thermal energy per year, equivalent to the heat required to heat approximately 2,500 traditional-energy-class apartments of 100 m^2 each. The plant will produce total dust emissions comparable to those generated by no more than 50 conventional domestic fireplaces. The biomass used will be tightly controlled and, as for the other plants, priority will be given to local virgin biomass or biomass coming from up to 250 km away.

Connections also continued in Chiusa and Lazfons. In Chiusa, a cogenerator for self-consumption will also be installed, while in Sesto, the installation of a second electrofilter is at an advanced research stage, which will allow the two biomass boilers to be operated completely separately, thus increasing efficiency. In the past, during maintenance, it was necessary to switch off biomass heat generation, using an oil boiler with very high consumption instead. Now, this will no longer be necessary.

In addition, to ensure optimum combustion, the system is equipped with a lambda probe control. This reduces emissions caused by incomplete combustion. In addition, the conversion factor has been certified for all plants and the calculation of CO_2 emitted is being planned to offset operational emissions with green gas.

The aim is to reach around 100 MW of new thermal power connected to the Alperia district heating network by 2024, as provided for in the new Strategic PlanStrategic PlanStrategic Plan.

It is also noted that to reduce environmental impact, district heating plants have been built differently depending on the area where they are located. In the South Tyrolean capital, Alperia S.p.A., in collaboration with the Bolzano Association of Architects, launched a competition for ideas for the external covering of the thermal storage tank to both contribute to the city's architecture and minimise its visual impact. 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 freephone 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[20].

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[20]   Il Sole 24 Ore (November 7th 2020), "Biomasse forestali, frontiera da esplorare".

The Bolzano district heating system in detail

Image 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 cogenerators (5) which allow it to cope with demand peaks. From the power plant, the heat, in the form of hot water, is fed into the district heating network (6) made up of a closed circuit of underground pipes. The hot water flows into the district heating network, then onwards to individual homes. Here, thanks to a heat exchanger (7), energy is used to heat the sanitary water of homes and heating systems. All this happens without the loss of any water. After the heat has been released, the water goes back to the plant through the district heating network (8) to be reheated and resume its cycle. In addition to heating private homes, the district heating system meets the energy needs of many public buildings in the city, including the Bolzano hospital (9).

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 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	* Investments in measures to improve plant performance in terms of availability, reliability and efficiency	2017-2021	Invest-ments (EUR)	400 million	-125.2 M	ongoing
Investments of €400 million over 5 years in the core business	* Tel power plant; deferred activity in the years 2021-2022.	* Construction of a mini-hydroelectric power plant to utilise the minimum vital water flow in Tel and to boost electricity production from renewable sources	2018-2021	-	-		ongoing
Increase the energy availability index for hydroelectric plants to 88%		* Programming and planning 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	88.88	✓
Expansion of the district heating network in Bolzano	* Expansion of connections and network in Bolzano	* Continuation of extending network in Bolzano	✓	Number of ex-changers		291 (Bolzano) /2,300 (South Tyrol)	✓
~100MW of new thermal power connected to our district heating network			2020-2024	Connect-ed power [increase 2020-2024] (MW)	100		ongoing
Reduce the duration of outages			annually	SAIDI (minutes)		29.82	X
Reduce the duration of outages	* Improving service quality and modernising infrastructure to improve network stability	* Improving service quality and modernising network infrastructure to improve stability	annually	SAIDI High voltage (minutes)	28	11.29	
Reduce the duration of outages	* 113 secondary cabins and 2 pole disconnectors remotely controlled already in service or newly built (as of 9 December 2020)	* Preparation for the annual plan of secondary substations and disconnectors to be remotely controlled in 2021	annually	SAIDI Medium voltage (minutes)	45	26.15	

Reducing the duration of outages themselves		* Gradual transition of the grid operation from isolated neutral to compensated neutral via a Petersen coil	annually	SAIDI Low Voltage (minutes)	68	47.44	
Reduction of power outages			annually	SAIFI (number of interruptions per user)		1.91	x
Reduction of power outages	* The 4 Zones have details of all inspections and tree cutting carried out on the distribution network in 2020	* Inspection and tree-cutting programme for overhead lines	annually	SAIFI High voltage (number of interruptions per user)	1.2	0.76	
Reduction of power outages	* The 4 Zones have details of all activities on the medium voltage distribution network in 2020	* Replacement of sections of overhead lines with underground cables and construction of new HV and MV connections	annually	SAIFI Medium voltage (Number of interruptions per user)	2.25	1.47	
Reduction of power outages	* Study of the MV distribution network for the extension of FNC automation on primary substations where the Petersen coil has been commissioned	* Extension of FNC automation on MV lines. Installation in various secondary substations of cells with DY 800 circuit breakers with protection	annually	SAIFI Low voltage (number of interruptions per user)	4.3	3.21	

6.3 Asset integrity {GRI EU21}
Less risk and more sustainability

Each year Alperia produces an average of over 4,700 GWh of clean energy through 34 large, medium and small hydroelectric plants subject to management and coordination (and 5 plants that are not majority-owned by Alperia). These plants include 13 large dams, 16 smaller reservoirs, 160 km of tunnels and 21 km of penstocks. These are complex and sensitive infrastructures, which we are committed to keeping stable, safe and efficient. To this end, we plan and carry out constant monitoring and maintenance work, in compliance with current regulations and the requirements of the supervisory authorities. In 2020, specifically, Alperia invested €32,333,000 in activities to improve plant performance in terms of availability, reliability and efficiency. Thanks to these activities, in 2020, **plant availability** was **88.88%** (it was 86.43% in 2019), meeting the target set.

Figure 10: Energy availability {GRI EU 30}

Availability factor *1		Unit	2020	2019	2018	2017
Energy source	Hydro	%	88.88	86.43	87.67	89.76
	Photovoltaic	%	not available	not available	not available	not available

Reducing the risk of environmental incidents
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 the 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.
Two environmental incidents occurred in 2020 (an alleged gas leak and a hazardous soil pollution situation). Neither of them, however, generated a negative impact on the environment.

Figure 11: Environmental incidents

	Unit	2020	2019	2018
Number of environmental incidents	No.	2	0	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 to go 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, the 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.

To increase the safety of our hydraulic infrastructure, we are also developing many innovative projects in cooperation with start-ups. Among these, we are working in particular on projects with Fieldbox, Sentetic and Hydrosim 4.0, which concern, respectively, the application of artificial intelligence and machine learning software to prevent failures, increase the life cycle of plants and optimise maintenance costs, the application of sensors usually used in the road sector to hydraulic works and the adoption of a simulator to improve the active management of flood events.

Allegation of non-compliance with MVF release at the Glorenza plant
In 2020, Alperia received an objection from the Office for Sustainable Water Management of the province, in light of a report drawn up by the Forestry Police of Malles accompanied by a fine of around €40,000. The report refers to the MVF of a small watercourse in Upper Vinschgau, in Glorenza, but was contested by Alperia both in formal terms, i.e. with regard to the inquiry method (there was no discussion, Alperia experts were not involved in the inspection and no accurate measurements were taken), and with regard to the quantity detected, which was considered incongruous. At the time of writing, Alperia has not received any update from the provincial office responsible for this dispute.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Definition of a KPI at Group level for asset integrity			✓	Environ-mental accidents	-	2, but not significant	✓
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; GRI 414-1, 414-2}

Alperia adopts an approach to purchasing and supplier management that is as sustainability-focused as possible – a requirement that is included in tenders. All Alperia suppliers must accept the principles of the Group's Code of Ethics and uphold them, beginning with the respect and protection of human rights (included in all tenders and purchase orders managed by Procurement), occupational health and safety as well as 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. In addition, the BravoSolution system is used for tender management.
Alperia uses a variety of tools to verify that our suppliers comply with precise **environmental and social standards**:

- **the Supplier Register:** to obtain the three-year qualification, suppliers must prove that they have specific social/environmental certifications, such as ISO 14001, ISO 45001 and EMAS, or have taken equivalent measures. In 2020, the Register was further updated and now has more than 850 certified suppliers;
- **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, it is planned to expand the tender management platform to include RDAs. Please note that the assessment or inclusion of product-related minimum sustainability requirements is not linked to a procedural obligation;
- **Vendor Rating System**: this instrument guarantees the quality of suppliers and minimises the risk of loss and dependence. The system provides that the collaboration of suppliers of strategic importance is evaluated internally on the basis of a standard questionnaire, in which the quality of services provided, safety standards and commitment to environmental sustainability are considered. These criteria allow the performance of individual suppliers to be assessed. Vendor Rating will be operational from 2021 and possible additions and/or changes to the system will be assessed during the year in view of the feedback from the field;
- **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 2020, as a result of the pandemic, audits with suppliers were suspended and will resume as soon as the emergency is over.

From 2021, it will be possible to access everything related to supplier management through the same portal, from the first purchase order to the final evaluation. The platform will also integrate contracts, thereby giving a complete view of the whole sector. The integration project was already planned for 2020, but its implementation has been postponed to 2021 pending the renewal of the management of the entire Group.
In addition, it should be noted that, during the lockdown period, some suppliers requested the inclusion of specific contractual clauses to limit liability (e.g. in the event of delays). Alperia's procurement department handled all requests on a case-by-case basis.

Alperia's **purchases**, where made centrally, are the responsibility of the Procurement department and in 2020 **58%** were **local**[21] (62% in 2019). Using local suppliers, where compatible with business needs, 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 2020 was **36%** (it was 35% in 2019) **of total expenditure**. Among these:

✓ origin of works suppliers: 72% local (42% in 2019)
✓ origin of service suppliers: 20% local (39% in 2019)
✓ origin of product suppliers: 21% local (18% in 2019)

Figure 12: Proportion of spending on local suppliers[*1] {GRI 204-1}

	Unit	2020	2019	2018	2017
Percentage of products and services purchased locally (based on expenditure in EUR)	%	36	35	27	34
Percentage of works purchased locally (based on total works expenditure)	%	72	42	36	41
Percentage of services purchased locally (based on total service expenditure)	%	20	39	22	51
Percentage of products purchased locally (based on total product expenditure)	%	21	18	19	15
Percentage of contracts awarded locally (based on number of contracts)	%	58	62	60	59

[*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 these are located outside of the province of South Tyrol.

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[21] 'Local purchases' are those made in the Province of Bolzano.

The total volume of purchases made by Alperia was €169 million (in line with the previous year, whereas in 2018 it was €197 million), of which **€60 million were dedicated to local suppliers** (in line with the previous year). Most of these purchases were related to the Group's core business, 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. Finally, a number of activities aimed at improving the sustainability of consumption in the offices were renewed in 2020, such as providing organic and fair-trade products in snack and drink vending machines, the use of biodegradable cups and the use of glass company dispensers instead of plastic water bottles. In addition, employees were provided with glass or aluminium flasks. All these measures, which are also detailed on the intranet with regular reports from the HSE department, contribute to raising awareness on sustainability issues.

In addition, respect for **human rights** has been included as a clause within the General Terms and Conditions of contracts as of May 2019. All significant new contracts, i.e. contracts managed centrally at Group level by the Procurement function and exceeding a value of €100,000, include this clause; however there may still be active contracts signed before 2019 that do not include it.

Figure 14: Significant investment agreements and contracts that include human rights clauses or that underwent human-rights screening[*1] {GRI 412-3}

	Unit	2020	2019	2018	2017
Number of significant investment agreements and contracts that include human rights clauses	No.	information unavailable	information unavailable	0	0
Percentage of significant investment agreements and contracts that include human rights clauses	%	information unavailable	information unavailable	0	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,[22] 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.

Figure 13: New suppliers that were screened using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2020[*1]	2019	2018	2017
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).

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[22] In Art. 18 of Law 221/2015 and, subsequently, in Art. 34 concerning "Energy and environmental sustainability criteria" of Legislative Decree 50/2016 "Procurement Code" (as amended by Legislative Decree 56/2017).

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 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 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	* Update of PRO 204 and RDA checklist to require assessment of product-related sustainability requirements	* Implementation of new PRO 204 requiring assessment of product-related sustainability requirements	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	**3,646 TJ**	Intensity of market-based operational GHG emissions – Scope 1 & 2	**0.01 tCO$_2$e/MWh of energy produced (gross)**
Percentage of energy consumption from renewable sources within the company	**68%**	Total market-based operational GHG emissions – Scope 1 & 2	**82,443 tCO$_2$e**
Electric, hybrid, hydrogen company cars	**144**		

7.1 Water {ALP6; ALP7}
Our primary source of green energy

Alperia Greenpower manages the production of electricity from renewable sources with 34 hydroelectric plants subject to management and coordination, and 5 subsidiaries, 13 large dams and 16 minor works. The hydroelectric plants are located in South Tyrol, along the main watercourses, which run through an area where water stress is in the range of 10-20%. Each area is characterised by a complex superficial hydrographic network originating from multiple intersecting catchment areas. Each year, around 4,000 GWh of energy is produced. **This is clean and sustainable energy**, but has an impact on the environment in its own way. For this reason, Alperia is committed to managing dams and reservoirs in the best possible way. These activities include regulating the volume of water flowing downstream in floods through the dams, guaranteeing the availability of water for other uses in times of drought, building fish ladders at the intakes and carrying out consolidation work on fish stocks, mitigating the impact of plant diversion works. Furthermore, Alperia has implemented numerous measures to improve the waterways through the compensation funds in collaboration with the Autonomous Province of Bolzano, the riparian municipalities and fishing associations, including consolidating fish stocks, building fish ladders for intake works and the conservation and improvement of the landscape.
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 responsible for protecting 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. Alperia provides around 20,000 Lt/sec on nights when there is a real risk of night frost (7-8 nights/year on average). This is made possible because of the volumes stored in the Resia and Gioveretto reservoirs, as well as in the Val d'Ultimo and Val Senales reservoirs, and is provided free of charge. The water is drained off for an entire night, reducing the company's possible profit margins, to guarantee an alternative use of the water for the region's agricultural economy. These examples demonstrate Alperia's commitment to promoting a **conscious use of** water resources, also through collaboration and dialogue with stakeholders (public institutions, consortia and trade associations). 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 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.

In relation to this, the **Smart Land** project continued in 2020, through which Alperia installed moisture sensors in the fields of 60 South Tyrolean fruit and vine growers. These sensors record and monitor irrigation process data, giving farmers real-time measurements. According to the data collected, water savings of between 50% and 80% can be generated. The project is being developed with the Laimburg Research Centre and the Fruit and Vegetable Consultation Centre.
Finally, with Alperia Bartucci, we have developed a project to **optimise the Trento aqueduct water network** managed by the Novareti company. Alperia Bartucci designed and implemented 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. Implementing the project with the Energy Performance Contract (E.P.C) Saving Sharing formula allowed Novareti to measure and share the benefits actually achieved. This not only allows water resources to be used sustainably, but also generates economic benefits in terms of the kWh of electricity saved per year. Specifically, in energy terms, the savings generated by the project are equal to 240,000 kWh/year (45 toe/year; 74 tonnes CO2e/year) and water loss savings of

680,000 m3/year. On an economic level, savings generated taking into account optimised pumping, loss reduction and fault reduction are approximately €75.000 per year. The project began in the spring of 2019, following structural work on the civil works supported by Novareti in the previous year, and will be monitored by Alperia Bartucci for the duration of the E.P.C. (5 years).

7.1.2 Protecting biodiversity
Reducing the impact of hydroelectric

Rivers are a primary source of biodiversity and an important part of our rich natural heritage. A precious habitat that hydroelectric activity could change. These effects can happen at any stage in the life cycle of a hydroelectric power plant, from construction to renovation and dismantling to day-to-day management. This is why Alperia adopts mitigation and compensation measures to protect the vulnerability of the species and habitats affected by its activities. For example, hydroelectric power stations with their dams can disturb or prevent the distribution and migration of fish. The presence of these barriers has significant effects on the survival of many fish populations. Sediment, usually considered a natural element of aquatic ecosystems essential for their hydrological, geomorphological and ecological functioning, can also be disturbed by the presence of weirs or dams. Under natural conditions sediment is constantly transported towards the sea, but the presence of large reservoirs affects this natural movement. Even maintenance works that involve the periodic discharge of sediment, if not managed correctly, can harm habitats and species. In addition, another problem can be fluctuations in flow caused by hydropower plants, which can cause damage both to species and their habitats, especially in small rivers. Fluctuations in flow rates are particularly stressful for organisms that cannot cope with sudden changes in water levels, such as fry. In relation to all these eventualities, Alperia not only adopts preventive behaviour and complies with sector regulations, but also invests in technological innovation to find the best solutions to protect biodiversity and act responsibly in the area. We want to **minimise the natural and environmental impact of hydroelectric plants** and actively protect the biological diversity of watercourses. To this end, we carry out activities for renaturation and restoration of the original landscape at disused facilities. In 2020, in particular, the subsidiary intakes of Rio Bremè (connected to the Ponte Gardena plant) and Rio Valles (Bressanone plant) were demolished, and the San Giovanni intake (Lasa plant) was also demolished. The removal of the Foltin intake (connected to the Lasa plant) and the Rio Fonderia intake (Santa Valburga plant) have been postponed until 2021.

7.1.3 Minimum vital flow {GRI 303-2}
Ponte Gardena, Santa Valburga and Bressanone: trial ends

Minimum vital flow (MVF) means the quantity of water that needs to be downstream of a water collection to guarantee the correct functioning and quality of the ecosystems concerned. The MVF is the residual flow rate that protects the natural biocoenosis of the water course in the short and long term. During flooding and when natural flow rates are high, plants, depending on their size, withdraw water up to the maximum flow rate allowed by the concession decrees; in lean periods, meanwhile, there may be a reduction in the significant flow rate in some sections of the riverbeds. In the Autonomous Province of Bolzano, the release of the MVF from a hydroelectric branch is regulated by the new General Plan for the Use of Public Water (PGUAP). In 2020, the **MVF (l/s) was 38,919**.

During the year, monitoring was completed for the definition of the MVF of three plants in Ponte Gardena, Santa Valburga and Bressanone, for which a provincial trial had been planned This process took around 8 years. The aim of the trial was to release a quantity of water deemed to be ecologically optimal, ensuring the watercourse downstream of the diversion was in a good state. The trial ended in 2020.
In 2020, Alperia was challenged for non-compliance with MVF release (see box on p. 59).

Figure 15: Water {ALP6; ALP 7}

	Unit	2020	2019	2018	2017	YtY variation
Water released for minimum flow	litres per second	38,919	38,926	38,883	38,178	0%
Incidents of non-compliance with MVF (minimum vital flow) requirements	No.	1	0	0	0	100%

7.1.4 Fish ladders
Corvara and Castelbello: innovation to protect fish species

Intake works at hydroelectric plants can also be a barrier to fish migration and an environmental problem. To remedy this, Alperia committed to building artificial passages, so-called **fish ladders**. During 2020, we completed the executive design of the Castelbello fish ladder at the Lasa crossroads, with the start of the tender process. Work will begin in spring 2021. The fish ladder was designed by Alperia's engineering department along the same lines as the construction of the Sarentino fish ladder in 2018. The Lasa fish ladder will be larger, as there are many more fish in the stretch where it will be located, and the fluctuations in flow are particularly strong and 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 the 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.

In 2020, we also carried out a feasibility study in Brunico, and, in 2021, in addition to the construction of the fish ladder in Lasa, we will be installing a fish deterrent at the Fontana Bianca dam in St. Valburga. The plant will be mounted in front of the intake, so as to prevent fish from entering the turbines. This is an experimental project that will be carried out in cooperation with the University of Innsbruck.

Finally, Alperia has signed agreements with local fishing associations for fishing rights. Specifically with the Val Martello fishing association for the management of fishing rights in Gioveretto and on Lake Resia and the Alta Pusteria fishing association. Bolzano fishermen were given an area in the Ega valley where the association will build a new facility for breeding marble trout.

7.1.5 Sediment management
Fortress and suction dredging

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 suitable method to remove sediment build-up is **controlled release**. The turbidity of the water during such operations is comparable to that produced during natural flood events. The release of silt and sand from the dams promotes the regeneration of optimal river bed conditions. The operation is carried out in line with the techniques, conditions and time schedules approved and monitored by the relevant provincial authorities. Releases of sediment material from artificial reservoirs are regulated at national level[23]. The same national regulation has been transposed by the laws of the Autonomous Province of Bolzano[24], which requires a reservoir management project to be drafted and approved by the relevant authorities.

For example, by nature, the Isarco and Rienza rivers see heavy transport of suspended solids during flooding periods, which accumulate in the Rio Pusteria and Fortezza (Bressanone plant) reservoirs owned by Alperia Greenpower.
The draining and purging operations for 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 every three 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 2 to 3 months). In addition, as an alternative to flushing the storage space, which is carried out in Fortezza about every 4-5 years, Alperia Greenpower carried out trial dredging in 2020, as a solution to the problem of silting. 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. Alperia's Engineering & Consulting division analysed the suction dredging carried out in terms of ecological compatibility, performance and costs to assess whether this method of sediment management could be more ecologically sustainable. The operation was also repeated in the Curon and Colma reservoirs with positive results. In addition, numerical simulations of the flow situation in the reservoir are being carried out as part of a dissertation at the University of Munich. At the end of the operations, Alperia Greenpower submitted a final report assessing the effectiveness and sustainability of this method.

Finally, it should be noted that all sediment management activities carried out by Alperia Greenpower are subject to EMAS assessments, are ISO 14001 certified and are improved year on year with increasingly efficient filtering systems.
Alperia Greenpower is also certified according to ISO 9001 and ISO 45001. To comply with the new ISO 14001:2015, a new environmental risk assessment approach was introduced to follow the same logic as the company's ERM (Enterprise Risk Management) and to take into account the internal and external context.

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[23] From Art. 114 of Legislative Decree 152/06 – Part III.
[24] Law No. 8 of 2002 and subsequent implementing regulation Decree of the President of the Province of Bolzano No. 6 of 21 January 2008.

7.1.6 Environmental plans
Investments for riparian municipalities

In agreement with the relevant authorities, Alperia has defined an improvement and conservation plan for the landscape, involving a investment of **€400** million over thirty years. These environmental plans are a key element of the concessions for large hydroelectric plants awarded in 2011. Environmental funds are also paid for facilities whose concessions have expired and are awaiting renewal. 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.

So far, 43 riparian municipalities have received environmental funding and completed several projects, including:

- improvement of the wastewater treatment system;
- restoration or improvement of natural environments;
- energy saving;
- reduction of pollution;
- conservation of the Alpine landscape.

Every year, the Alperia Group provides more than €18 million for the implementation of environmental measures. The work is carried out by the riparian municipalities, the Autonomous Province of Bolzano and the concessionaire itself.
In addition to the work already carried out at the large hydroelectric plants in Santa Valburga-Pracomune, San Pancrazio, Lana, Sarentino, Cardano, Ponte Gardena, Bressanone, Lappago, Molini di Tures, Brunico, Marlengo, Tel, Vizze, Glorenza, Castelbello, Lasa, San Floriano and Barbiano, in 2020, Alperia Greenpower installed two new filters in Tel, on the Adige River, implemented sediment dredging works in Monguelfo and Vizze, and continued to directly and indirectly support the repopulation of fish species. Added to these are the measures which aim to improve the environmental impact of hydroelectric production plants, such as the construction of fishways and the environmental monitoring of water sections to ensure and optimise minimum vital flow.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Compliance with legal provisions on minimum vital water flow	* Carried out in 2020: Delivery of the request for completion of monitoring for the definition of MVF for 3 plants: Ponte Gardena, Santa Valburga, Bressanone	* Monitoring and maintenance of the intake works of the plants managed by AGP	annually	Compliance with provisions on minimum vital water flow	100%	100%	✓
Construction of fish ladders and compensation measures	* Carried out in 2020: fish ladder at the crossing in Lasa: completion of the executive design and start of the tender process monitoring of 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 in 2020: carried out trial dredging project at the Fortezza reservoir and sent in the diversion works; duration of around 2 months with removal of 30,000 m³ 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 in 2020: – demolition of the Rio Bremè subsidiary intake (Ponte Gardena plant) – demolition of the Rio Valles subsidiary intake (Bressanone plant) – demolition of the San Giovanni intake (Lasa plant)	* Postponed to 2021 – removal of the Foltin intake (Lasa plant) – removal of the Rio Fonderia intake (Santa Valburga plant)	2021	-	-		✓
Reducing the danger of contamination from recycled water derived from open-cycle cooling			✓	-	-		✓

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 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	* 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	* Due to COVID-19 the tensiometer T360 product was not marketed in 2020	* Marketing of T360 tensiometer product in 2021	2021	Number of sensors sold	-	0	✓
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 flowerbeds with rainwater		✓		-		✓

7.2 Energy consumption {GRI 302-1}
A new energy management process

In 2020, Alperia appointed an Energy Manager to strengthen its energy efficiency and emission reduction efforts. During the year, the **energy efficiency** projects already implemented by the Business Units and individual companies were assessed by interviewing the managers. The data was systematised and analysed in a structured way to define an improvement programme in the Group's energy management.

Alperia consumes energy directly and indirectly. **Direct consumption** includes the use of fuel for the production of electrical and thermal energy in plants (cogeneration, thermal power stations, 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 2020, the Group's direct and indirect energy consumption, defined as that of the Group's operating companies, customer offices and representative offices, amounted to **3,646 TJ**. 32% of energy consumption comes from non-renewable sources and **68% from renewable sources**. Among renewable sources there was an increase in electricity for self-consumption (+9%) determined by more refined data measurements in 2020.

Alperia prefers to use energy from renewable sources in its offices and production areas. Two out of five district heating systems have installed photovoltaic panels. Moreover, during the year, Alperia continued to pursue the energy efficiency programme defined in 2019, integrating some measures identified through the assessment carried out by Alperia Bartucci. The introduction of a transformer to reduce losses and facilitate possible heat recovery is part of these measures (when fully operational there will be 3 transformers in use). For 2021/2022, with the support of Alperia Bartucci, we also plan to:

- install energy-efficient motors (in 2021 the complete replacement of pumps for two production groups and in 2022 the complete replacement of pumps for three production groups);
- replace a tunnel fan at the Bressanone plant;
- install an advanced control system for thermal generation and on biomass boilers;
- review the control logic of the heating and cooling system.

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

	Unit	2020	%	2019	%	2018	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,168	32%	1,204	34%	1,117	36%	-3%
Gasoline	TJ	25	1%	78	2%	36	1%	-67%
Natural gas	TJ	738	20%	751	21%	741	24%	-2%
Electricity for own consumption (produced and acquired)	TJ	404	11%	375	11%	340	11%	8%
Total energy consumption within the organisation from renewable sources:	TJ	2,478	68%	2,340	66%	1,981	64%	6%
Palm oil	TJ	2,125	58%	1,997	56%	1,708	55%	6%
Wood chips	TJ	168	5%	173	5%	167	5%	-3%
Electricity for own consumption (produced and acquired)	TJ	185	5%	170	5%	106	4%	9%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	0%
Total energy consumption within the organisation	TJ	3,646	100%	3,544	100%	3,099	100%	3%

It will be key in the coming years to have an integrated management system that looks at both environmental management and energy efficiency and sustainability.

Alperia has also obtained UNI 11352 certification, which verifies the results achieved in terms of energy savings by companies that provide energy services in the industrial sector and has also set itself the goal of obtaining ISO 50001 certification, which specifies the requirements for building, launching, maintaining and improving an energy management system. This is a goal that Alperia will achieve by first working at two pilot sites, to be certified at the beginning of 2022, and then extending the process to the whole Group.

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

Operational objectives	Measures implemented in 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 value	Status
Establishing energy management at Group level	* 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	* Implementation of an Energy Management System (ISO 50001) on pilot sites * Improvement of the consumption monitoring system: identification of the monitoring data perimeter for future software implementation * Building energy dashboards for pilot civil buildings to extend measurement points and monitor building performance	2022	-	-		ongoing
Reduction of energy consumption in buildings and plants through targeted energy efficiency initiatives	* Continuation of the energy audit process * Launch of energy efficiency projects * Identification of new energy efficiency projects	* Start of implementation of energy efficiency process monitoring * Continued implementation of energy efficiency projects and energy diagnosis activities	2021	Energy con-sump-tion (TJ)	-	**3,646 TJ**	ongoing

7.3 Emissions {GRI 305-1, 305-2, 305-3, 305-4, 305-5, 305-7}

The new energy management process implemented by Alperia also covers emissions management. In 2020, an analysis was carried out for each company to understand the level of emissions generated and what they derive 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. Alperia wants to contribute to the provincial Climate Strategy 2050 by reducing its emissions. South Tyrol currently generates 5 tonnes of CO_2 per capita per year (at European level it is 9 tonnes), which, according to the Climate Strategy, will have to be reduced to 1.5 tonnes of CO_2 per capita per year. In this scenario, CO_2 emissions from the energy sector contribute significantly to the increase in greenhouse gases responsible for climate change.

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 the amount of emissions emitted;
- define targeted action to reduce them, developing and adopting new technology (e.g. converting existing plants to biomass, developing energy efficiency projects at our sites and building the new Merano headquarters with the highest efficiency standards);
- 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 kt CO2e.

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 greenhouse gas into the atmosphere (CO_2 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 can be indirectly attributed to company activity. This includes upstream emissions such as emissions caused by the transport of materials and people, but also downstream emissions such as emissions caused by the use of our products (e.g. the sale of non-green energy).

Specifically, we estimated the generation of **82,443 tCO$_2$e of** Scope 1 and Scope 2 (market-based) operational emissions in 2020, of which 5.08 tSOx and 42.22 tNOx. The gross direct greenhouse gas emissions (Scope 1, which also includes SF6) deserve particular attention: 45,483 tCO$_2$e in 2020 (52,709 tCO$_2$e in 2019). NOx and SOx 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.

Figure 17: GHG emissions[*1] {GRI 305}

	Unit	2020	2019	2018	YtY variation
Gross direct (Scope 1) GHG emissions[*2]	tCO$_2$e	45,483	52,709	45,019	-14%
Biogenic CO_2 emissions[*2]	tCO$_2$e	11,364	3,551	3,368	220%
Gross location-based energy indirect (Scope 2) GHG emissions[*3]	tCO$_2$e	34,878	34,662	34,559	1%
Gross market-based energy indirect (Scope 2) GHG emissions[*4]	tCO$_2$e	25,596	39,393	44,538	-35%
Gross other indirect (Scope 3) GHG emissions[*5*7]	tCO$_2$e	2,833,961	32,096	27,931	8,730%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO$_2$e	91,725	90,882	82,946	1%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO$_2$e	82,443	95,653	92,925	-14%
Total GHG emissions location-based	tCO$_2$e	2,925,686	122,978	110,877	2,279%
Total GHG emissions market-based	tCO$_2$e	2,916,404	127,749	120,857	2,183%
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	

Operational GHG emissions intensity (Scope 1 & 2 – market-based) ratio for the organisation[6]	tCO_2e/MWh of produced energy (gross)	0.01	0.02	0.02
Total GHG emissions intensity (Scope 1, 2 & 3 – location-based) ratio for the organisation[6]	tCO_2e/MWh of produced energy (gross)	0.55	0.03	0.02
Total GHG emissions intensity (Scope 1, 2 & 3 – market-based) ratio for the organisation[6]	tCO_2e/MWh of produced energy (gross)	0.55	0.03	0.03

[1] The main gases included are CO_2, CH_4, N_2O and SF_6.
[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 tCO_2e) and non-renewable energy electricity (1,931,484 tCO_2e). Emission factors used: DEFRA and cargo manifest.
[6] Biogenic emissions are included in ratio.
[7] The increase of Scope 3 emissions in 2020 is due to the accounting of downstream emissions relating to the sale of non-green products (gas and electricity).

Proportion of emissions	Unit	2020
Scope 1	%	2
Scope 2	%	1
Scope 3	%	97

Emissions avoided	Unit	2020
Scope 1[1]	tCO_2e	1,935
Scope 2[2]	tCO_2e	674
Scope 3[3]	tCO_2e	2,159,539
Total emissions avoided[4]	tCO_2e	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 to 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 m^3 and uses thermal energy from the local municipal solid waste incinerator, reducing the consumption of fossil fuels and CO_2 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 market-based GHG (greenhouse gas) intensity (Scope 1, 2, 3) of **0.55 tCO_2e/MWh** and a market-based operational intensity (Scope 1, 2) of **0.01 tCO_2e/MWh**.

It should also be noted that the renowned independent certification body TÜV NORD officially confirms the climate-neutral status of Green Gas – one of Alperia's sustainable products – every year. Alperia customers are therefore guaranteed that all greenhouse gas emissions generated are offset by a certified climate protection project.

Finally, this year, with the aim of making the monitoring of GHG emissions even more comprehensive, we have expanded the emissions inventory to include part of our indirect downstream Scope 3 emissions from the sale of our products from traditional fossil sources. This explains the large increase in Scope 3 emissions and has shown that 97% of the emissions are indirectly due to company activity.

In addition, we have 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 in 2020 to reduce its carbon footprint. The projects that the Alperia Group has carried out in 2020 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 employees to travel between Group sites, and compensation projects to offset each printed sheet of their publications.

For the first time, we can therefore disclose the level of avoided emissions as 2,162 ktCO₂e.

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 transport
More than 140 electric vehicles, a renewed e-bike fleet and incentives for sustainable mobility

Reducing emissions also involves everyday activities, such as taking public transport or using a bicycle to get to work. Therefore, Alperia is developing a programme to encourage green mobility among its employees. In 2019, it carried out a survey to understand how this type of mobility might be perceived by its population, and, given the positive outcome of the responses, it introduced some measures in 2020, such as:

- the renewal of the company's fleet of electric bikes for travelling during working hours: older and broken bikes were replaced and a new long-term rental contract was signed for higher performance bikes;
- organisation of mobile bike workshops for the maintenance of private bicycles (this initiative will be repeated on a fixed basis on 8 days per year);
- installation of bike racks with kits for self-repair of private bicycles at each location;
- installation of electric charging stations for private bicycles in all administrative buildings;
- a one-off contribution of €240 towards the hire or purchase of electric bikes;
- providing parking spaces for private electric cars at each Alperia site;
- providing a card for free charging of electric vehicles.

There are also plans to introduce an allowance for the use of public transport. This measure was supposed to be launched as early as in 2020, but due to the COVID-19 pandemic, it was postponed to 2022. The allowance will be about €120 per year and will be paid directly through the payslips of those who travel at least 2,000 km per year by public transport (the distance will be certified by the local transport card, Alto Adige Pass).

The renewal of the company car fleet with electric cars, which began in 2018, also continues. These vehicles can be charged with 100% renewable energy produced in the Group's own hydroelectric power stations, thereby generating a significant reduction in the environmental impact of transport, both in terms of air quality and noise. In 2020, the number of **green vehicles** reached **144** (exceeding the Group's target of 120) with the intention of reaching 164 electric/hybrid vehicles by 2021, equal to 100% of "electrifiable" vehicles, i.e. 50% of Alperia's total vehicle fleet (it should be remembered that not all company vehicles are considered "electrifiable", as is the case for vehicles used for work on networks and plants in remote areas).

7.3.3 Alperia in Merano: new emission-conscious headquarters
Sustainable, smart and integrated architecture in the city

Construction work will begin on the new Alperia headquarters in Merano in 2022. 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) and will be designed 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 what is known as the "road park". 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 buildings are scheduled to be delivered in 2024.

The new headquarters will provide space for about 300 employees from various Alperia Group companies, as well as the Edyna offices, technical areas and warehouses. The approved budget for the entire project is around €38 million (excluding VAT).

During 2019, Alperia also awarded the project for the design of the new Alperia Greenpower headquarters in via Claudia Augusta, Bolzano. Again, there was an intense focus on the issue of energy efficiency and wellbeing, with the aim of gaining certifications similar to those for the Merano office.

7.3.4 Noise pollution
We limit plant noise levels

Alperia is not only committed to reducing the CO_2 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 2020. 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 2020 and available on the www.alperiagroup.eu website.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Set up reporting on greenhouse gas emissions at Group level	* Improvement of greenhouse gas monitoring * Creation of avoided greenhouse gas emissions report * Launch of process for offsetting Group operational emissions	* Expansion of the greenhouse gas monitoring system * Implementing monitoring of greenhouse gas emission reduction activities and improving reporting * Offsetting Group operational emissions	2023				ongoing
Reduce emissions within the company	* Implementation of a series of initiatives to promote sustainable mobility among employees: - setting up private electric bicycle charging stations at all sites – 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	* Provision of an allowance for interested employees to purchase or rent an electric bicycle for private use	2020-2023	-	-		ongoing
Reduction of emissions in the heat and services sector through the application of environmentally sustainable technologies and optimisation measures	* Construction work on the biomass plant has begun. Edyna's connection to district heating completed	* Commissioning of the biomass plant in Merano with the start of the heating period (October) after various tests * Commissioning of the infranet SEU in Bolzano * New cogenerator in Chiusa	2017-2021	t CO_2e avoided	-	2,162 kt CO_2e	ongoing
Making the Alperia Group carbon-neutral by 2024		* Establish a process to buy offsetting certificates for the `Group's operational emissions	2020-2024				ongoing
Saving over 303 kt of additional avoided CO_2 equivalent emissions	* Calculated the absolute avoided emissions (Scope 1,2,3) for the whole Group * Identified projects to avoid additional	* Implement new projects to avoid emissions as foreseen in the 2020-2024 Strategic Plan * Establish a process for monitoring the	2020-2024	additional kt CO_2e avoided	303	_	ongoing

emissions for all Business Units		progress of projects * Identify new projects to avoid emissions * Evaluate joining the Science Based Targets initiative					
In three years, 50% of its own vehicle fleet will be electric and operate with zero emissions	* Reach 144 corporate electric or hybrid vehicles	* Reach 164 corporate electric or hybrid vehicles	2017-2021	Number of electric vehicles in fleet	120 electric/ hybrid vehicles by 2020 and 170 by 2021	114	ongoing

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	**340,844**	Complaints per 100 customers	**0.13**
New customers in 2020	**+ 5%**	Percentage of complaints promptly processed	**99.3%**
Paperless bills	**30%**	Total number of identified leaks, thefts, or losses of customer data	**0**

8.1 Customer satisfaction {ALP1; ALP2; GRI EU3}
From South Tyrol to Veneto and Piedmont, with more digital services and new Energy Points

In 2020, we supplied electricity, natural gas and district heating to **340,844 customers**, including families, large and small businesses and public institutions. 81% of customers have signed contracts for electricity, 19% for gas and 0.5% for heat.

Building a relationship of trust and transparency with customers has always been a priority for Alperia. This is an objective that we have pursued over the years using a variety of tools – our website, call centre, a freephone number active at least 35 hours a week in accordance with the service quality criteria imposed by the competent authority (ARERA), Energy Points throughout the territory, social media networks and apps –which we will increasingly focus on in the future.

Figure 18: Number of customer accounts[1][2] {GRI EU 3}

Type	Unit	2020	2019	2018	2017	YtY variation
Electricity customer accounts	No.	275,000	261,000	236,000	193,000	5%
Heating customer accounts	No.	1,844	1,772	1,716	1,674	4%
Gas customer accounts	No.	64,000	61,000	60,000	59,000	5%
Total customer accounts	No.	340,844	323,772	297,716	253,674	5%

[1] Customer accounts = active connections to the grid (POD) as per 31 Dec.
[2] Smart Region customer accounts are not included.

While many operators only manage their activities digitally without investing in the territories, we still believe in being physically close to communities. For this reason, in addition to our online services, following the new company acquisitions that have seen us take a leading role in the Veneto region, we have decided to open 3 new Energy Corners in shopping centres in Venice, Padua and Treviso. In addition, the collaboration with Sparkasse (which we discuss in more detail on the next few pages of the report) resulted in the opening of a new Energy Point in Vicenza, in the heart of the city. We want to be close to our old and new customers and show, also in a physical way, how proud we are that they belong to our Group. A path that we will further strengthen in 2021 with new planned openings.

Again in 2021, we intend to open up to SMEs outside South Tyrol, promoting the supply of energy and gas as well as products and services for energy efficiency and smart mobility. For this reason, we are recruiting and training a group of agents who will be prepared to manage customers at both the sales and after-sales stage, including through digital tools such as the new CRM. We want to give each of our customers the possibility of having an immediate contact person for their needs.

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. 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 already 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[25], a website that hosts consumer ratings for companies all over the world. This double way of listening testifies to our commitment to professional and competent assistance, both physically and digitally, improving our standing in the eyes of consumers.

Finally, it is our intention to check our customers' satisfaction in the coming year through a survey commissioned by Alperia. We had intended to carry out the survey in 2020, but were unable to do so due to the health emergency. To ensure the fairness and comparability of the results (in 2018 Alperia recorded a satisfaction rate of 87.2%), the survey contexts should be as similar as possible to each other, but as a result of COVID-19, they were inevitably different.

A recognised commitment
Recommended by Altroconsumo

Altroconsumo, Italy's largest consumer protection association, has recognised Alperia as the best electricity supplier in Italy. Following a thorough survey, we ranked first in Italy, ahead of the likes of Edison, E.ON and Enel Energia. Altroconsumo surveyed 21 energy suppliers, analysing the quality and transparency of contracts, complaint handling and other aspects of customer satisfaction, using a scoring system to determine the overall quality of their work. We are very proud to have received this award and it is an incentive to work even harder to offer the best service to our customers.

8.1.1 New partnerships
With Sparkasse in South Tyrol and Veneto

In 2020, Alperia signed an important business partnership with Sparkasse, the Bolzano savings bank. 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 South Tyrol and Trentino and 30 in Veneto, of which 4 are located in the Vicenza area.

The partnership also led to the opening of a common space in Vicenza, in Corso Palladio, offering customers a physical point of contact with competent professional help. A space added to the Energy Corners opened by Alperia over the last year in shopping centres in Treviso, Venice and Padua, offering only 100% green energy services, which have no negative impact on the environment in terms of CO_2.

The synergies with Sparkasse are based on the common values of sustainability and customer focus, values that are also reflected in the store concept, which feature an innovative and technological design. The ceiling, designed to look like a surface of water, is reminiscent of the resource from which Alperia draws the power to produce energy. Together with the asymmetrical video wall, other elements take visitors on a journey through the mountains and the history of Alperia. The innovative concept was brought to life with Schweitzer Project, a leading retail furniture company, taking into account the South Tyrolean roots of the two companies and the theme of environmental sustainability, deliberately adding wood features to the space to create a welcoming atmosphere. This is a unique format in Italy; for the first time the same space is used not only by the bank, but also by energy service provider Alperia.

8.1.2 Energy efficiency to create value
Advanced services with Alperia SUM and Gruppo Green Power

Alperia Sum was launched in January 2019 out of the partnership between Alperia and Sum (Servizi Unindustria Multiutilities), the direct benchmark for the territorial Confindustria branches of Treviso, Padua, Venice and Rovigo The company sells electricity and gas and offers advanced services in the field of energy efficiency with the aim of reducing costs for companies and increasing their competitiveness. With Alperia Sum, Alperia has further strengthened its presence in the North East, an increasingly strategic territory for the Group. In addition, the relationship with the industrial associations of Veneto, which are 30% members of Alperia Sum, is a useful tool to strengthen Alperia's link with one of the most dynamic and innovative business landscapes in Italy. The acquisition was finalised in 2019, and a careful programme of integration of the company within the Alperia Group was carried out in 2020. This included IT systems (starting with the billing system), organisational structures (all corporate bodies have remained in place, but the sales side has been streamlined, with some staff transferred to Alperia Smart Services) and the purchasing procedure (from October 2021, gas will also be purchased through Alperia Smart Services). From 2020, all purchases will be made by Alperia Smart Services using the same pricing tool that updates market prices with real-time quotes. In addition, Alperia Sum is also participating in the digitisation process. In terms of sustainability, the company has already tried to reduce the use of paper as much as possible, all bills

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[25] https://it.trustpilot.com/review/alperia.eu

are paperless and 75% of payments are made via SEPA (Single Euro Payments Area) and 25% by bank transfer. Only 20 per cent of customers use green products, a share that we will try to increase in the future.

Gruppo Green Power, part of the Alperia Group since 2019, is also involved in energy efficiency. It is a company based in Mirano, in the province of Venice, which is active in the field of services for energy efficiency in the domestic sector. With its strong territorial roots in Northern Italy, as well as in the Marche and Lazio regions, it has worked for many years in supplying 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.

These two companies join Alperia Bartucci, an Alperia Group company specialising in the design and implementation of industrial energy efficiency measures and integrated energy services, which is covered in a specific paragraph.

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. The call centre was expanded in 2020, 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 2020, the number of complaints per 100 customers was **0.13**.

ARERA requires a monthly response rate of 85% to calls received. Alperia has set itself the target of responding to 99% of calls received each month and in 2020, reached **96%**. As for complaints, we deal with and resolve them within ten days (according to the regulations, the company is obliged 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. For this reason, Alperia also uses an external call centre to cope with peak calls. Furthermore, Alperia promotes training days for front-office staff to maintain service quality and provides them with the myRetail service available in the myAlperia space.

Figure 19: Monthly average of calls answered at toll-free number[1] {ALP 1}

	Unit	2020[2]	2019	2018	2017
Monthly average of calls answered – green number	%	96	97	97	97

[1] Includes only calls made to the green number of ASS.

[2] In 2020, we recorded a 65% increase in calls received at the call centre (base year 2019).

According to Alperia's monitoring – as required by law – there were **448 complaints** in 2020, up from 403 in 2019. Complaints referred 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 2020, Alperia processed **99.3%** of complaints on time, compared to a target of 100%.
In 2020, some of the situations of dissatisfaction that emerged related to Gruppo Green Power (in 2019, before being acquired by Alperia S.p.A., it had been the subject of negative press and enquiries by the provincial council). To resolve these situations, the Group revolutionised customer management, introducing a freephone number with a call centre available to customers and is creating a CRM for structured customer management. All complaints are handled and resolved promptly by a commercial, legal and technical task force.
No complaints were escalated to the conciliation service.

Figure 20: Customer complaints[1] {ALP 2}

	Unit	2020	2019	2018	2017	YtY variation
Number of complaints within the reporting period	No.	448	403	533	587	11%
i. thereof number of complaints registered within the reporting period[2]	No.	448	402	533	587	11%
ii. thereof number of complaints addressed within the reporting period[3]	No.	446	401	533	587	11%
Number of unaddressed complaints including prior periods[4]	No.	0	2	0	0	-100%

Resolution rate customer complaints within the reporting period, addressed within 30 days[5]	%	99.3	100	100	100
Complaint rate (no. of complaints per 100 clients)	Rate	0.13	0.13	0.18	0.23

[1] Includes only customer complaints from ASS. Complaints from GGP are not included.
[2] One complaint was launched in 2019, but only registered in 2020.
[3] Two complaints were registered in 2019 and addressed in 2020.
[4] Four complaints which were registered in December 2020 and were addressed in January 2021.
[5] As of 2019, response time is 30 days; for 2017 and 2018 response time was 40 days.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
99% of calls to the freephone number answered	* Increase in staff answering at the call centre due to the significant increase in calls during COVID-19	* Reorganisation/ staff increase, implementation of call centre in Salesforce	annually	Percent-age of telephone calls answered	99%	96%	✗
100% of complaints received from customers are processed within 30 days	* Standardisation of answers to frequently asked questions. For some complaints (about 15%), the response time is subject to the time available to the distributors (M12C – 12 working days); distributors usually have this timeframe. Other responses (around 20% of the total) are dependent on action by other, non-retail departments (e.g. Connection, Billing, Accounting)	* 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	Percent-age of com-plaints promptly processed	100%	99.3%	✗
For a better understanding of the causes, all complaints were divided into subgroups and analysed, starting in 2018			✓	Percent-age of com-plaints analysed	100%		✓
Number of complaints per 100 customers less than 0.14			annually	Number of com-plaints per 100 clients	0.14	0.13	new
Improvement of customer satisfaction	* Customer satisfaction survey, moved due to COVID-19	* Scheduling of a new customer satisfaction survey to be carried out in 2021	2020-2024	Customer satisfac-tion index	90%	87.2% (2018)	ongoing

8.2 Transparent marketing and communication {GRI 102-43; GRI 417-1, 417-2, 417-3; ALP 8}
Transparency and punctuality

In the year of the pandemic, of sudden changes and great uncertainty, Alperia wanted to stand by its stakeholders, adopting the most useful tools to engage with them and involve them. In particular, we launched the following marketing and communication activities:

- **Press and online**: Announcements, PR articles, customer website (www.alperia.eu) and institutional website (www.alperiagroup.eu), social media, online portal and customer apps. During the year, in total, there were **2,007** print and online articles relating to Alperia, of which 1,028 were in the local press, 948 in the national press and 31 in the international press. These articles reported on events that took place in Alperia (e.g. new acquisitions, divestments, opening of new Energy Corners/Energy Points), initiatives developed in reference to COVID-19 (e.g. donations) and only in one case had a negative tone, in reference to the acquisition of Gruppo Green Power. Again this year, all emissions resulting from the www.alperia.eu website and the Group's websites were offset. Alperia takes part in the "CO_2-Neutral Websites" climate initiative. The initiative aims to neutralise carbon dioxide emissions of both websites and users, through setting up new projects based on renewable energy, CO_2 reduction projects and the purchasing of CO_2 offsetting certificates;

- **Energy Point**: We continued the Energy Point activities in South Tyrol, supporting our customers with qualified consultants and call centre staff, both in person – when possible and with appropriate safety measures – and online. In addition, to confirm our closeness to new customers in the Veneto region, we opened the doors of a new Energy Point in Vicenza and installed three new Energy Corners in Venice, Padua and Treviso;

- **Events**: Not being able to hold the traditional "Open Days", we decided to organise virtual tours of our Glorenza and Lasa hydropower plants, accessible through the Alperia Facebook page and via www.alperiagroup.eu. This opportunity was very much appreciated, and we also extended it to schools;

- **Schools**: We went into primary and secondary school classrooms with projects for students. Specifically, for the youngest children, we produced a booklet titled "Save Energy and Protect the Climate", with which we explained through quizzes, experiments and easy crafts how they can help to deal with climate change and save energy at the same time. Through the story of Lucy, the firefly, who fights climate change, we explained the concepts of energy conservation. The booklet was created as a project to support educational work in schools and aims to give a basic understanding of how to deal responsibly with climate protection and the Earth's ecosystem. All booklets were available in Italian and German free of charge and were accompanied by an #Alperiaforschools notebook and pencil. The same notebook was also given to secondary school students, to whom we also gave the opportunity to discover our power stations through a virtual reality tour. Each school was able to borrow a free VR box with 10 viewers. The students were able to visit a hydroelectric power station – including the one in Bressanone – or a dam from their classroom – an unforgettable learning experience. But it does not end there. As part of the donations made to support local associations following COVID-19, Alperia supported young people and in particular the most disadvantaged children assisted by Südtiroler Kinderdorf. During the pandemic period, the work of Südtiroler Kinderdorf intensified and costs increased. Just some of the additional costs they had to bear included protective masks and hygiene measures for employees and children being cared for, disinfectants, disinfection equipment and, above all, increased staff numbers. Because of this, we donated €30,000 to them, recognising the important value of their work for our society. Many things may be important, but people come first: help that the Südtiroler Kinderdorf children and young people appreciated very much.

- **Surveys**: Alperia also carried out a survey on brand perception in 2020. The survey showed that the Group's brand recognition was 94.2% (an increase compared to the previous year) and that the strongest values attributed to Alperia are commitment to South Tyrol (34.4%) and the highest quality (23.6%). Specifically, since the beginning of the coronavirus pandemic, more than 77% of respondents had become aware of particular initiatives developed by Alperia and more than 63% of respondents believed that Alperia had made an important contribution to South Tyrol during the health emergency. We also involved our employees in a survey on the myAlperia intranet platform in view of the renewal we will carry out in 2021. Finally, we planned to carry out a new customer satisfaction survey (the first survey in 2018 showed 87.2% satisfaction), but due to COVID-19 we had to postpone this survey to 2021. Alperia has set itself a target of 90% satisfaction for the new survey;
- **Intranet**: Alperia uses its intranet to communicate with its employees and strengthen corporate cohesion. During 2020, we asked the employees to help us rethink the platform to make it even more engaging, and next year we will launch the new version. We used a workshop and a questionnaire to ask employees to help us identify strengths and weaknesses and to identify areas for improvement. Although the current intranet has positive reviews, the work revealed the need for a more 'social' network, which encourages collaboration, two-way communication and the expression of opinions and views. A place where the company can come together in an efficient and organised way and where employees can share thoughts between departments, management can convey important information, and technology can be brought together – all within a secure network. The new intranet should also incorporate an efficient search engine (currently missing), user profiles, blogs, mobile apps with notifications and event planning, and should integrate with existing applications allowing for a smooth transition and optimisation of existing technology. In addition, the new portal will include a section dedicated to sustainability;
- **Information evenings**: Information evenings have also been 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;
- **Employees**: We distributed an abridged version of the 2019 Sustainability Report to our employees. We also discussed the topic of sustainability with them on the intranet, and, at Christmas 2020, we involved them in an advent calendar where each day corresponded to questions related to sustainability for Alperia;
- **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 CO_2 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, do not 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);
- **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 the local company Pur Südtirol;
- **Transparent bills**: All new contracts signed outside of South Tyrol include the adoption of paperless bills, 100% CO_2 neutral. 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. Currently, **30%** of Alperia's **total customers** receive **paperless bills**, 3% more than the previous year (equal to 100,000 less DIN A4 pages printed a 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%. In addition, we will work to make the layout of bills increasingly detailed and easy to read, and to encourage the signing of contracts remotely with signature certification systems;
- **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 subject 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 {GRI 102-12}
Faithful to our commitment

Alperia supports 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. A commitment that it renewed in 2020. A year when, due to the pandemic, many cultural and sporting activities had to be stopped. But, faithful to its mission to support the territory, create added value for the local economy and be close to the communities where it operates, Alperia chose to pay the full amount agreed upon for the entire 2019/2020 season. It told the associations concerned through a letter, explaining the reasons for this choice.

As from next year, territorial support will also extend to organisations operating in the Veneto region, with which the first contacts were made in 2020. It should be noted that all sponsorship is carried out in full compliance with the guidelines published on the company website[26]. Anyone wishing to apply for sponsorship must submit an application on the online portal. After checking that the

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[26] www.alperiagroup.eu/public/user_upload/pdf/sponsoring/sponsoring-richtlinien_2020_it.pdf

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
World's best in the International Charge Energy Branding Award 2020

We want to increase the number of companies adopting completely green products, such as Green Gas and Green Energy, and raise awareness among users and employees about sustainability issues. Therefore, we have a coherent and determined communication strategy to underline the value of making such choices. Indeed, 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 rewarded Alperia by recognising 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, is 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-on-one meetings and targeted campaigns.

8.2.3 Transparent pricing
ARERA's recommendations

How are energy and gas prices determined in Italy? ARERA, the Italian Regulatory Authority for Energy, Networks and Environment plays a key role. It is an independent institution which regulates and monitors the electricity and gas sector to protect the interests of consumers by promoting efficiency and appropriate quality levels in the provision of services. Every three months ARERA updates the energy prices for customers in the protected market. Alperia's family packages are based on these prices. Specifically, energy expenditure includes the price of energy and the sales and marketing components. In addition, a fee is paid to the network operator for distribution. This includes transport, distribution and metering costs. The system charges are set by law, and are designed to cover the costs of activities in the public interest. These include research and development, the decommissioning of nuclear power plants and the promotion of renewable energies. Finally, taxes consist of excise duty and value-added tax (VAT). VAT is currently levied at 10% on domestic customers and at 22% on non-domestic customers. Specifically, it can be said that around 45% is the cost of energy, followed by 22% for system charges, 20% for the cost of transport and meter management and 13% for taxes.

13%
Taxes

45%
Cost of energy

22%
System charges

Composition of electricity prices[1]

[1]Supply economic conditions for a typical household with 3 kW of installed power and 2,700 kWh of annual consumption. Data 4th quarter 2020.

20%
Cost of transport and meter management
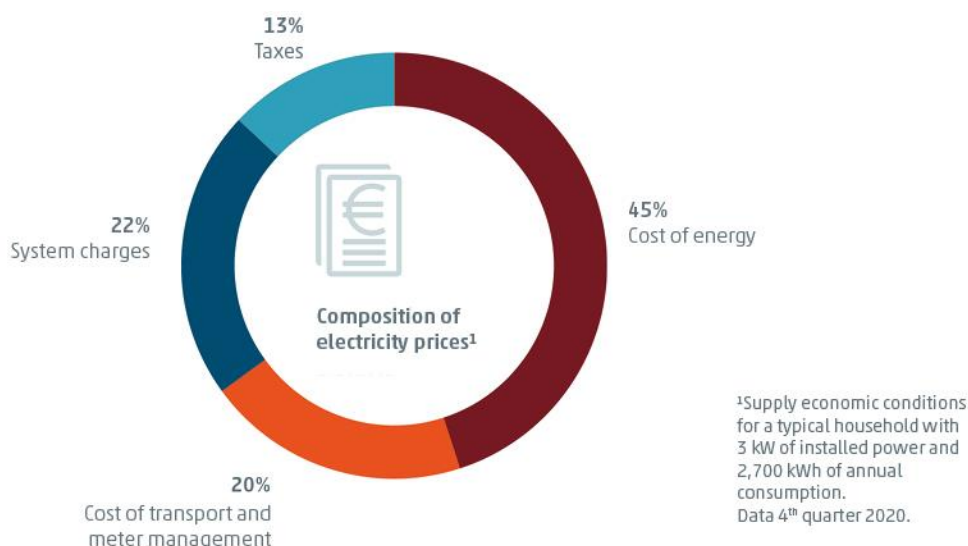
Image 9: Composition of electricity prices (devised by Alperia)

What has happened over recent months? The pandemic led to a drastic fall in the price of oil with a knock-on fall in bill costs. As certified by ARERA, the Italian Regulatory Authority for Energy, Networks and Environment (www.arera.it/it/index.htm):

- in the first quarter of 2020, electricity bills fell sharply, while gas bills remained broadly stable. The sharp fall in general charges, containment of regulated network tariffs (transport and distribution) and low raw-material prices on wholesale markets saw a 5.4% reduction for electricity and a slight adjustment for gas, +0.8% for the average household;
- in the second quarter of 2020, both energy and gas fell sharply. The continuing low prices of raw materials on wholesale markets, linked to the heavy reduction in consumption, also due to the COVID-19 emergency, and an essential stability in the requirements of general charges, led to a reduction of -18.3% for electricity and -13.5% for gas;
- in Q3 2020, the typical household with a protected market contract still saw a drop in its gas bill, -6.7%, and an increase in its electricity bill, +3.3%, linked to the costs of operating the system (dispatching costs). In terms of the effects on consumers (before tax), the typical household benefited from a total saving of €212/year compared to last year;
- in Q4 2020, electricity bills rose by +15.6% and gas bills by +11.4%, the latter also due to the usual seasonal increase in demand. In terms of the effects on consumers (before tax), in 2020, a typical household benefited from a total saving of €207/year compared to 2019.

In the first quarter of 2021, on the other hand, the high wholesale commodity prices, which have returned to the levels of a year ago, will lead to an increase in energy bills for the typical household in the protected market of +4.5% for electricity and +5.3% for gas. In fact, in the fourth quarter of 2020, according to pre-consummation data, the Single National Price of electricity was up by around 15% compared to the third quarter, returning to be in line with the average level of the corresponding quarter of 2019.

COVID-19 and the energy market

The energy shock following the pandemic was severe and will force multinational fossil companies to rethink their strategies. Coal, which is responsible for 42% of global carbon dioxide emissions from fossil fuels, has seen an 8% drop in consumption worldwide (in Q1 2020)[27]. It is estimated that also following COVID-19, the role of this fuel is likely to reduce in the medium to long term due to competition from gas and especially renewables.

Oil suffered the sharpest fall. Prices fell dramatically and on 20 March even went below zero for the first time in history, leading to the blocking of some production, in particular American shale oil, and the piling up of crude oil in all available deposits and tankers.

For natural gas, COVID-19 also resulted in a global consumption cut of around 5%.

Renewables, on the other hand, could be given a new lease of life as a result of the pandemic. The green transition is at the heart of recovery strategies, accelerating trends that had already started in pre-pandemic times. Before the arrival of COVID-19, coal would have accounted for a minimum share of 21% of the energy mix by 2040. Even oil, while maintaining its leadership, will follow a decreasing trend, in part due to the demand for electric mobility and motoring efficiency. Natural gas is the only fossil source to maintain growth, representing a quarter of energy consumption by 2040. Renewables, on the other hand, will be driven mainly by the spread of solar photovoltaics in electricity generation, reaching 21% of global energy demand by 2040, thus equalling the share of coal[28].

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[27] Source: Global Energy Review 2020.
[28] Source: newsletter GME, December 2019.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Expansion of website content dedicated to sustainability			✓	-	-		✓
Regular meetings between stakeholders on sustainability issues	* Strengthening of internal communication: 1. Brochure "Sustainability Summary 2019" in German and Italian. Sent to each employee personally in an envelope with a personalised letter. The envelope was put on employee desks or handed to them by their line manager. 2. Advertised advent calendar with communication and header on the intranet portal myAlperia with 24 questions on the topic of sustainability, noting our dedicated website sostenibilita.alperia.eu. In addition, 24 sustainable prizes: adoption of a beehive with a honey pot (3bee.it) 3. Implementation of the sub-heading "Sustainability Policy" in the intranet portal myAlperia 4. Link on Group website to Alperia's sustainability website	* English translation of the main parts on the website sostenibilita.alperia.eu * Sub-heading "Sustainability" in the new intranet portal myAlperia	2020-2021 2021	-	-		ongoing
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	* Assess the possible implementation of a system to monitor complaints about the transparency of marketing and communication * Define procedures for proactive stakeholder involvement in order to prevent complaints (e.g. informative	2018-2021		-		ongoing

		events for major projects)					
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	* It was not possible to achieve 100% FSC certification of printed products and related CO_2 offsets, because to use FSC paper, it is necessary to include the relevant logo on the printed product. Some specific products, such as business cards, do not have enough space to include the logo. * 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). * For budgetary reasons, we have not always been able to find fully sustainable alternatives	* Using new materials and printing methods to reduce the climate footprint; aim to print 100% on FSC or green-certified paper. * New materials used for business cards, such as paper coated with an opaque acetate film made from cellulose or cotton, which, for an extra charge, would guarantee natural origin (contains no petroleum derivatives or GMO starch) and biodegradability. * For gadgets, the aim is to make suppliers more aware of the need for a wider choice of sustainable products to have more green alternatives at affordable prices	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 a standard; paper form only provided upon request. * The Doxee project (innovative paperless billing) is on standby, because the SAP system	* Increase the number of customers receiving paperless bills in line with the targets set in the 2020-2024 Strategic Plan	annually	% of customers receiving paper-less bills	30%		✓

	has to be changed first and the Accenture project has to be completed						

8.3 Cybersecurity {GRI 418-1}
A new IT security unit

In an increasingly connected world, cybersecurity risks are increasing. Cyberattacks against businesses, once considered extraordinary events, have almost doubled in the last five years[29] with an increasing level of sophistication. And in the year of the pandemic, this risk was further amplified. This is an issue that concerns everyone, citizens, governments and businesses of all sizes, and which, for an organisation like ours, is an absolute priority. As an energy service provider, Alperia handles a large amount of data, including personal data on customers, employees and partners, technical data on customer consumption, distribution infrastructure, electricity and heat production facilities. **Cybersecurity is therefore central** and is also an area of major investments in our Strategic PlanStrategic Plan, which include:

- the adoption and renewal of best-of-breed systems for threat detection and perimeter security;
- the use of advanced tools for monitoring internal network traffic;
- employee training.

In particular, we have a **Data Protection & Security** unit that deals with defining guidelines on compliance with the GDPR for the protection of personal data and cybersecurity. It also monitors the vulnerability of systems, introduces protective measures and promotes awareness and training programmes for employees on IT security. This is a significant change from the past and marks an even greater focus on cybersecurity. Alperia guarantees maximum compliance both with the standards to which it is legally bound and with those it chooses to adhere to voluntarily, as in the case of the ISO 27001 certification, which was renewed in 2020 and extended to supplier companies, which were assessed according to the parameters of ISO 27001 with in-depth audits. Furthermore, during the year, we successfully carried out regulatory compliance audits of all Group companies, continued to update the Disaster Recovery Plan and adopted systems to protect against ransomware threats.

At the heart of Alperia's strategy is an innovative **approach of Security and Privacy by Design**, according to which security and data protection go hand in hand with the aim of defending ourselves against attacks and unforeseen vulnerabilities with measures such as continuous monitoring, the use of double authentication factors and advanced protection systems. Specifically, all systems related to privacy management have been reorganised to make them even more sophisticated, and Alperia has equipped itself with a system that allows advanced risk analysis to promptly understand where and how to intervene to close any gaps in relation to what is required by data protection regulations, the GDPR and ISO 27001 certification. Similarly, on the security side, we have equipped ourselves with artificial intelligence tools that allow us to monitor possible threats, both external and internal, so as to activate appropriate mitigation systems. In addition, using a vulnerability management tool, the team highlights areas of weakness in software installed on company PCs and reports them to IT, so that protection systems can be activated and their effectiveness verified.

Knowing that many threats come from within, as a result of a lack of familiarity with IT risks, Alperia has purchased specific training to raise awareness among employees and fill the training gap on IT security issues, which will be made available to employees in 2021, so that everyone can understand how to manage IT systems securely.

It should be noted that the head of the Data Protection & Security area is also the DPO – Data Protection Officer – of the Group. Finally, collaboration continued with a number of key players in the sector, such as CLUSIT (Italian Association for Information Security).

Figure 24: Customer privacy {GRI 418-1}

	Unit	2020	2019	2018	2017	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
Blocking threats and spam, and preventing IT incidents

In 2020, Alperia did not encounter any significant IT security incidents, but threats did emerge. Protection systems blocked an average of 2,000 spam mails and 1,000 malicious connection attempts per day, figures that were down on 2019 by 50% and 83% respectively. The change is due to the fact that measurement methods and systems were revised, and new cloud protection functions were introduced that can recognise and reject certain types of connections even before access attempts are made.

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[29] Source: Global Risk Report 2018 – World Economic Forum.

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

- 530 viruses: the figure is down 82% on the previous year and is linked to a targeted attack;
- 27 pieces of spyware (software that collects information about a user's online activity): The figure is down 13% due to more efficient internal security systems and greater user awareness;
- 2.8 million malicious, suspicious or prohibited internet use incidents (activities related to suspicious or prohibited browsing): 40% up on 2019, attributable to an increase in users and greater exposure of internet services;
- 360 malicious or unauthorised applications: 80% up on 2019, attributable to an increase in users and greater exposure of internet services;
- 54,000 malicious or prohibited items of content: a 78% decrease compared to 2019, as activities were carried out to prevent connections to blocked or prohibited content at source.

Figure 25: Other indicators related to cybersecurity

	Unit	2020	2019	2018	2017	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
Spam emails	No.	2,000	4,000	3,000	5,000	-50%
Malicious connection attempts	No.	1,000	6,000	22,000	20,000	-83%
Each month, Alperia identifies and blocks an average of:						
Viruses	No.	530	2,930	70	17	-82%
Pieces of spyware (software that collects information about a user's online activity	No.	27	31	40	22	-13%
Malicious, suspicious or prohibited internet activities	No.	2,800,000	2,000,000	1,000,000	600,000	40%
Malicious or unauthorised applications	No.	360	200	120	80	80%
Malicious or prohibited items of content	No.	54,000	250,000	250,000	300,000	-78%

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Total compliance with privacy laws	* Investigation carried out on Sw products managing the issue. Suitable product selected, purchase made at end of year with implementation during 2021	* Sw implementation of the One Trust product to manage GDPR, during 2021	annually	Per-centage compli-ance	100%	100%	✓
No security incidents involving information management and data protection	* ISO27001 certification renewed for 2020	* 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 cybersecurity – adoption of a SIEM solution (MS Sentinel) for continuous monitoring of cyberrisks. Preparation of a dashboard for evidence of compliance and risk measures – development of the Group Security Plan – mapping of IT risks for the Group – integration of GDPR in the new affiliated companies	* Sw implementation of the One Trust product to manage ISO27001, during 2021	Dec-21	Prepara-tion percent-age	-	100%	ongoing
Create a culture of information security among our employees to reduce risks	* Selection and purchase of Sw and cybersecurity awareness training services to improve the awareness of all employees on cybersecurity issues	* Launch the training plan with the Sw Security Awareness Proofpoint in 2021	Dec-21	Prepara-tion percent-age	-	0.75	ongoing

Employees

We want to empower our employees to do their best work, with solid growth opportunities, talent development programmes and work-life balance measures. From people in operational to administrative roles, from management roles to new recruits, each of them, with their own value, contributes to the success of the Group.

3 GOOD HEALTH AND WELL-BEING

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

5 GENDER EQUALITY

We are striving for gender equality and female empowerment

8 DECENT WORK AND ECONOMIC GROWTH

Promoting inclusive and sustainable economic growth and decent and secure employment

In figures:

Permanent employees	**94%** (1,023 people)	Turnover rate	**7%**
Female staff	**24%** (261 people)	Training hours carried out in 2020	**+2.96%** (or an average of 19.6 per person)
Average pay gap between men and women in the office worker category	**- 8%**	Percentage of women in middle management	**18%**
Parental leave for men	**63%** (19 out of 30 entitled)	Employee absentee rate (per 1,000 h):	**8**
Accident rate (per 1,000,000 h)	**8.13**	Accident severity index	**0.19**

9.1 Employee development {GRI 102-8; GRI 401-1}
2020: the year of remote working

Figure 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	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017
Women	Persons	261	230	195	193	244	211	182	189	17	19	13	4	173	147	121	119	88	83	74	74
	%	24	23	21	21	22	21	19	20	2	2	2	0	16	14	13	13	8	8	8	8
Men	Persons	826	787	750	747	779	750	708	730	47	37	42	17	807	769	729	726	19	18	21	21
	%	76	77	79	79	72	73	75	78	4	4	4	2	74	76	77	77	2	2	2	2
Total[1]	Persons	1,087	1,017	945	940	1,023	961	890	919	64	56	55	21	980	916	850	845	107	101	95	95
	%	100	100	100	100	94	94	94	98	6	6	6	2	90	90	90	90	10	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 for 2019 are calculated for total employees, whereas in the 2018 Sustainability Report they were calculated for employment contract/type.

As of 2020, we have integrated a section on human resources management into the Strategic Plan. This is because we are convinced that it is essential to invest in the development of our employees and in particular in their talent to achieve significant growth objectives and strengthen the future pillars of our companies. From the production of energy in hydroelectric power stations to its distribution, from the management of district heating networks to sales, via customer service, electric mobility, innovation, safety, and much more. **1,087** people make their skills available to the Alperia Group every day. 90% of them work full time, most of them are subject to the rules of the National Collective Agreement for workers in the electricity sector, 88 people joined our team in 2020, 26 of them women. The rate of recruitment of new employees in 2020 was 8%, and most of the recruitment took place through online interviews.

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

New employee hires		Total					under 30	31-40	41-50	51+
	Unit	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	26	21	13	9	24%	9	11	6	0
	%	30	28	22	26					
Men	Persons	62	54	46	25	15%	25	25	11	1
	%	70	72	78	74					
Total new employee hires	Persons	88	75	59	34	17%	34	36	17	1
Total headcount per 31 Dec.	Persons	1,087	1,017	945	940	7%				
New employee hire rate	%	8	7	6	4					

*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	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	19	7	10	4	171%	5	5	4	5
	%	24	12	19	10					
Men	Persons	60	52	44	36	15%	9	8	8	35
	%	76	88	81	90					
Total employee turnover	Persons	79	59	54	40	34%	14	13	12	40
Total headcount per 31 Dec.	Persons	1,087	1,017	945	940	7%				
Employee turnover rate	%	7	6	6	4					

*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.

2020 was an exceptional year for human resources management. The arrival of the pandemic accelerated the introduction of **remote working**. This organisational method has been launched for all employees (except for operational roles) who carry out activities using IT equipment. Around 750 people started working from home in just a few days, starting in February 2020. Thanks to this new way of working, the conditions under which meetings are held changed, work processes were redesigned to make them more suitable for remote working, and new collaboration tools are used (e.g. Microsoft Teams). Thanks to its ICT infrastructure and the skills developed by its employees, Alperia was able to maintain its operations even during the lockdown and throughout the pandemic period, thereby significantly reducing the risk of possible infection at work. In an internal survey in which 551 employees participated, we sought their opinions on this new way of working. **88.75%** of the respondents were **working remotely for 5 days a week**, 45% noticed an improvement in terms of satisfaction and motivation, autonomy, productivity and quality of work done. Around 33% reported an increase in the sense of belonging to the company (which for 60% remained unchanged, as did coordination with colleagues and managers, which remained unchanged for most respondents). 71% were satisfied with the technology and IT support that was made available, and the perception of managers about their role was also positive. In addition, 87% claimed that remote working can help work-life balance. 55% said it would be ideal to continue the experience after COVID-19, with a frequency of 2/3 days per week to alternate work in the office with work outside the company and also to be in closer contact with colleagues and managers. The experience gained and the responses to the survey provided an important basis for the trade union agreement that was signed on 21 December 2020 with the trade union representatives and that will be activated at the end of the emergency.

However, not all employees were able to take advantage of this working method during the pandemic. Those who, as a result of the specific nature of their tasks, had to work in the presence of others (e.g. those working in plants), were enabled to do so by means of special shifts, with the aim of ensuring maximum safety in their work activities. For those who had to stay at home and make use of the furlough scheme, Alperia guaranteed to make up for any shortfall to 100% of their salary. These are measures that we implemented with a clear objective, which was to protect our employees and do our utmost to make such a difficult time as little traumatic as possible. All activities were agreed with the trade unions and also shared in a company Emergency Board.

Three agreements were also signed with the trade unions in 2020, for the FIS redundancy fund, for Edyna in relation to the Workers' Career model and for solidarity holidays (spouse; harmonising supplementary negotiated pensions, special standby availability AGP).

9.1.1 The evolution of leadership and personnel {GRI 404-2, 404-3; GRI 401-1}
A structured talent programme and succession plan

People are an important resource for the Alperia Group, to be enhanced by a solid People & Talent management strategy. For this, we have developed plans dedicated to "Talented Individuals" or "High Performers" and the "Pillars" of the Group. Talented Individuals are proposed by managers or can apply themselves. They are then assessed by a committee and – once they have passed the first round – undergo an assessment to highlight strengths and areas for development. The Group's Pillars are also subject to an assessment, with the same objective. The results of the assessments are used to organise targeted development measures and workshops (mainly online) to continue to stimulate the growth of employees and contribute to their growth plan, but also to keep motivation high, which is key for everyone.

New **career development plans** were implemented for 5% of the directors and staff within the first level of the reporting structure, 11% of the staff within the second and third level of the reporting structure and 1% of the remaining employees. The fall compared to the previous year, which in absolute terms amounts to 4 staff members (there were 23 plans concluded in 2020, whereas there were 27 in 2019), is due to an increase in the number of employees of 70 (1,017 in 2019 against 1,087 in 2020). Development plans for middle management and the rest of the staff increased, while those for senior management fell. It should be noted, however, that the plans are concluded on the basis of the need for development and not with regard to the level of those concerned in the organisation chart.

Figure 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	2020	2019	2018	2017
Women	%	3	3	4	0
Men	%	2	3	3	0
Total	%	2	3	4	0

Percentage of employees receiving regular performance and career development reviews – employee category

	Unit	2020	2019	2018	2017
Top management[2]	%	5	19	36	100
Middle management[3]	%	11	15	9	0
White-collar and blue-collar employees	%	1	0	1	0

[1] Currently only newly approved Career Development Reviews are included. As of 2018, regular employee feedback reviews are being 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] Includes directors and direct reports.
[3] Includes 2nd and 3rd level reports.

The number of **annual interviews** increased to 83% of staff, although we were not able to carry out feedback interviews with manual workers due to a software problem and the pandemic situation. They will be implemented in the first half of 2021.

We continued to invest in **training**, including remote training, with 21,268 hours dedicated mainly to: digitisation, MS Office courses – D3 courses, workplace safety, 231 legislation and soft skills (conflict management, communication and time management). These are areas that will be further investigated in the coming years as they are considered essential for a growing company. The platform for training 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.

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

Average training hours per employee – gender

	Unit	2020	2019	2018	2017	YtY variation
Women	Hours	17.1	15.9	14.9	not available	7%
Men	Hours	20.4	21.6	19.7	not available	-6%
Total	Hours	19.6	20.3	18.7	not available	-4%

Average training hours per employee – employee category

	Unit	2020	2019	2018	2017	YtY variation
Top management (directors and direct reports)	Hours	34.1	28.2	31.5	not available	21%
Middle management (2nd and 3rd level)	Hours	33.2	25.3	28.4	not available	32%
Employees	Hours	16.4	19.2	16.5	not available	-14%

We are confident that these initiatives, combined with a shared corporate culture based on mutual trust, can help strengthen team spirit and the bond with the company, thereby limiting the **turnover** rate, which in 2020 was 7% or 79 people.

However, much of the turnover is due to the seniority of those concerned, who have begun a new chapter, namely that of their well-deserved retirement. Skills enhancement and the development of young talent is also key to the successful implementation of Alperia's succession plan. A tool that will be indispensable to cope with the ageing of the working population that we will face in the coming years. In 2020, we initiated the generation change, by surveying the skills needed for key positions and asking directors to share the skills required and identify a potential successor where necessary. The aim is to have a backup for each role. The Strategic Plan envisages around 91 retirees and 140 new joiners by 2024.

To facilitate internal dialogue, the company's intranet is also being overhauled. A new platform will be built which employees will be able to use more interactively to find information and propose new ideas to innovate the Alperia world with a focus on sustainability. A development to which the employees themselves contributed, who were involved in a survey prior to the creation of the new company intranet. The new platform will be more intuitive and provide more space for socialising.

Turning to the myIdeas tool, which was put in place to give employees an area to make suggestions for improvement, the proposals that emerged in 2020 included, for example, the introduction of aluminium bottles for operational staff (power station technicians, operational staff, hydrocivil and electromechanical technicians following up on works, surveyors, etc.). As a result of reports on the intranet, it was felt that the glass bottles provided to office workers might be too fragile for operational staff and prone to breakage. Many more ideas like these can be expected in 2021.

Similarly, in 2021, the IT dashboard providing managers with data on their staff (e.g. overtime, holidays, illnesses, etc.) will be improved.

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

Operational objectives	Measures implemented in 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 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 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 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.)	-	22	✓
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 4,573 hours for Teams courses		✓	Percentage delivered	-	more than 50% (more than 651 hours)	✓
Expanding e-learning programmes	The platform was also extended to Alperia Smart Services and Alperia Ecoplus, but not to Alperia Fiber, as its 231 Model will be processed after the reorganisation		✓	-	-		✓

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

Operational objectives	Measures implemented in 2020	Measures planned	Deadlines (new)	KPI	Target value	2020 value	Status
Organise regular feedback interviews with employees	* In 2020, 8 further workshops were held with the Group's managers, as well as a closing workshop, during which the first results of a working group that developed concrete measures to be implemented in the coming months were also presented	*Extend annual interviews to the whole Group: due to a change of the assessment module to the Zucchetti programme, it was decided to start operations in 2021	2021	% of employees who regularly conduct feedback interviews	100%	82.75%	X

Raising managers' awareness of their importance as role models, with targeted workshops	* Continuation of the leadership programme		✓	Number of work-shops for managers	-	9	✓

9.2 Diversity and equal opportunity {GRI 401-3; GRI 405-1, 405-2}
We want to strengthen female leadership

Figure 30: Diversity of governance bodies and employees {GRI 405-1}

Diversity of governance bodies[1]		Total					under 30	31-40	41-50	51+
	Unit	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	5	5	4	4	0%	0	0	1	4
	%	42	42	33	33		0	0	8	33
Men	Persons	7	7	8	8	0%	0	0	1	6
	%	58	58	67	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	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	261	230	195	193	13%	30	96	76	59
	%	24	23	21	21		3	9	7	5
Men	Persons	826	787	750	747	5%	88	234	195	309
	%	76	77	79	79		8	22	18	28
Employees with disabilities	Persons	24	23	24	29	4%	1	4	8	11
	%	2	2	3	3		0	0	1	1
Total	Persons	1,087	1,017	945	940	7%	118	330	271	368
	%	100	100	100	100		11	30	25	34

We have **24% female** employees (**+13%** compared to 2019). We intend to further increase this. We believe in a company where everyone can have the same career opportunities. To make this possible, we want to ensure that women can fulfil their potential. We do this with courses and workshops geared towards strengthening female leadership. For this reason, we also started a collaboration with Valore D, an association of companies promoting gender balance and an inclusive culture within companies, with 16 employees taking part in the courses, while 5 took part in multiple modules. In addition, for the Talented Individuals Path, we have created a module dedicated to "Women in the Alperia World", and to attract more women into technical professions, we have been collaborating for years with local universities and colleges. In 2021, we will consider new measures to promote female leadership and we would like to create a video on female leadership with Alperia's Communication department.

Aware of the fact that greater participation of women in corporate life is also facilitated by reconciliation measures, we continue to promote flexibility, parental leave and parenting support tools such as contributions to provincial and municipal crèches. Our commitment is also recognised by the Family Audit certification awarded by the Family Agency of the Autonomous Province and the Chamber of Commerce. This certificate demonstrates our efforts to improve the work-life balance of our staff. All measures implemented in this area have been successful. In 2020, **parental leave** was taken by 100% of women and 63% of men.

Figure 32: Parental leave[1] {GRI 401-3}

		Men				Women			
	Unit	2020	2019	2018	2017	2020	2019	2018	2017
Total number of employees that were entitled to parental leave[2]	Persons	30	25	16	42	11	12	7	13
Total number of employees that took parental leave[3]	Persons	19	21	14	17	11	12	7	13
	%	63	84	88	40	100	100	100	100

Total number of employees planned to return to work in the reporting period (2020) after parental leave ended	Persons	17	21	14	17	3	6	7	8
Total number of employees that returned to work in the reporting period (2020) after parental leave ended	Persons	17	21	14	17	2	2	6	8
Return-to-work rate[4]	%	100	100	100	100	67	33	86	100
Total number of employees that returned to work in 2019 after parental leave ended that were still employed 12 months (ending in the reporting period 2020) after their return to work	Persons	19	14	15	9	3	6	6	4
Retention rate[5]	%	90	100	88	100	150	100	75	100

[1] Based on the entitlements with starting date after 1/1/2020.
[2] Based on total entitlements known to the employer with starting date after 1/1/2020.
[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 is higher than 100% due to the fact that an employee from a newly acquired business was included in 2020 and not in 2019.

Another very important issue is the **gender pay gap** between men and women. Among office workers, the ratio of women's pay to men's pay is 0.92, showing a negative difference of 8% in the pay of female office workers compared to their male colleagues, while in middle management, women earn on average 7% more than their male colleagues, the ratio being 1.07. Finally, in senior management, the pay gap is 0.62 and shows a greater gender pay gap.
Furthermore, the numbers of women in executive and management positions increased compared to the previous year. They rose from 12% in 2018 in senior management to 19% in 2019 to 20% in 2020, while in middle management the percentage of new second- and third-level managers rose from 15% to 17% to 18% (2020 figure).

Figure 31: Ratio of basic salary and remuneration of women to men {GRI 405-2}

Ratio of basic salary and remuneration of women to men	Unit	2020	2019	2018	2017[4]
Top management[1]	Ratio	0.62	0.69	0.77	0.78
Middle management[2]	Ratio	1.07	1.03	0.93	1.06
White-collar employees	Ratio	0.92	0.95	0.87	0.83
Blue-collar employees[3]	Ratio	not applicable	0.78	0.62	0.75

Percentage of female employees per category	Unit	2020	2019	2018
Top management[1]	%	20	19	12
Middle management[2]	%	18	17	15
White-collar employees	%	35	33	32
Blue-collar employees[3]	%	0	0,4	0,4

Percentage of employees per category based on total number of employees	Unit	2020	2019	2018
Top management[1]	%	8	8	6
Middle management[2]	%	11	10	10
White-collar employees	%	58	57	57
Blue-collar employees[3]	%	24	25	26

[1] Includes directors and direct reports.

[2] Includes 2nd and 3rd level reports.

[3] Data not representative, as there is only one woman in this category, who is not a specialised worker.

[4] Data was restated due to a change in calculation methodology.

In terms of **average age**, 34% of the workforce within the Group is over 51 years old (36% in 2019), equal to 368 employees.

Finally, a **Diversity Policy** and a **Diversity Manager** are planned, as provided for in the 2020-2024 Strategic Plan.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Formalise diversity management governance within Alperia	* During 2020, the training initiatives promoted by Valore D for female leadership training continued * A succession plan has also been drawn up for all Group companies together with the Group's directors, which will be a very important personnel planning tool and a fundamental contribution to giving staff growth prospects within the Group * Assessment of the gender pay gap	* Continuing with Valore D programmes and providing female leadership training * Define and publish a diversity policy * Introduction of a Diversity Manager * Promoting paternity leave and work/family balance, also for fathers	2021	-	-		ongoing
Promote measures to encourage female leadership)	* The possibility of part-time leadership is also extended to women, and as part of the Talented Individual class, a women-only module "Women in the Alperia World" is offered, which aims to strengthen the role of women and will also be continued in 2021 * 16 employees participated in courses promoted by Valore D and 5 people took part in courses of several modules	* Assessment of new measures to promote women's leadership (e.g. extension of part-time to leadership roles, training focused on female leadership, etc.) * Creation of a video on female leadership with Alperia Communication	2021	Per-centage of women in middle man-agement		18%	ongoing

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 Value	Status
Extend targeted marketing measures by personnel to raise public awareness of the issue of women in technical professions	* Setting up information days in women's educational institutions * Creation of content/videos to raise awareness among the public and employees on the issue of women in technical professions	* Continue with 2020 initiatives	2021	Propor-tion of women in the work-force (%)		24%	✔

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Promote flexible, shorter working hours for men and women and managers	* Approx. 700 employees in remote working: corresponds to a percentage of 67%	* After the emergency phase in 2021, it is planned to move to a new work system, allowing, where feasible, alternating remote working	2018-2021	Propor-tion of part-time staff (%)	-	10%	ongoing

Industrial Relations / Collective Bargaining Agreements

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Standardising Alperia Group trade union agreements	* Development of further trade union agreements: 3 agreements on FIS redundancy pay, agreement on Edyna model for manual workers, agreement on solidarity holidays (spouse, harmonising supplementary negotiated pensions, special standby availability AGP)		✓	Number of new stan-dardised union arrange-ments for the whole Group	4	8	✓

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

We want to ensure the highest level of safety at work for our employees and those of our collaborators. Therefore, we put in place measures to raise awareness among people and reduce the real risks involved in managing all work activities.

9.3.1 Safe working
Tools, training, certifications

Alperia aims to minimise the risk of accidents for its employees, especially in areas classified as hazardous, such as plants and infrastructures. This is done through regular training of employees in safety, Personal Protective Equipment (PPE) and the continuous updating of work equipment. Each company in the Alperia Group has an HSE manager and a Prevention and Protection Service Manager (RSPP). This figure 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.

In 2020, 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. The audits were first carried out remotely, followed by field audits in June when, according to the law, it was again possible to host auditors and carry out in-person audits. The Smart Region companies (Alperia Fiber, Neogy and Alperia Bartucci) were also certified and aligned to the Group's standards.

As planned, defibrillator installations were completed in 2020, in cooperation with the Red Cross and the White Cross, but due to the health emergency, training in their use has been postponed until 2021.

During the year, Alperia also distributed radios connected to the provincial Civil Protection network to manage any critical situations or serious emergencies with a resilient radio network.

The most significant risks for Alperia are identified through a risk assessment document. 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. 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. It should be noted that in 2020, there were 14, while the number of days of absence was 320, i.e. -25% compared to 2019. The **Frequency Index** (FI) went from 8.68 to 8.13 and the **Severity Index** (SI) from 0.26 to 0.19.

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, we also include 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, 16 accidents occurred during the year, leading to 73 days of absence from work. These accidents mainly affected the suppliers of Edyna and Ecoplus. This led to an increase in the FI accident rate index for contracted companies from 3.05 to 20.77, while the SI index on work absences decreased from 0.13 to 0.09. It should be noted that as the years of collection go by, the data becomes increasingly accurate, but it is not tracked in the same way as employee accidents, rather monitored against that reported by suppliers. In addition, it should be noted that 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.

Figure 34: Work-related injuries {GRI 403-9}

Employees[1]	Unit	2020	2019	2018	2017	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.	14	14	13	13	0%
Injuries that result in restricted work or transfer to another job	No.	not applicable	not applicable	not applicable	not applicable	
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.	1,721,452	1,613,516	1,454,474	1,396,937	7%
Lost work days[5]	No.	320	427	293	192	-25%
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	8.13	8.68	8.94	9.31	-6%
Lost-day rate (per 1,000 h)	Rate	0.19	0.26	0.20	0.14	-30%

Contractors[1]	Unit	2020	2019	2018	2017	YtY variation
Fatalities	No.	0	0	0	not applicable	0%
High-consequence work-related injuries (excluding fatalities)[2]	No.	0	0	0	not applicable	0%
Injuries that result in days away from work	No.	16	2	1	not applicable	700%
Injuries that result in restricted work or transfer to another job	No.	not applicable	not applicable	not applicable	not applicable	
Injuries that result in medical treatment[3]	No.	0	0	0	not applicable	0%
Other significant injuries diagnosed by licensed healthcare professional[4]	No.	0	0	0	not applicable	0%
Hours worked	No.	770,223	656,616	584,353	not applicable	17%
Lost work days[5]	No.	73	86	13	not applicable	-15%
Rate of fatalities as a result of work-related injury (per 1,000,000 h)	Rate	0.0	0.0	0.0	not applicable	0%
Rate of high-consequence work-related injuries (per 1,000,000 h)	Rate	0.0	0.0	0.0	not applicable	0%
Rate of recordable work-related injuries (per 1,000,000 h)	Rate	20.77	3.05	1.71	not applicable	582%
Lost-day rate (per 1,000 h)	Rate	0.09	0.13	0.02	not applicable	-28%

[1] Injuries as a result of commuting incidents have been included only where the transport was 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.

To actively involve its employees in occupational health and safety issues, Alperia has provided a total of more than 21,000 hours of training, of which **8,334 were dedicated to safety**. The training was addressed to all Group companies and a total of 1,096 employees took part (the number is higher than the total workforce because those who were employed at 31/12/20 but then terminated their positions were also included).

In addition, the monthly report on quality, asset integrity, environment and health and safety continued to be published, in which any accidents occurring at work are discussed. From 2019, this tool was updated with a zero-waste section. Awareness-raising also continues with information bites on the company intranet and lessons learned.

Occupational Health and Safety 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 annually 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.

9.3.2 Emergency board and infection prevention measures
Meeting the challenge of the pandemic

Enabling workers to work safely, avoiding the spread of infection and minimising the risks associated with Alperia's activities. All of this is done to ensure an efficient and timely service to customers. These are just some of the challenges we had to face in 2020, a year marked by the arrival of the COVID-19 pandemic, which Alperia tackled by setting up an Emergency Board right from the start, which met every day and then once a week during the most critical period of the health emergency. A pandemic management team comprising the heads and directors of the individual Business Units, the Director of Communications, the head of HSE Alperia and each Group company, General Services and the trade unions. Its objective was to make shared decisions, monitor infection trends and manage the COVID-19 risk in the company.

In addition to applying the provisions of national and provincial legislation, Alperia also took additional safety measures, organising operational shifts so as to avoid the crossover of groups as far as possible, maintaining fixed teams which are easier to trace in the event of infection, and ensuring workstations were disinfected between shifts. Remote working was enabled for all those working in offices, and those with positive COVID cases in their family have the opportunity to take rapid tests at Alperia's expense before returning to work with colleagues. 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.

In addition to providing employees with protective masks, Alperia also introduced special disposal systems at its sites, raising awareness on environmental sustainability.

It should be noted that all decisions taken by the Emergency Board were communicated to employees via the myAlperia intranet and through targeted communication activities. These measures have proven effective, since there has been no outbreak in any of the Group's companies, and Alperia has further ensured this by obtaining the CSQ COVID-19 Restriction certification from IMQ. A tool aimed at monitoring through random audits the application of measures to combat and contain the spread of the COVID-19 virus in the workplace.

9.3.3 Focus on health
How we improve wellbeing and reduce injuries and absences

We want our employees to be able to work in a healthy and welfare-focused environment. That is why, in compliance with Legislative Decree 81/2008, we provide for a medical examination to check their 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 a dependent or non-dependent relative). Each employee can take advantage of a dedicated welfare programme, supplementary health insurance, insurance against accidents at work and those outside work in the event of permanent disability.

At our sites, also as a result of suggestions through the employee myIdeas tool, we introduced glass water bottles, or aluminium bottles for operational staff, drinking water dispensers, free apples and hand sanitizer at site entrances and in each bathroom (in addition to the new bins for the disposing of masks).

We continue to support CRAL, which organises after-work social activities for our employees. We also renewed agreements with various sports centres in Bolzano and with other organisations in the area. These principles will also be the basis for our new headquarters in Merano, which will also be focused on the wellbeing of the people who use it on a daily basis, including by building fitness and relaxation rooms. The Group-wide **absenteeism rate** in 2020 was 8 per 1,000 hours worked, some 33% higher than the previous year. This increase is due to an increase in absences due to the COVID-19 pandemic. Occupational illnesses contracted in 2020 were, as in 2019, zero.

Figure 33: Work-related ill health {GRI 403-10}

Employees	Unit	2020	2019	2018	2017	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.	16,698	11,729	10,033	10,717	42%
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.	1,721,452	1,613,516	1,454,474	1,396,937	7%

Hours scheduled to be worked	No.	2,086,963	1,950,015	1,822,584	1,824,863	7%
Absentee rate (absentee days per 1,000 hours worked)[3]	Rate	8.0	6.0	5.5	5.9	33%

[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	2020	2019	2018	2017	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 want to ensure the highest level of safety in the workplace for our employees and external staff (external companies).

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Record all incidents of significant external companies			✓	Frequency and severity of accidents of external companies	TBD		✓
No incidents involving employees and external companies	* The following information is provided through the monthly HSE Report: 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 * Monthly meetings are held with all Group HSE (Steering Committee) to discuss all safety, quality and environmental training activities, open points regarding safety and audit recommendations, internal and external audit programmes for ISO certifications	* Operational audits: creation of a programme of operational audits with all Group companies – > activity was suspended due to COVID-19 in 2020, will be repeated in 2021 as per PRO 403 * Internal audits 2021: new multidisciplinary system	annually	Number of accidents with lost days	0	14 (employees) 16 (external compani es)	X

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Reduction in the rate of absence	* Intense focus on employee health (COVID-19)	* Continuation of measures implemented in previous years	annually	Absence rate (days of absence per 1,000 hours worked)	-	8	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.

3 GOOD HEALTH AND WELL-BEING
We promote a healthy and safe working environment also through our products

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:

Investment in research and innovation	**€2,148,484**
Revenues from sustainable products and services:	**46%**

10.1 Innovation, Research and Development {GRI EU8; GRI 102-12; GRI 203-1}
International competitions and R&D investment

Innovation will be crucial to the success of our business and to making a real contribution to the sustainable development of the territory and communities where we operate. For this reason, **research and development are central to** the 2020-2024 Strategic Plan "One Vision" with planned investments of €680 million. These investments will be guided by a new internal procedure with which we want to standardise and strengthen the management of innovation projects, introducing a series of standard analyses to assess their effectiveness. Each innovation initiative will be subject to several stages of assessment and approval by the new 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 will be 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.

In addition, we will equip ourselves with a tool to monitor the main innovation trends in our sectors of interest to enable us to react more rapidly to market changes. This tool will enable Alperia to involve all BUs in the identification and assessment of trends and, consequently, to take action to improve the Group's innovation.

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

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

	Unit	2020	2019	2018	2017	YtY variation
Number of employees working on R&D projects	Persons	110	88	46	not available	25%
Employee hours on R&D projects	Hours	not available	not available	not available	not available	
Total R&D expenditure	EUR	2,148,484	1,560,934	1,056,717	1,554,248	38%
thereof						
EU projects	EUR	185,223	167,293	393,169		
other Innovation projects	EUR	1,963,262	1,393,641	663,548		

10.1.1 A selection of our innovation projects

INNOVATE!
We reward the best in-house ideas for innovation in the company

For Alperia, innovation means ensuring its products, activities and services evolve in an integrated and sustainable way, ensuring substantial added value for the customer and the companies it works with. This is why, convinced that the best ideas can come from both outside and inside the company, we launched INNOVATE!, an ideas competition where every employee can not only put forward their project idea, but also follow – as project manager – the idea's development, if it is selected. Projects may relate to new products, services, processes, as well as the improvement of those already existing.

The first edition of INNOVATE! was launched at the end of 2019, and a total of 12 project applications were received. They covered topics related to electromobility, plant maintenance, marketing opportunities, sustainability of internal processes and much more. The six most interesting ideas were presented in January 2020 to the Managing Director, Johann Wohlfarter, and the Chief Strategy Officer, Paolo Vanoni. Two projects, Fleetmatica and DealBox, were chosen to be taken forward, but all proposers were awarded a certificate of appreciation.

Fleetmatica aims to support customers in the transition from traditional mobility to electric mobility by providing a tool that can make analysing the electrification potential of a company fleet easier and more immediate. Alperia and others have shown how the electrification of service vehicles, i.e. vehicles that travel daily distances of between 50 km and 250 km and are parked overnight at the company or at the user's home, is easy to implement and brings significant benefits in terms of both economic and CO_2 savings.

DealBox, on the other hand, is an IT tool designed to promote Alperia products, to enable contracts to be agreed (complete with signature), mobility-enabled cards to be issued, contract start-up fees to be collected, and contracts, receipts and credentials to be produced on paper (e.g. payment receipts). An easy-to-use, secure system that makes customer interaction more immediate and efficient, in line with the Group's business strategy.

In 2020, there was no new edition of INNOVATE!, but employees' entrepreneurial ideas were integrated into the third edition of Alperia Startup Factory, giving in-house ideas even more visibility and providing tools to successfully develop the proposed technology.

Alperia Startup Factory
Third edition also open to our employees

Launched in 2018, Alperia Startup Factory, the competition for ideas 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. The 2020 competition focused on themes related to District Heating 4.0, innovative energy products (Italian market), efficiency, safety and sustainability in the hydropower sector, Smart Region solutions (smart agriculture and smart home for emergency), flexible energy storage systems, Internet of Things and artificial intelligence for energy efficiency. 189 applications were received from 39 countries across Europe, North and South America, Asia and Australia. There were eight in-house applications, focusing on hydroelectricity, the Smart Region, District Heating 4.0 and flexible energy storage systems. After a multi-stage selection procedure, the applicants with the most interesting projects (9) were invited to participate in a three-day virtual workshop (Innovation Camp, held from 9 to 11 December 2020). The finalists (5) moved on to the next stage, which will take place in the first half of 2021 and will be dedicated to building physical prototypes and market testing with a view to possible marketing.

During 2020, some of the ideas that emerged from the second edition of the Alperia Startup Factory were also developed. On 24 May 2020, the results were presented to the jury consisting of Alperia's senior management, who then selected the four winners:

- **Ev.Energy**, offering a home recharging service that allows electric vehicles to be recharged at an affordable price;
- **FlexiDAO**, which has developed a loyalty tool that allows Alperia to give its customers greater transparency in their energy choices, particularly in relation to energy traceability, differentiating itself from its competitors;
- **HeatVentors**, which presented an innovative thermal energy storage system with phase change materials, able to respond to the many technical challenges facing district heating and cooling such as peak load management, lack of space, optimisation of plant size and investment costs;
- **EcoSteer**: which has developed a data-sharing platform that decentralises control of data access, technically giving data owners full control over their data, with the automation of real-time data sharing with different applications and stakeholders in full compliance with the GDPR.

The Startup Factory was launched by Alperia together with the University of Bozen-Bolzano – Faculty of Economics – and WhatAVenture, a young company that offers support to companies in realising innovative projects and new ideas.

Alperia is also assessing the start-up of a venture capital business to further support the growth of start-ups and seek out the best realities capable of accelerating the Group's development.

Open innovation
Valuable partnerships and collaborations for innovation without borders

Alperia collaborates with local and international partners from the scientific world and industry, including research institutes, companies and start-ups. Again in 2020, some historic partnerships continued, such as those with Eurac Research, Laimburg Research Centre, IDM Alto Adige and NOI Techpark, the innovation district of Bolzano, and a new partnership launched with EIT Digital, the leading European organisation for digital innovation and business education, which leads the digital transformation of Europe and is supported by the European Union through the European Institute of Innovation and Technology. In particular, EIT Digital worked with the Open Innovation Scaleup initiative to assess five possible start-ups.
These collaborations are 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 test and launch new technology for this reason too.
Alperia's innovation activity will also develop in the hydropower sector through the recent 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.

Fusion grant
We carry out sustainability-oriented research

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 Bozen-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
We integrate data to optimise the energy efficiency of buildings

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 Bozen-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.

Fieldbox.AI
Applying artificial intelligence to penstocks

In 2020, the project proposed in the previous year at the first Alperia Startup Factory by the French start-up Fieldbox.ai was brought to life. It is a package, called Hydrobox, that addresses the problem of assessing penstock behaviour under specific geotechnical conditions with the help of artificial intelligence.

The idea of Fieldbox.ai is to analyse penstock behaviour in hydroelectric power plants and to supplement the traditional engineering approach with mathematical information through algorithms governed by artificial intelligence, to highlight unexpected patterns and possible weak points and propose digital solutions applicable to other penstocks of the same type. The project was implemented on the Santa Valburga penstock with the collaboration of Alperia Greenpower. One section of the penstock at the Santa Valburga plant is 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. The results of the study will be available in early 2021.

Storage4Grid
New tools for distributed storage systems

The European research project Storage4Grid (December 2016 – February 2020) finished at the end of February 2020. Storage4Grid is an ambitious research and innovation action 100% funded by the European Commission under the Horizon 2020 Framework Programme for Research and Innovation. In addition to Alperia, Edyna and Neogy, participants in the project included the LINKS Foundation Research Institute in Turin as coordinator, the Polytechnic University of Bucharest (Romania), the Fraunhofer Institute (Germany), UNINOVA (Portugal), ENIIG (Denmark) and Lithium Balance (Denmark).

The energy systems of the future will be characterised by increasing shares of intermittent generation from renewable sources and an increasing spread of electric vehicles. These scenarios will create new challenges for the efficient and stable management of the electricity grid, to which Energy Storage Systems (ESS) can provide valuable solutions. This is the background to the trial of the European Storage4Grid project, which had the following results:

- provided utilities and end customers with new tools for the design, operation and evaluation of ESS;
- designed new control and interface models capable of interacting with different types of ESS on the basis of current legislation;
- deepened the knowledge of storage technologies between the distribution network and end users by developing a methodology for modelling, design and integration of ESS distributed with electric vehicles.

During its more than three years of activity, the project developed real solutions to avoid or reduce the need to reinforce the electricity grid, inspired by the idea of distributing energy storage systems (batteries) between end users and the low-to-medium voltage distribution grid, and coordinating their use in the presence of electric vehicles.
The solutions developed by Storage4Grid include a new ICT decision support framework for service planning and optimisation, predictive control algorithms for real-time optimisation, innovative energy metering and routing systems. These solutions have been implemented and assessed under real conditions in Europe, in Bucharest (Romania), Bolzano (Italy), Fur and Skive (Denmark).

Specifically, in Bolzano, thanks to the collaboration between Edyna, Alperia and Neogy, two separate test sites were set up in a real-life scenario, one in a domestic environment and one in a commercial/industrial environment. The scenario is based on the use of electrochemical storage systems (lithium-ion batteries) used to support the extensive development of charging infrastructure for electric vehicles. The domestic site was located at a user's building on the outskirts of Bolzano equipped with a photovoltaic system, electric car and 12 kWh storage. The commercial plant, on the other hand, was located at Edyna's head office in Lungo Isarco 45/A in Bolzano, which has two photovoltaic systems and more than 7 charging points for electric cars.

The project concluded with satisfactory results for the European Commission and all the members of the consortium.

Sinfonia
Let's help make Bolzano a smarter and greener city

The Sinfonia research project, co-financed by the European Commission, which involved the partners Alperia, Alperia Ecoplus, Eurac Research, the Municipality of Bolzano, IPES and Agenzia CasaClima in Bolzano for the last 6 years, finished at the end of July 2020. The project was created with the aim of changing the face of Bolzano in terms of energy efficiency and contributing to the transition towards a more sustainable and smarter system by lowering CO_2 emissions.
District heating played a key role in this process.
The Sinfonia project began at a time of great expansion for Alperia. The plan was to double the district heating network fed by the Bolzano waste-to-energy plant to 60 kilometres of pipeline, which would distribute more than 200 gigawatt hours of clean, safe heat per year. In recent years, the laying of pre-insulated pipes has taken place in several districts of the capital city, including Firmian, Prati di Gries in viale Druso, the hospital, the NOI Techpark and the areas between via Rovigo and the Druso stadium.
Participation in the Sinfonia project enabled us to develop intelligent software to better manage the expanded network. It is an innovative control system based on additional measuring points along the pipes and a more efficient hydraulic and energy model of the network. With this system we can monitor heat production and distribution in real time, predicting peak loads and optimising the operating temperature of the network. As a result, Bolzano's district heating can operate at maximum distribution efficiency while reducing energy losses along the entire network by up to 5%. The extension of the latter has enabled Alperia to bring the benefits of district heating to two of the residential complexes that were given an energy overhaul thanks to European funds from Sinfonia (in Via Similaun and Via Palermo, in the Don Bosco district of Bolzano, owned by IPES). Thanks to this work, the 97 families in the two apartment blocks can now have a home heated by district heating, which resulted in a 54% reduction in CO_2 emissions.
We also used part of Sinfonia's European funds to test a more sustainable power supply system for one of the two co-generation plants of the Alperia Ecoplus district heating plant. With a hydrogen additive of up to 30% of volume, we have reduced carbon dioxide emissions by up to 15% and nitrogen oxide emissions by up to 40%.
As part of the Sinfonia project, we also considered possible developments of district heating at city level. A feasibility study examined the potential for recovering waste heat from industrial activities in Bolzano as a new source to supply the network. The results of this study showed some technical criticalities mainly related to the accessibility of the source itself, but at the same time pushed Alperia to focus on different technologies for heat recovery. We are actively working on several projects to recover heat from widely accessible low-temperature sources such as supermarkets or data centres.

Mobster
Spreading e-mobility

The autonomous province of Bolzano is known for being at the forefront of the green revolution. With its 64.4 km of cycle paths per 100 km^2, the use of hybrid and electric buses in urban public transport lines and the huge investment in modernising the railway line, it stands out from the rest of Italy. The region aims to become a model of sustainable Alpine mobility by 2030 by implementing strategies that include reducing private traffic, spreading e-mobility and introducing multimodal transport.

The Mobster project is part of policies and incentives to strengthen sustainable mobility in South Tyrol. The increase in the number of electric vehicles and the expansion of the charging infrastructure will help to improve the tourism offer for guests in South Tyrol's accommodation facilities. In this context, Alperia's experts are involved in the development of strategies for the deployment of charging infrastructures, in the development of new business models and information tools to foster the use and purchase of new electric vehicles and in raising awareness of green mobility issues.

Smart Land
Making agriculture more modern and sustainable

Smart Land is a project that Alperia is developing in collaboration with the Laimburg Research Centre and the Centro di Consulenza per la Fruttiviticoltura, an advisory centre, with the aim of making agriculture even more intelligent and sustainable. In fact, this is a fundamental sector for South Tyrol, a province that produces more than 50% of the apples sold in Italy and is also a leader in the production of white wine.

With Smart Land, over 120 soil moisture sensors capable of recording and monitoring various data relevant to the irrigation process were installed and tested for two years in the fields of 60 fruit and vine growers in 2019. The sensors inform the farmer about soil moisture and, by combining weather and temperature data, provide a real-time digital record of all measurements taken in the field. According to the data collected, water savings of between 50% and 80% can be generated.

Smart Land was due to be on the market in 2020, but due to the impact of the pandemic, this phase has been postponed to 2021. In addition, another tensiometer model for viticulture is being developed, the aim of which is to make the irrigation process even more efficient.

Alperia and energy communities
More efficient communities with shared energy

Two years ago the Energy Community project was developed by Alperia in collaboration with Regalgrid Europe, a leading company in the digital energy sector, with the aim of making the energy produced by renewable energy plants – photovoltaic and wind – available locally so that several interconnected producers/consumers/users forming an "energy community" could benefit directly. A

system made possible thanks to a sophisticated technology that allows the optimisation of the energy flows exchanged between the interconnected users to make the best use of the energy produced, save money and benefit the environment.

To test the dedicated technology and launch the project on the market, Alperia has set up a community – one of the first in Italy – at the NOI Techpark in Bolzano, the innovation district of South Tyrol, interconnecting seven consumers and prosumers (people 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.

The innovative technology used, patented by Regalgrid, is based on special devices, SNOCU (Smart Node Control Unit), 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 the production and storage systems to optimise the energy of the entire system on the basis of the results processed by an algorithm developed by Regalgrid itself. This algorithm analyses consumption profiles, self-regulating and optimising energy flows to make the best use of available energy. Thanks to a digital platform, users can also monitor and manage the energy produced and consumed in real time, both at individual user and community level. The aim is to use as much self-generated energy as possible within the community.

A similar system was also implemented in the rural area, creating a community through the virtual interconnection around 20 South Tyrolean farms already equipped with a photovoltaic system, in 7 of which SNOCUs, inverters and energy storage systems were installed, while the remaining 13 only had SNOCUs installed. The "Bauernbund Energy Community" was thereby created.

In both cases, the effectiveness of the system was validated by Eurac Research through the development of a specific modelling environment that reproduced the two trial energy communities. 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 as if the energy was not shared. 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. These are encouraging results in the right direction in view of Alperia's long-standing strategy, which is continuous optimisation and innovation in the field of energy distribution technologies to ensure that the sector becomes increasingly smart, digital and efficient, which will create great added value for the public. In the second phase of the project, the recharging stations for the electric service vehicles of the Bolzano technology centre and the heat pumps of the building housing the community's users will be connected to the system built at the centre. This will further increase the number and type of interconnected loads, also to simulate an increasingly diverse system that meets the real needs of domestic and other energy uses expected in the near future.

Smart Edyna
Managing water, parking, lighting, access and waste more efficiently
The Smart Edyna project aims 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 will be 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.

In addition to these four areas, which were already in place and active in 2020, a further area will be added related to smart waste management. The project is underway and will be completed in 2021. At the end of the development phase, it will be offered on the market.

SmartNet
Research to improve network management

The project lasted more than three years and officially ended in the summer of 2019. Edyna worked with 21 partners from nine European countries on Pilot A of the research and innovation project. The project developed crucial issues such as optimising the grid storage of electricity produced from non-programmable renewable sources. The production of electricity from renewable sources is constantly increasing and so is its contribution to the electricity grid, which is mainly managed by the electricity companies known as DSOs (Distribution System Operators). All this leads to significant changes not only in the energy market, but also in the exchange between the different DSOs of the electricity grids, especially with regard to medium- and high-voltage grids.

The aim of the SmartNet Pilot A research project was to identify efficient systems for improving coordination between network operators. One of the main objectives, which was fully achieved, was the real-time exchange of information (every 4 seconds) between Edyna and Terna for grid monitoring, such as voltage balancing along the MV lines, frequency regulation and grid congestion management. The project was funded by the European Commission's Innovation and Networking Agency (INEA) under the auspices of the Horizon 2020 research programme.

In addition to Edyna both industrial and scientific partners participated in the project and it was coordinated by the energy system research company RSE. The varied equipment designed, built and installed as part of the trial under SmartNet's Pilot A, with the related financial coverage, remains installed and working in the Valle Aurina production plants.

FlexiGrid
Towards a more reliable, secure and smart electricity grid

The electricity sector has seen a radical transformation in recent years: On the one hand, there has been exponential growth of non-programmable renewable source (NPRS) plants connected to the medium- and low-voltage grid, and, on the other, conventional plants capable of providing the necessary regulation services to ensure safe system operation have been decommissioned. The FlexiGrid project was launched to make the electricity grid increasingly safe, reliable, sustainable and innovative. It involves 16 partners from five European countries (Spain, France, Italy, Croatia and Greece) and will lead to the development of:
- future secondary electrical substations with the use of new generation smart meters;
- protection systems that allow for and integrate a high penetration of renewable-source-produced energy into the grid;
- software modules that can identify anomalies or malfunctions along the network, first attempting to resolve them automatically and then, if necessary, requesting the intervention of on-call staff from the remote monitoring centre;

In addition, a platform will be developed integrating hardware and software solutions to exploit data provided by local energy resources and distributed with FlexiGrid solutions, which will be interoperable with stakeholder IT systems, increasing their potential to be replicated. This will allow the distribution operations along the DSO (Distribution System Operator) electricity grid to be rendered more flexible, reliable and cost-efficient, promoting market growth and development.

Edyna, as the main DSO of South Tyrol, participates in the project with the MV and LV grid at the Sarentino primary substation. Here the medium-voltage and low-voltage grids are powered by a primary system. We want to test the technical feasibility of modulating the production and loads connected to the medium-voltage grid (to optimise grid power flows and reduce congestion) and use the available production for isolated management of the electricity grid in emergency conditions. The project began on 30 October 2019 at the CIRCE headquarters in Zaragoza, a research centre leading the consortium of partners, and will continue for 4 years.

10.1.2 Digital transformation
The challenge of remote working and new investments

One of the effects of the health emergency has undoubtedly been the drive to digitalise work. This was a challenge for many companies, which Alperia was able to tackle immediately, allowing 750 employees from its administrative offices to work remotely. The key to Alperia's success in quickly managing this transition was the company's strong focus on digital issues years before the pandemic arrived. Over a very short period of time, Alperia gave its employees the chance to work from home under the same conditions and with the same equipment they used in the office (more than 200 new laptops were supplied in record time to enable remote working).

The post COVID-19 era will mark the start of a 'new normal' that will see remote working become – albeit in different forms and ways – a constant. This is why it is crucial that workers are properly trained. Alperia will also pursue this objective by launching training courses on digitalisation and IT security in 2021. In addition to addressing a short-term need, this objective is also a pillar of the Group's strategy. Indeed, we know that Alperia's evolution will involve digitalisation aimed at improving the efficiency and effectiveness of operations and enabling new innovative services. As foreseen in the new Strategic PlanStrategic Plan, we want to:

- Enable data-driven decision-making with a view to greater customer centricity, facilitating the introduction of new personalised products/services;
- Optimise processes to simplify both the work of employees and the customer experience;
- Facilitate the development and transfer of skills within the company also with new working methods (e.g. coordination of external partners)

In particular, with "One Vision", Alperia is investing more than €50 million in the digitisation plan – resources that will be used to carry out a full migration to the cloud of all the company's data centres and the digitisation of the main processes of the various company functions. Between 2020 and 2021, many projects that had been in the pipeline in 2019 came online. They included adopting an agile approach for all accounting, purchasing and management control processes relating to Edyna by bringing them together in a single application, thereby providing the Group's structures with common procedures. The marketing processes of Alperia Smart Services were upgraded, and, in 2021, the sales and after-sales activities will be introduced into the new CRM Salesforce, the world's leading provider.

Again in 2021, the project dedicated to electricity and gas billing, market communication and billing of non-commodity services (primarily electric mobility, but also photovoltaics and other innovative products/services) is expected to be released.

At the same time, a dedicated infrastructure for data collection, harmonisation and analysis was created. A tool developed and secured in the cloud to intelligently monitor and analyse Alperia's vast amount of data. 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. These include a series of innovative projects in the field of advanced analytics and artificial intelligence, including the development of an advanced algorithm for predicting the energy consumption of Alperia's customers.

In addition, black boxes are currently being tested in company cars to monitor their maintenance status and to facilitate booking of keyless cars by simply using employees' company ID badges.

Predictive maintenance activities also continued with the cooperation of the Trading department. An activity that has had an immediate direct impact on the business and will soon be extended to other areas of the company.

Finally, in 2021, at the same time as the release of CRM, the new web portals will go live, revised with a new layout, a new interaction mode and a higher level of infrastructure sophistication with a view to optimising the customer experience and facilitating the activation of cross-selling logics.

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

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Creation of centralised and multidisciplinary innovation management	* Implement and monitor projects launched by the Innovation Board: has been achieved * New procedure defined and implemented; phasing-in of existing projects in the new procedure; one meeting of the new Innovation Board and three meetings of the decision-making committee were held; decisions on innovation projects have been implemented	* Strengthening support and monitoring of all innovation projects	2021-2024	Investment in research and innovation (in million EUR) Number of employees in research and innovation projects		EUR 2.15 million 110 employees	ongoing
Cooperation and search for synergies with businesses, start-ups and research institutes (OPEN INNOVATION)	* Implement projects with winning start-ups has been achieved (Fieldbox.ai) * Startup Factory 2nd edition start-up collaboration started * 3rd edition of Startup Factory launched * Worked with EIT Digital, on the Open Innovation Scaleup initiative – > started conversations with 5 scaleups of possible interest	* Implement projects with winning start-ups * Continuation of the successful partnerships with the winning start-ups of the previous editions * Testing of the solutions proposed by the scale-ups, found through the EIT Digital platform	2021-2024	Number of projects with start-ups	5	6 Fieldbox.AI Ecosteer FlexiDAO Heatventors Sentetic Quantego	ongoing
Development of tools (myAlperia improvement proposals, workshops, etc.) to create space for ideas and encourage an entrepreneurial mindset among the workforce	* Assessment of the 12 ideas received through INNOVATE! and selection of them for advancement: has been achieved (Dealbox, Fleetmatica). * The launch of the new edition of INNOVATE! did not take place, but entrepreneurs were integrated in the third edition of SUF, which provides in-house ideas even more visibility and tools to successfully develop their solutions	* Guiding entrepreneurs through the SUF and supporting the implementation of the best ideas during and after the acceleration phase	2021-2024	Number of suggestions on the internet portal	-	8 business ideas of which 2 selected to participate in the SUF innovation camp	ongoing
Trend management – allowing continuous monitoring of trends and evolving technologies	* A suitable instrument was sought; the content was checked with the demo version and a demo presentation was made to the CEO and CSO	* Launch the continuous management of trends through the workshop "How to Manage Trends"; disseminate the tool throughout the organisation,	2021-2025	KPI TBD after introduction of the instrument in 2021			ongoing

		establish a trend management process					

10.2 Sustainable products and services {GRI 302-5; ALP4; ALP5}

In 2020, **46% of** Alperia's revenues were generated by sustainable products and services. In 2019, the share was 42%. The objective, in line with the next Strategic Plan, is to significantly increase this share, investing increasingly in green gas, green energy, district heating, energy efficiency and electric mobility.

Figure 36: Sustainable products and services[*1] {ALP 4}

	Unit	2020	2019	2018	2017
Share of revenues with sustainable products and services	%	46	40	49	46

[*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.

Energy and gas: our full green offer {GRI 302-4}
In the field with new partnerships and measures for companies

Alperia produces green energy from renewable sources through its managed hydroelectric plants within the province. In 2020, these plants, together with solar energy and biomass, generated around **5 TWh/year** (around 4.3 TWh/year in 2019) of energy. Most power stations are certified, meaning that they produce 100% CO_2-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 Strategy[30]. 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 same 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.

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, in 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 intend to strengthen our presence among SMEs based outside South Tyrol so that they adopt green energy and green gas.

In 2020, Alperia also signed its first Power Purchase Agreement with a major food company that will purchase 100% green energy from a specific power plant.

The desire to spread green energy and gas will also be central to the next Strategic Plan and we will continue to move in this direction, also by promoting the sale of energy efficiency and smart mobility services, which, in 2021, will be accompanied by the launch of a new product dedicated to domestic photovoltaics and the Smart Land service for efficiency in agriculture.

Energy efficiency
Alperia Bartucci: on-site advice to reduce waste and decarbonise

Alperia wants to become a reference point for the energy transition. The 110% Superbonus is a central driver of this strategy. We want to make a significant contribution to energy redevelopment by sharing the know-how of Alperia Bartucci and Gruppo Green Power, which joined the Alperia Group in 2019 and specialises in services for energy efficiency in the household sector.

Alperia Bartucci is 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

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[30] https://ambiente.provincia.bz.it/pubblicazioni.asp?publ_action=4&publ_article_id=214427

suppliers and credit transfers for tax deductions), as well as energy efficiency works based on Sybil's proprietary technology using Advanced Process Control (APC) systems. These systems use multivariable and predictive algorithms to automatically monitor the production process, pursuing a reduction in costs related to the primary energy consumed.

In 2020, Alperia Bartucci developed several significant energy efficiency projects, including the cooling of the Venice Airport, adopting the proprietary Sybil HVAC (Heating, Ventilation and Air-Conditioning) system, which, with complex algorithms, is able to acquire data on expected crowding in the various areas of the airport, adjusting the air-conditioning accordingly. By comparing the electricity consumption before and after its installation under the same exogenous conditions related to the outside temperature and the influx of passengers, energy savings of almost 30% were calculated. An excellent result, so much so that in 2021, the system will also be replicated in large shopping centres.

Efficiency improvements linked to Ecobonus, Sismabonus, Bonus casa and Bonus facciate were provided during the year to more than 1,000 private customers. To further strengthen this sector with the MSM Consortium (of which Proger, Saccir and Gestioni Italiane are members), Alperia Bartucci has also set up the controlled business network EfficienteRete, a company that provides specialised consultancy and cutting-edge technology, and takes on the financial commitment of projects, thanks to its ability to absorb the transfer of tax credits.

In addition, during the year, Alperia Bartucci carried out several activities in the form of Energy Performance Contracts (a contract that combines the advantages of third-party financing for the purchase of technology with performance-based remuneration for the customer). It also carried out energy efficiency monitoring activities at Alperia sites. It implemented a cooling system in the district heating plant in Silandro and a monitoring system for Alperia Green Power in Ponte Gardena.

An important part of the work in 2020 was also dedicated to decarbonisation projects, helping companies to design a sustainable energy strategy for the period up to 2030.

Alperia Bartucci 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. In one of these cases, the savings generated by a single activity amounted to over €180,000.

Finally, in connection with the acquisition of SUM, one of the main energy operators for the corporate world in the North East, Alperia Bartucci carried out several energy efficiency activities for companies in the Triveneto region. The activities included energy diagnoses, monitoring systems, certification according to ISO 50001 and ISO 14064, compressed-air leak detection and thermography. According to the agreements, part of the purchase price (around €500,000) was to be paid in energy efficiency services to local companies. This activity will end in 2021.

Again within the EEC Business Unit, in 2020 Alperia Bartucci developed the Carbon Strategy service that supports companies in achieving carbon neutrality starting from GHG accounting (Scope 1-2-3) that will be launched in 2021. Of particular interest is the expansion of consultancy services in areas including retail, glass and food.

In detail, Alperia Bartucci managed **65 projects with EPCs** in 2020 (46 in 2019) with total annual savings of 6,832 toe (tonnes of oil equivalent) for a total of 20,818 tCO_2e of avoided emissions into the atmosphere. In the same year, Alperia Bartucci S.p.A. was issued with **115,719 energy efficiency certificates** (112,544 in 2019) relating to 48,480 toe saved by customers for whom Alperia Bartucci S.p.A., as ESCO, followed the procedure for obtaining energy efficiency certificates (TEE).

Our plan for the Superbonus 110%
Know-how and targeted partnerships for tailor-made solutions

With the "Relaunch" decree and the latest budget law, the Italian government has introduced new provisions regarding the Superbonus 110%, with the deduction of expenses incurred from 1 July 2020 to 30 June 2022 (until 31 December 2022 in the case of condominiums with a SAL of at least 60% as of 30 June 2022) for specific energy efficiency and seismic works, also providing – instead of direct use of the deduction at the time of the tax return for the reference year of the expenses for the person who commissions the works – the option of credit transfer. To qualify for this incentive, all works (such as thermal insulation of buildings, modernisation of air-conditioning systems, installation of photovoltaic systems, energy storage systems, electric recharging infrastructures and seismic safety...) must allow for an improvement by at least 2 energy classes of the building. The advantages of a renovation to improve efficiency are numerous. In addition to reducing energy consumption from fossil fuels and contributing to climate protection, households and apartment blocks also benefit from increased property values, improved home comfort and reduced energy costs. Therefore, specifically for the South Tyrolean market, Alperia has developed tailor-made solutions in cooperation with the local enterprise networks of ARO and Lvh.Apa Confartigianato Imprese. In this way, families and apartment blocks can benefit from tax relief and cooperation with local tradesmen. Thanks to ARO, it is possible to combine the strengths of many individual trade businesses and offer a structure covering the whole of South Tyrol. The provincial network currently includes more than 100 companies with all the necessary professional specialisations and is ideally suited to coordinate and implement the project. In addition, Alperia can also draw on many years of in-house experience in the field of energy efficiency for private individuals and apartment buildings through its subsidiaries Alperia Bartucci and Green Power, which specialise in projects for the implementation of energy efficiency measures. The "One Vision" Strategic Plan itself focuses on the Superbonus, with planned investments of around €500 million.

Sybil
The final frontier of smart heating

At Klimahouse 2020, the trade fair dedicated to sustainable building, Alperia Bartucci, presented Sybil®, a patented system based on artificial intelligence, able to respond to the specific characteristics of each building, optimising consumption. Sybil® regulates heat distribution by adjusting the generators and mixing valves, while respecting the comfort levels required inside the building.

The special feature of this innovative solution is its ability to adapt in a smart mode to the thermal identity of each building. Through AI algorithms, Sybil® manages to maintain a lower average temperature in the boiler and distribution circuit, while maximising the heat supplied to the consumers.

By learning property characteristics and uses, this system reduces energy consumption, resulting in significant energy savings. It is an environmentally friendly solution with a focus on living comfort and user needs. Through online, real-time monitoring of system performance, Sybil® operating parameters such as on- and off-times can be remotely controlled and changed, while timely remote alarms alert users to system malfunctions. In addition, the device is able to produce intelligent alerts, useful to correct mistakes on the part of the users and to warn of the need for maintenance.

Since Alperia Bartucci adopts the innovative Energy Performance Contract (EPC) business model, taking on the financial commitment necessary to carry out energy efficiency measures at its customers' premises, sharing part of the savings with the apartment block, the installation of Sybil® does not require any initial outlay for apartment blocks, so owners have the opportunity to make their buildings smarter as well as save on their energy bills. The installation of Sybil® is in no way invasive to the building and can be carried out during any season, even when the thermal power station is in operation, without any interruption of service.

Smart Meters
Smart Meters are coming

During 2020, Edyna, South Tyrol's leading electricity distributor, installed the first Smart Meters in the municipalities of Egna, Ora and Caldaro. Over the next few years the meters of all 238,000 customers will be replaced.

The start of the meter replacement operations was provided for by resolution 259/2020/R/eel with which the Regulatory Authority for Energy, Networks and Environments (ARERA) approved the plan presented by Edyna for the commissioning of Smart Meters. With the installation of the new Smart Meters, Edyna aims to make its electricity network smarter and more digital to increase the efficiency and quality of the service offered to customers. The new meters will also allow more precise monitoring of energy consumption by customers, who will be able to view their electricity consumption updated every quarter of an hour, thereby encouraging a more rational use of energy. A further innovative aspect of the Smart Meter is its connectivity features that will enable the development of new technological solutions for home automation and energy saving in the future, representing a new frontier for smart homes.

In concrete terms, replacing meters requires only a few minutes of work and a short interruption of the power supply. Users are notified in good time, at least five days in advance, by means of a written notice posted at their building or in the street where the work will be carried out. The replacement is completely free of charge and the presence of customers is not required unless access to the meters is not otherwise possible. To guarantee the security of the replacement operations, Edyna provides the operators in charge of the works with special badges and customers can verify their identity by calling the dedicated freephone number 800 221 999.

On the Edyna website, you can find detailed information about the new Smart Meters and the planned timeframe for installation in the 96 South Tyrolean municipalities under its jurisdiction.

10.2.1 Smart Region
In the field to make the territory smarter, more connected and energy-sustainable

In 2020, Alperia Smart Region invested **€14 million** with the aim of developing innovative solutions to make land management smarter, to further spread electric mobility and to improve energy efficiency both for large industrial and commercial groups and for apartment blocks and homes, taking advantage of the 110% Superbonus, a measure that will be central to the growth of Alperia Smart Region in the coming years.

For all these activities, the Business Unit worked closely with local actors, with the aim of creating added value at local level. It is worth noting the following projects:

- Energy Community with the Südtiroler Bauernbund: the project aims to increase the self-consumption of photovoltaics and involves 26 participants who have been fitted with devices that enable the virtualisation of the energy community. Data collection started in 2020 and will be analysed in 2021;
- Smart Health with start-up Care4u: Alperia Smart Region has developed an IoT prototype for the care of patients suffering from dementia, Alzheimer's disease or other psychogeriatric disorders. The solution, called diPAS Basic, has the ambitious goal of revolutionising the care sector by adopting a holistic approach. diPAS Basic uses special sensors and intelligent IoT technologies that, via a digital platform, are able to recognise and assess a patient's health condition and provide nurses with immediate information via messages (including alarm messages) sent to fixed or mobile devices. The solution was tested in 2020 at the Marienklinik in Bolzano and will soon be marketed;

- Smart Land, in collaboration with the Laimburg Research Centre: an experimental project that led to the installation of intelligent sensors that read the soil moisture, thereby improving the efficiency of the irrigation process, and which, in 2021, will see the development of new sensors (including rain gauges) and the marketing of tensiometers for vineyards;
- network losses: the topic, which is the responsibility of Edyna, was also addressed at a technology level by the Smart Region Business Unit, with Alperia Bartucci developing a project to limit network losses with the Rovereto aqueduct, while Alperia Fiber tested technology to understand how to apply Smart Meters to water management.

All companies in the Smart Region group in 2020 achieved ISO 9001 and ISO 18001 quality, environment and safety certification – important goals for new companies.

Finally, it should be noted that in 2020 a business unit of Alperia Fiber was sold to Infranet, a company in charge of the management, planning and maintenance of the fibre optic telematic infrastructure for the Province of Bolzano.

According to "One Vision", Smart Region will invest €700 million over the next four years, of which approximately €500 million will be for the Superbonus.

10.2.2 e-Mobility

Established in 2019, as a joint venture between the two largest energy providers in Trentino-Alto Adige, Alperia and Dolomiti Energia, Neogy promotes electric mobility with an extensive recharging infrastructure serving numerous private and corporate customers. With around 500 vehicles and 100 charging stations per 100,000 inhabitants, according to the Smart Mobility Report produced by the Energy & Strategy Group of the School of Management of the Politecnico di Milano, Trentino-Alto Adige is the Italian region with the highest number of charging stations and electric cars per inhabitant, placing it among the top European countries. Most notably, Trentino-Alto Adige is the region with the greatest development of electric mobility, 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 ensured by Neogy, the region's largest operator, which has installed over 300 stations with public access, with 3 charging points of 150 kW and 3 charging points of 100 kW which, thanks to an upgrade, will be able to go up to 150 kW. In addition, in 2021, in cooperation with the South Tyrolean trade association, it will install a further 33 hyperchargers throughout the province. 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. 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.

But not only that: Neogy is also constantly working on developing new technology through participation in innovative European projects. These include:

- 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.

There are currently over **300 public charging stations** installed across the country, 130 more than in the previous year. At the end of 2020, 995,000 kWh were charged (twice as many as in 2019), 5.97 million kilometres were travelled (the conversion factor is 6 km/kWh) iand 1,000,000 kilograms of CO_2 were saved (respectively 2.27 million kilometres and 400,000 kilograms of CO_2 saved in 2019).

Strategic objectives: We want to turn our entire business green.

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Develop new business activities in line with 100% Green DNA principles	* Partnership with Sparkasse, opening of new sales channels (Sparkasse). * Collaboration with the network of local enterprises ARO and lvh.apa Confartigianato Imprese for the development of tailor-made solutions for South Tyrol for the Superbonus		✓	-	-		✓
Develop new business activities in line with 100% Green DNA principles	* "Bauernbund Energy Community" pilot project (completed phase 1) * Energy Community pilot project (at NOI Techpark) (completed phase 1) * Implementation of Alperia offers in the field of residential photovoltaics & energy community	* PP Bauernbund: 1. Data access API release (back-end activity for data analysis) 2. Local plant self-consumption analysis 3. Potential collective consumption analysis 4. Production failure alarm service 5. Dedicated support 6. Customised mobile app development * PP NOI Techpark: 1. Connecting a storage unit with inverter to the charging columns 2. Evaluation of the extension of the aggregate with the inclusion of photovoltaic systems outside the NOI Techpark 3. Inclusion of the thermal component (heat pumps) and monitoring of consumption by means of a mathematical model capable of distributing the thermal consumption of each utility 4. UVAM study and analysis for the implementation of UVAM in the existing aggregate. Residential & EC photovoltaics: Future developments in companies, apartment blocks and public administrations	2017-2021	-	-		ongoing
Develop new business activities	* The topic was explored in a feasibility study and	* None	✓				✓

Operational objectives	Measures implemented	Measures planned	Dead-lines	KPI	Target value	2020 value	Status
in line with 100% green DNA principles	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	* Increase the green customer base (gas/electricity) in line with the targets set in the 2020-2024 Strategic Plan	2017-2021	Share of sales of sustain-able products and services (%)		46%	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	* Unilateral changes for the customer base that still has non-green contracts. Planning of co-marketing possibilities also with corporate customers	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	* Unilateral changes for the customer base that still has non-green contracts. Planning of co-marketing possibilities also with corporate customers	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 possibilities also with corporate customers	* Unilateral changes for the customer base that still has non-green gas contracts	2020-2024	Percent-age of green products for new customers	95		ongoing

Strategic objective: We want to promote electromobility and the charging infrastructure in South Tyrol.

Operational objectives	Measures implemented in 2020	Measures planned	Dead-lines (new)	KPI	Target value	2020 value	Status
Installation of 5,000 charging stations	* Expanded charging infrastructure * Joint venture Neogy with Dolomiti Energia set up * App development postponed to 2021-22	* Activation of ASS and DE sales channels * Installation of 20 hyperchargers in AA	2021	Hyper-chargers installed		20	ongoing

APPENDIX

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 Strategy, 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 Group level contain a binding human-rights clause. Responsibility for this topic has been defined internally. The volume of purchases from local suppliers is recorded regularly and reported annually in the Sustainability Report.

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 BravoSolution 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

103-1 Explanation and definition

The topic was identified as relevant both in terms of 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

103-2 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: the Administration & Finance department in relation to direct taxes and most indirect taxes; Legal & Corporate Affairs, General Services, and 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 is 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 is subject to specific verification activities by the auditing company. With respect to relations with tax authorities, Alperia therefore 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 audits (also) by the tax authorities. The Alperia Group is also a member of various trade associations to protect and represent its interests.

103-3 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.

GREEN MISSION

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 impact 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 5 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 is returned to the environment (river or lake) through a canal or tunnel after being taken from the intake structures. 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 (MVF) 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 the 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. For the plants in Sarentino, Lappago, Molini and San Pancrazio, this trial was completed and the Provincial Council accepted the results. In 2021, the procedure should also be completed for the other plants.

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: fishery 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 addition, numerical simulations of the flow situation in the reservoir are being carried out as part of a dissertation at the University of Munich. At the end of the operations, Alperia Greenpower submitted a final report assessing the effectiveness and sustainability of this method.

Mitigation and offsetting measures

The operation of hydroelectric power stations 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 18 large hydroelectric plants: Santa Valburga-Pracomune, San Pancrazio, Lana, Sarentino, Cardano, Ponte Gardena, Bressanone, Lappago, Molini di Tures, Lasa, Brunico, Glorenza-Castelbello, Tel, Marlengo, 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 stations. In 2020, Alperia made approximately €18 million available for the AGP and AVP plants to implement these projects. In doing so, 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. Part of them deals 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. Specifically, in 2020, Alperia completed the executive design of the Castelbello fish ladder, which will be built in 2021 and will use a system of tanks with gates that adjust according to the water level. In addition, the Sarentino fish ladder built in 2019 was monitored in 2020. This ladder divides the drop caused by the weir into sixteen small pools, allowing fish and other aquatic species to easily overcome the height difference. The monitoring was positive. Currently, there is no centralised complaint mechanism; complaints are handled locally at the individual power plants. We have set a target to implement a centralised complaint mechanism by 2021.

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 Green Power. 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, the 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 11 large plants), Alperia is obliged to manage a monitoring system that measures the quality of the watercourse concerned. Water quality monitoring is carried out in agreement with the Province of Bolzano. Any adjustments are made during the year.

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 CO_2 emissions deriving from its activities. Since 2020, Alperia has had an Energy Manager, and an analysis has been carried out for each company to see the level of emissions generated and what they are derived from. Monitoring, already active in previous years, has been further streamlined and rationalised, so as to have a standardised and structured analysis in relation to the objective of reducing emissions at Group level with the launch of corrective actions. To this end, work is underway to develop a structured reporting system at Group level. Alperia Ecoplus (which manages district heating), Alperia Greenpower and Alperia Vipower (which manage hydroelectric power plants) run all the sites certified according to the ISO 14001:2015 standard. They are also EMAS registered. 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 Strategic 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 essential 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 will appoint an Energy Manager to strengthen its energy efficiency and emission reduction efforts. During the year, the energy efficiency projects already implemented by the Business Units and individual companies were assessed by interviewing the managers. 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 Strategic Plan. Achievement of the target values will be monitored on an annual basis.

CUSTOMERS

Customer satisfaction

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 10 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 freephone number answered by bilingual local operators. Customers can also contact freephone operators by email. Complaint response times are strictly regulated by the national regulator (ARERA), which obliges operators to comply with and, if necessary, improve on these requirements. 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

The national supervisory authority (ARERA) regularly reviews and monitors the achievement of the goals 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 2021 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 340,844 customers served.

103-2 The management approach and its components

Alperia aims to perform responsible, authentic and adequate marketing. 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. The room to 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 the 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. A new Energy Point and three new Energy Corners were also opened in Veneto in 2020.

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

Cybersecurity

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 (Data Protection & Security (DPS)) 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 a 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

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 and active in all areas of the energy sector, from production and distribution to the sale of energy and innovative services. This activity has a 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 work.

The year also saw the introduction of remote working due to COVID-19 for more than 700 employees (all office staff) who were able to work from home, and the Family and Work audit was renewed for 2020. 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, employees were also involved in a survey on the functionality of the platform, which will be renewed in 2021.

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 Individuals 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, in 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% compared to the previous result. In addition, feedback interviews continued in 2020 and were extended to all Group employees. Adjustments can be made continuously throughout the year. Measures sent via the 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 risk situations (fraud, crimes, unlawful or irregular conduct on the part of company individuals). No reports were recorded in 2020.

Diversity and equal opportunity

103-1 Explanation and definition

In the 2020 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, language background or disability. For Alperia, this also implies the guarantee of equal pay and equal career opportunities for men and women. There are relatively few women at 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, at 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 4 members appointed by the trade unions and 4 members appointed by the company. Adjustments can be made continuously throughout the year.

Occupational health and safety

103-1 Explanation and definition

This topic was identified as essential 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 regular training of employees regarding 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. The most significant risks for Alperia are identified through a risk assessment document. 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 learnt'. Through regular reports, employees are therefore involved in the implementation of the occupational health and safety management system. Training hours are also provided specifically on the subject of safety at work.

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 doctors 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. These appointments also took place during the pandemic.

Alperia also provides a dedicated welfare programme, 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 wellbeing at work and to lower absenteeism rates. To this end, an agreement was launched in 2019 to hold Safety Days, the aim of which is to promote health at work.

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 in national and provincial legislation to prevent the spread of infections, 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 for suppliers to be assessed on the basis of predefined indicators, including accident indices.

103-3 Evaluation of the management approach

Occupational health and safety 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 annually 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 and 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, with the new Strategic PlanStrategic Plan it has set itself the goal of becoming carbon-neutral by 2025. In doing so, Alperia and its customers will contribute significantly to the reduction of CO_2 emissions, as provided for in the Autonomous Province of Bolzano's Climate Strategy 2050. 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.

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	**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).	**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.
			RISK 2: OPERATIONAL – Risk of potential malfunctions or interruptions in the distribution of energy, gas and district heating due to: - inadequate activities to prevent damage from adverse weather events; - inadequate inspection and maintenance; - infrastructure inadequacy of the electricity grid (e.g. availability, reliability, efficiency); - inadequate level of automation (e.g. fault and malfunction detection); - inadequate new connection planning.	**MITIGATION / CONTROL ACTION 2** – We have created a portal for businesses where they can register to view the status of the underground line to avoid the risk of potential malfunctions in electricity distribution with the aim of reducing both the frequency and duration of power interruptions themselves; we have taken out insurance policies for adverse weather events risks. We have also developed innovation projects for the management of penstocks in hydroelectric plants. To improve the quality of the service, modernise the network infrastructure and make it more stable, we plan to gradually bury all lines.
			RISK 3: OPERATIONAL – Risk of inadequate connection expansion measures in the Bolzano district heating network with potential impact on customer satisfaction.	**MITIGATION / CONTROL ACTION 3** – We are expanding the district heating network in both Merano and Bolzano, with more than 20 MW of new connections. We are also strengthening our sales network.
			RISK 4: FINANCIAL – Risk of inadequate investment in measures to improve plant performance in terms of availability, reliability and efficiency.	**MITIGATION / CONTROL ACTION 4** – We have planned €464 million in investments into the core business (Strategic Plan 2020-2024) over a period of five years, to improve the availability, reliability and efficiency of plants; we are also expanding the district heating network in Bolzano and Merano.
	Economic development	Strategic/ financial	**RISK 1: STRATEGIC** – Risk of not including objectives aligned with climate change forecasts in Strategic Plans, increasing the Alperia Group's resilience for possible future scenarios.	**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.
			RISK 2: 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.	**MITIGATION / CONTROL ACTION 2** – To contribute to the creation of a South Tyrolean Smart Region, we collaborate with important research bodies to develop new smart grid solutions.
			RISK 3: 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.	**MITIGATION / CONTROL ACTION 3** – We want to ensure the wellbeing 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.

Scope Legisla-tive Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
	Marketing and transparent communication	**Strategic/ operational**	**RISK 1: STRATEGIC** – Risk of lack of/inadequate transparency of information 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.	**MITIGATION / CONTROL ACTION 1** – We are committed to implementing transparent, up-to-date and stakeholder-oriented marketing and internal communication. We do this through the Sustainability Report, by involving stakeholders in various initiatives, with the website and with numerous other communication tools. We provide consistent information through our various media channels (e.g. Energy Points, call centres). In 2019, we began to introduce CRM – Customer Relationship Management – focusing on lead management.
			RISK 2: OPERATIONAL – Risk of failure/non-definition of motivational measures for customers to increase the number of customers receiving paperless bills.	**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.
	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.
	Cybersecurity and privacy	**Compliance/ operational**	**RISK 1: COMPLIANCE** – Risk of non-compliance with privacy law provisions in relation to the protection of sensitive data.	**MITIGATION / CONTROL ACTION 1** – We want to ensure compliance with privacy legislation (GDPR). To achieve this objective, we are taking the following measures: - implementation and monitoring of specific procedures and processes; - continuous monitoring of information systems (including data flows); - compliance with privacy regulations (appointing a Data Processor, personal data processing register, TOM measures pursuant to Art. 32 GDPR etc.).
			RISK 2: OPERATIONAL – Risk of security incidents and failure to manage information and protect sensitive data and intellectual property due to the infrastructure 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 plans.	**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). 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).
	Innovation, research and development	**Strategic/ operational**	**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.	**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 third edition of which we launched in 2020.
	Sustainable energy products and services	**Strategic/ operational**	**RISK 1: STRATEGIC** – Risk of failure/inadequate development of new energy concepts (e.g. products and services) with potential impact on the strategic objectives to make the business 100% green.	**MITIGATION / CONTROL ACTION 1** – We want to develop new business activities in line with the 100% Green DNA concept, promote the take-up and purchase of green products and increase the sales share of sustainable products and services. For this reason, we are examining consumer behaviour programmes aimed at stimulating the purchase of green products.

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			RISK 2: OPERATIONAL – Risk of failure/inadequate management and development of electromobility services and support infrastructures.	**MITIGATION / CONTROL ACTION 2** – We want to promote electromobility and the charging infrastructure in South Tyrol. To achieve this, we are making Alperia an e-mobility service provider and install charging infrastructures in the area.
Environ-mental aspects	**Water**	**Strategic/ compliance/ operational**	**RISK 1: STRATEGIC** – Risk of failure to manage climate change and the increase of weather phenomena (e.g. floods, droughts) with impact on the water cycle and reservoirs with related implications for plant productivity.	**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.
			RISK 2– COMPLIANCE – Risk of non-compliance with regulatory provisions.	**MITIGATION / CONTROL ACTION 2** – We want to guarantee the highest level of compliance with environmental legislation. For this reason, we comply with all provisions and seek all the necessary authorisations from the relevant bodies. We comply with regulatory provisions on minimum vital flow, so as not to cause damage to local flora and fauna. We also have ISO 45001, 14001, 9001 certification and EMAS registration.
			RISK 3 OPERATIONAL – Risk of non-implementation of compensatory measures (e.g. fish ladders) and loss of biodiversity.	**MITIGATION / CONTROL ACTION 3** – 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.
			RISK 4 OPERATIONAL – Risk management of flood events at large dams.	**MITIGATION / CONTROL ACTION 4 –** We have defined the "Large Dam Flood Management" procedure and developed a tool that simulates flood events.
	Emissions	**Operational**	**RISK 1: OPERATIONAL** – Risk of failing to optimise eco-sustainable technology and define monitoring instruments for greenhouse gas emissions (e.g. establishment of a Group-level report).	**MITIGATION / CONTROL ACTION 1** – We support the Province of Bolzano's 2050 Climate Strategy by reducing our greenhouse gas emissions. To this end, we have begun reporting activities related to environmental KPIs for the purpose of the Sustainability Report to monitor Group emissions and carbon intensity.
			RISK 2: OPERATIONAL – Risk of non-compliance with mobility plans developed for the company vehicle fleet in relation to reducing emissions.	**MITIGATION /CONTROL ACTION 2** – We want to reduce mobility-related emissions by making 100% of the electrifiable vehicle fleet green, i.e. 50% of Alperia's entire car fleet, within two years. We already have over 144 electric or hybrid vehicles.
			RISK 3: OPERATIONAL – Risk of non-compliance with activities to reduce pollution generated by the Group's plants (e.g. air emissions, discharges into water, waste, etc.).	**MITIGATION / CONTROL ACTION 3** – We want to minimise the pollution caused by our plants, which is why we used part of the proceeds of the green bond to finance the modernisation of the hydroelectric plants and the related distribution network.
	Energy consumption	**Operational**	**RISK 1 OPERATIONAL** – Risk of inadequate monitoring of energy consumption and energy efficiency levels of buildings and systems with potential impact on the design of energy efficiency measures.	**MITIGATION / CONTROL ACTION 1** – We want to improve the monitoring of energy consumption to reduce the consumption of buildings and plants through targeted energy efficiency initiatives. We also do this through Alperia Bartucci S.p.A., the ESCO that oversees the implementation of energy efficiency projects and innovative energy services in line with the efficiency objectives of the Group's Strategic Plan. Our objective is to use, wherever possible, renewable energy sources to run our plants and buildings.
	Supplier management	**Strategic/ operational**	**RISK 1: STRATEGIC** – Risk of failure to identify specific criteria/requirements to ensure	**MITIGATION / CONTROL ACTION 1** – To help create local value and select suppliers of raw materials suitable for our business, we strategically set ourselves the

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Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			corporate purchases are made as locally and sustainably as possible and risk of inadequate choice and selection of suppliers.	objective of making our purchases as locally and sustainably as possible from an ecological and social perspective. All of our new suppliers 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).
			RISK 2: OPERATIONAL – Risk of potential non-ethical conduct by suppliers.	**MITIGATION / CONTROL ACTION 2** – To avoid the risk of a lack of transparency in the supplier selection process, in particular in relation to active/passive corruption issues, we are committed to ensuring responsible supply chain management by checking that suppliers meet the requirements of integrity, professionalism, technical standards and good reputation. Furthermore, to avoid the risk of non-ethical conduct on the part of suppliers, employees, customers and other stakeholders, a respect-for-human-rights clause is included in the Group's General Terms and Conditions for contracting.
	Asset integrity	**Operational**	**RISK 1: OPERATIONAL** – Risk of failure to manage inspection and maintenance activities for dams and other hydraulic works (e.g. pipelines, tunnels, etc.) to guarantee their structural integrity and avoid potential total or partial collapses, which could potentially impact the surrounding environment and result in penalties from the authorities.	**MITIGATION / CONTROL ACTION 1** – To ensure the safety of people living near dams and hydraulic works, we constantly monitor and maintain the infrastructure in accordance with the relevant bodies and in compliance with legal requirements. Specifically, we are preparing Risk Analyses for diversion tunnels, penstocks, other supply systems and culverts; we are installing differential and maximum-flow protection systems for penstocks, and, in conjunction with the revamping of the power plants, we are replacing shut-off devices. Dams and other minor containment basins are subject to specific regulations and control by the Ministry of Infrastructure – Dam Service and the Autonomous Province of Bolzano's dam office.
			RISK 2: OPERATIONAL – Risk of damage to local communities due to accidents at plants in locations potentially sensitive to natural disasters or terrorist attacks.	**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. A flood forecasting system is being researched, which would allow preventive action to be taken. In addition, we want to ensure business continuity of all IT systems and plants and minimise risks associated with sensitive terrorism targets (e.g. cybersecurity and sensitive locations). To this end, we have developed a special business continuity and disaster recovery plan.
Personnel management	**Occupational health and safety**	**Compliance**	**RISK 1: COMPLIANCE** – Risk of failure to achieve adequate/maximum levels of occupational health and safety for employees and collaborators (external companies), in relation to injuries, accidents and occupational diseases with potential non-compliance with the legislation on the protection of occupational health and safety in workplaces.	**MITIGATION / CONTROL ACTION 1** – We want to ensure the highest level of safety in the workplace for our employees and external staff (external companies). We have numerous tools including: a monthly HSE report on health and safety and the 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, we began installing 30 semi-automatic defibrillators in 2020. As a manager of critical infrastructures, we have consolidated our partnership with the Civil Protection Agency of the Autonomous Province of Bolzano.
		Operational	**COVID-19 –** Risk incorrect implementation of requirements or inadequate definition of additional measures to reduce/avoid the risk of infection in the workplace.	To manage the COVID-19 pandemic, the Alperia Group set up the Emergency Board and Committee provided for in the shared protocol of 24/04/2020. All measures were managed at Group level (purchase of protective equipment, introduction of remote working and the necessary hardware, limits for worker presence at sites,

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
				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**	**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).	**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, cybersecurity, etc.).
			RISK 2: OPERATIONAL – Risk of inadequate Group-level human resources policies and procedures with potential impact on recruitment, management and development.	**MITIGATION / CONTROL ACTION 2** – We want to ensure the presence of and compliance with Group-wide policies and procedures for the recruitment, management and development of staff. To achieve this, we apply the measures required by the 231 Model, pursuant to Legislative Decree 231/01 (segregation of duties, powers of attorney and proxies, traceability, objective definition and selection, performance measurement, etc.).
			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).	**MITIGATION / CONTROL ACTION 3** – We want to ensure compliance with regulatory obligations relating to staff training, updating training plans in accordance with the quality system and monitoring their actual performance in the area of compliance (e.g. SSL, Legislative Decree 231/01).
			RISK 4: OPERATIONAL – Risk of employee dissatisfaction leading to potential inefficiency in the management of company activities.	**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.
			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.	**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: - 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 devise career development plans for Pillar employees who want to get involved and who have the skills Alperia needs; - we have defined the succession plans for the individual BUs; - we have defined backups for some positions.
			RISK 6: OPERATIONAL – Risk of conflicting relationships between parties with the consequent impossibility of developing effective personnel policies.	**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.
			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	**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.

Scope Legislative Decree 254/2016	Material topics	Risk type	Risk	Mitigation/observations monitoring
			awareness through targeted workshops.	
	Diversity and equal opportunity	**Strategic / operational**	**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.	**MITIGATION / CONTROL ACTION 1** – We want to attract more women into technical professions and managerial roles. We promote our company in the main schools and universities in the area, including through meetings with professional women who already work for 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.
			RISK 2: OPERATIONAL – Risk of work/life imbalance.	**MITIGATION / CONTROL ACTION 2** – We want to be a family-friendly company for both men and women. For this reason, we promote reduced and flexible hours for our employees. As a result of the measures we have adopted, we have been awarded the Family and Work Audit certification from the Family Agency of the Autonomous Province and the Chamber of Commerce. Furthermore, in 2020, following COVID-19, we introduced remote working and involved female 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.
Combat corruption	**Anti-corruption**	**Operational**	**RISK 1: OPERATIONAL** – Risk of failure to monitor processes and activities with a risk of corruption between private individuals and in relationships with the public administration, as well as relationships with related parties.	**MITIGATION / CONTROL ACTION 1** – We want to minimise the phenomenon of active and passive corruption between private individuals and conflicts of interest in relationships with the public administration. For this reason, we adopted the Management and Control Organisation Model pursuant to Legislative Decree 231/01 (active corruption), implemented a whistleblowing procedure and follow a rigorous code of ethics.
Respect for human rights	**Supplier management/ diversity and equal opportunity/ occupational health and safety/ employee development**	**Operational**	**RISK 1: OPERATIONAL** – Risk of violating human rights.	**MITIGATION / CONTROL ACTION 1 –** Respect for human rights is fundamental for Alperia. We adopt a system of values based on transparency and respect for the dignity, equality and freedom of each individual. This is a commitment that we make both internally and externally, also with regard to supplier selection, to the extent that purchase contracts and the Group's General Terms and Conditions include a binding clause of respect for human rights (beginning with the respect and protection of human rights, occupational health and safety, as well as respect for the environment and sustainability). We are committed to providing a non-discriminatory working environment and equal opportunities for all Group employees, regardless of age, gender, linguistic origin or any disability. For Alperia this also implies the guarantee of equal pay and equal career opportunities for men and women. Every Alperia employee has the right to keep themselves informed and freely express their opinions, without being discriminated against for any reason (racial, political, religious).

GRI CONTENT INDEX {GRI 102-55}

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
GRI 101: Foundation 2016					
General Disclosures					
	Organisational profile				
GRI 102: General disclosures 2016	102-1 Name of the organisation	See chapter 'Who we are', pp. 12-16	none		
	102-2 Activities, brands, products, and services	See chapter 'Our corporate structure', pp. 13-15 and chapter 'Integrated strategy', pp. 17ff.	none		
	102-3 Location of headquarters	See chapter 'Who we are', pp. 12-16	none		
	102-4 Location of operations	See chapter 'Who we are', pp. 12-16	none		
	102-5 Ownership and legal form	See chapter 'Who we are', pp. 12-16	none		
	102-6 Markets served	See chapter 'Who we are', pp. 12-16	none		
	102-7 Scale of the organisation	See chapter 'Who we are', pp. 12-16 and Appendix 'Figure 1' and 'Figure 7'	none		
	102-8 Information on employees and other workers	See chapter 'Employees', pp. 99ff. and Appendix 'Figure 26'	102-8-b	not applicable	Split by region: Alperia is a regional 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', p. 16 and chapter 'Supplier management', pp. 64ff.	none		
	102-10 Significant changes to the organisation and its supply chain		none		There has not been any significant change in the supply chain.
	102-11 Precautionary principle or approach	See chapter 'Risks and opportunities', pp. 38ff.	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	102-12 External initiatives	See chapter 'Selected external initiatives', p. 15, chapter 'Investment in infrastructure', p. 45, chapter 'Sponsorship', pp. 90-91 and chapter 'Innovation, research and development', pp. 117ff.	none		
	102-13 Membership of associations	See chapter 'Associations', pp. 15-16	none		
	EU1 Installed capacity	See Appendix 'Figure 5'	none		
	EU2 Net energy output	See chapter 'Green energy supply', pp. 53-54 and Appendix 'Figure 6'	none		
	EU3 Number of residential and commercial customer accounts	See chapter 'Customer satisfaction', pp. 84ff. and Appendix 'Figure 18'	none		
	EU4 Length of above and underground transmission and distribution lines by regulatory regime	See chapter 'Our distribution network', pp. 54ff. and Appendix 'Figure 8'	none		
	Strategy				
	102-14 Statement from senior decision-maker	See chapter 'Letter to the stakeholders', pp. 4ff.	none		
	102-15 Key impacts, risks, and opportunities	See chapter 'Risks and opportunities', pp. 38ff. and chapter 'Legislative Decree 254/16: mapping and risk management' pp. 142ff.	none		
	Ethics and integrity				
	102-16 Values, principles, standards, and norms of behaviour	See chapter 'Who we are', pp. 12-16, chapter 'Corporate governance', p. 19, and chapter 'Disciplinary Code and Golden Rules', pp. 20-21	none		
	Governance				
	102-18 Governance structure	See chapter 'Corporate governance', p. 19, and chapter 'Governance tools', pp. 20ff.	none		
	Stakeholder engagement				
	102-40 List of stakeholder groups	See chapter 'Stakeholder management', pp. 28-29	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	102-41 Collective bargaining agreements	100% of total employees are covered by collective bargaining agreements.	none		
	102-42 Identifying and selecting stakeholders	See chapter 'Stakeholder management', pp. 28-29	none		
	102-43 Approach to stakeholder engagement	See chapter 'Stakeholder management', pp. 28-29 and chapter 'Transparent marketing and communication, pp. 89ff.	none		
	102-44 Key topics and concerns raised	See chapter 'Stakeholder Management', pp. 28-29	none		
	Reporting practice				
	102-45 Entities included in the consolidated financial statements	See Appendix 'Note on methodology', p. 178	none		
	102-46 Defining report content and topic boundaries	See chapter 'Materiality Matrix', p. 25	none		
	102-47 List of material topics	See chapter 'Materiality matrix', p. 25	none		
	102-48 Restatements of information	See Appendix 'Note on methodology', p. 178	none		
	102-49 Changes in reporting	See Appendix 'Note on methodology', p. 178	none		
	102-50 Reporting period	See Appendix 'Note on methodology', p. 178	none		
	102-51 Date of most recent report		none		April 2020
	102-52 Reporting cycle	See Appendix 'Note on methodology', p. 178	none		
	102-53 Contact point for questions regarding the report	See Appendix 'Contacts', p. 179	none		
	102-54 Claims of reporting in accordance with the GRI Standards	See Appendix 'Note on methodology', p. 178	none		
	102-55 GRI content index	See Appendix 'GRI content index', pp. 148ff.	none		
	102-56 External assurance	See Appendix 'Independent auditors' Report', pp. 173ff.	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', p. 133	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 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		
Indirect economic impacts					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management approach: economic value', p. 133	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', pp. 45ff., chapter 'Innovation, research and Development', pp. 117ff. 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', p. 132	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' pp. 64ff. 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', p. 133	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' pp. 43-44	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', pp. 43-44			

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
	207-3 Stakeholder engagement and management of concerns related to tax	See chapter 'Taxes' pp. 43-44	none		
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', pp. 136-137	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' p. 75 and Appendix 'Figure 7' and 'Figure 16'	none		
	302-4 Reduction of energy consumption	See chapter 'Investment in infrastructure', pp. 45ff. and chapter 'Sustainable products and services' pp. 126ff.	none		
	302-5 Reductions in energy requirements of products and services	See chapter 'Sustainable products and services' pp. 126ff.	none		
Water					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management approach: Water', pp. 134ff.	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' pp. 69ff. 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', p. 136	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', pp. 77ff. and Appendix 'Figure 17'	none		
	305-2 Energy indirect (Scope 2) GHG emissions	See chapter 'Emissions', pp. 77ff. and Appendix 'Figure 17'	none		
	305-3 Other indirect (Scope 3) GHG emissions	See chapter 'Emissions', pp. 77ff. and Appendix 'Figure 17'	none		
	305-4 GHG emissions intensity	See chapter 'Emissions', pp. 77ff. 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', pp. 77ff. and Appendix 'Figure 17'	none		
	305-7 Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	See chapter 'Emissions', pp. 77ff.	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', p. 132	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' pp. 64ff. 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', pp. 138-139	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', pp. 100ff. and Appendix 'Figure 27'	401-1-a / 401-1-b	not applicable	Split by region: Alperia is a regional company.
	401-3 Parental leave	See Chapter 'Diversity and equal opportunity', pp. 106ff. 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', p. 140	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', pp. 111ff.	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: employees Development', pp. 138-139	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', pp. 111ff., chapter 'Employee development', pp. 100ff. and Appendix 'Figure 28'	none		
	404-2 Programs for upgrading employee skills and transition assistance programs	See chapter 'The evolution of leadership and personnel', pp. 102-103			
	404-3 Percentage of employees receiving regular performance and career development reviews	See chapter 'The evolution of leadership and personnel', pp. 102-103 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', p. 139	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', p. 19, chapter 'Diversity and equal opportunities', pp. 106ff. and see Appendix 'Figure 30'	none		
	405-2 Ratio of basic salary and remuneration of women to men	See chapter 'Diversity and equal opportunities', pp. 106ff. 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', p. 132	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', p. 132	none		
	103-2 The management approach and its components		none		
	103-3 Evaluation of the management approach		none		
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	See chapter 'Supplier management' pp. 64ff. and Appendix 'Figure 13'	none		

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
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', pp. 137-138	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', pp. 89ff.	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 have been no such incidents.
	417-3 Incidents of non-compliance concerning marketing communications	See Appendix 'Figure 23'	none		There were no known incidents in 2020 of non-compliance with voluntary sponsoring and donation codes.
Alperia Own 2017	ALP 8 Complaints concerning communication and marketing that is not transparent		ALP8	not available	Currently, there is no centralised grievance mechanism in place. We have set a target to implement a centralised grievance mechanism by 2021.
Customer privacy					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management approach: Cybersecurity', p. 138	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', pp. 96-97 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', p. 132	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', pp. 53-54 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', pp. 54ff. and Appendix 'Figure 9'	none		
	EU28 Power outage frequency	See chapter 'Our distribution network', pp. 54ff. 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.

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part omitted	Reason	Explanation
Customer satisfaction					
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	See Appendix 'Management approach: Customer Satisfaction', p. 137	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', pp. 84ff. and Appendix 'Figure 19'	none		
	ALP2 Customer complaints	See chapter 'Customer satisfaction', pp. 84ff. and Appendix 'Figure 20'	none		
	ALP3 Customer satisfaction index	See chapter 'Customer satisfaction', pp. 84ff. 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', pp. 140-141	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', pp. 117ff. 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', p. 141	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', pp. 126ff. and Appendix 'Figure 36'	none		
	ALP5 Description of new business initiatives with sustainable products and services	See chapter 'Sustainable products and services', pp. 126ff.	none		
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' p. 134 and chapter 'Asset integrity', pp. 61-62	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', pp. 61-62	none		

FULL INDICATOR LIST

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

Territory

Economic development

Figure 1: Financial indicators {GRI 102-7}

	Unit	2020	2019[*1]	2018	2017	YtY variation
Revenues	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Net financial position	EUR	-394,993,918	-383,917,923	-387,653,511	-421,765,304	-3%

[*1]Data have been restated to align them to the new accounting method introduced in 2020.

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

	Unit	2020	2019[*5]	2018	2017	YtY variation
Direct economic value generated:	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Revenues	EUR	1,437,718,992	1,546,878,354	1,272,182,146	1,123,490,760	-7%
Economic value distributed:	EUR	1,375,769,723	1,490,245,497	1,228,491,345	1,121,559,780	-8%
*Operating costs[*1]*	EUR	1,196,350,493	1,327,594,723	1,067,875,802	962,787,064	-10%
	%[*4]	83.2	85.8	84.0	85.8	
Employee wages and benefits	EUR	77,068,468	73,093,184	68,525,722	67,720,277	5%
	%[*4]	5.3	4.7	5.4	6.0	
Payments to providers of capital	EUR	9,514,673	9,250,687	13,443,507	19,524,556	3%
	%[*4]	0.7	0.6	1.1	1.7	
*Payments to government[*2]*	EUR	90,180,251	78,524,074	76,939,902	69,869,747	15%
	%[*4]	6.3	5.1	6.0	6.2	
*Community investments[*3]*	EUR	2,655,837	1,782,828	1,706,412	1,658,137	49%
	%[*4]	0.2	0.1	0.1	0.1	
Economic value retained	EUR	61,949,269	56,632,857	43,690,801	1,930,980	9%
	%[*4]	4.3	3.7	3.4	0.2	

[*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.

Figure 3: Value for South Tyrol[1] {GRI 201-1}

	Unit	2020	2019	2018	2017	YtY variation
Employee wages and benefits	EUR	70,264,455	69,682,656	66,384,082	67,720,277	1%
	%	27	30	30	37	
Payments to government	EUR	90,951,387	78,524,074	76,939,902	69,869,747	16%
	%	35	33	35	39	
Dividends to local governments	EUR	33,300,000	26,000,000	24,000,000	15,200,000	28%
	%	13	11	11	8	
Community investments	EUR	2,655,837	1,782,828	1,706,412	1,658,137	49%
	%	1	1	1	1	
Local procurement	EUR	60,286,081	59,833,219	53,343,496	26,501,483	1%
	%	24	25	24	15	
Total value for South Tyrol	EUR	257,457,761	235,822,778	222,373,892	180,949,643	9%
	%	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.

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

Type:	Unit	2020	%	2019	2018	2017	YtY variation
Energy distribution	EUR	46,390,000	37	41,571,000	36,520,000	29,663,000	12%
Teleheating and services	EUR	11,251,000	9	13,059,000	6,866,000	8,596,000	-14%
Energy production – mandatory	EUR	27,529,000	22	19,078,000	17,147,000	13,663,000	44%
Energy production – stay in business	EUR	4,804,000	4	10,777,000	9,009,000	3,420,000	-55%
Smart Region	EUR	14,003,000	11	9,235,000	7,718,000	0	52%
IT infrastructure and digital projects	EUR	20,783,000	16	7,836,000	4,294,000	1,135,317	165%
Supply and trading	EUR	1,095,000	0.5	1,430,000	412,000	825,000	-23%
Facility investments	EUR	773,000	0.5	588,000	1,587,000	1,646,225	31%
Other investments	EUR	72,000	0	1,126,000	828,000	2,751,106	-94%
Total	EUR	126,700,000	100	104,700,000	84,381,000	61,699,648	21%

Security of supply

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

	Unit	2020	2019
Projected energy demand in South Tyrol in 2050[1]	GWh	4,303	4,144
Produced electricity from renewable sources by Alperia	GWh	5,061	4,326
Hydroelectric capacity[2]	GW	ca.1.4	ca.1.4
Capacity under construction[3]	GWh	3	0

[1]Data calculated based on data taken from the 'Piano Clima Energia-Alto Adige-2050' and 'dati statistici TERNA 2019'.
[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.

Figure 6: Net energy output broken down by primary energy source[1] {GRI EU2}

		Unit	2020	%[3]	2019	2018	2017	YtY variation
Total net produced electric energy		GWh	5,108		4,373	4,256	3,712	17%
thereof:	*Hydro*	GWh	4,772	90	4,044	3,961	3,344	18%
	Photovoltaic	GWh	19	0	22	21	24	-13%
	Cogeneration (gas/gasoline)	GWh	47	1	47	53	66	0%
	Biofuel	GWh	270	5	260	221	278	4%
Total net produced energy for heating[2]		GWh	222	4	217	199	195	2%
Total net energy output		GWh	5,330		4,590	4,455	3,907	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	2020	2019	2018	2017
Net produced energy from renewable sources	GWh	5,061	4,326	4,203	3,977
	%	95	94	94	94

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

	Unit	2020	2019	2018	2017	YtY variation
Electricity sold to end customers	GWh	5,372	5,423	3,994	3,212	-1%
thereof green-labelled electricity sold to end customers	GWh	2,015	1,813	1,891	657	11%
	%	38	33	47	20	
Trading	GWh	3,166	4,788	1,907	2,310	-34%
Thermal energy sold to end customers	GWh	222	217	199	195	2%
Natural gas sold to end customers	MSmc	421	464	367	328	-9%
thereof green-labelled gas sold to end customers	MSmc	3	1	0	0	330%
	%	1	0	0	0	

Figure 8: Distribution network[1] {GRI EU4}

Electricity distribution network	Unit	2020				2019				2018			
Length of transmission and distribution lines		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
High voltage	km	239	21	260	8%	233	19	252	8%	211	13	224	6%
Medium voltage	km	1,129	2,298	3,427	67%	1,171	2,144	3,315	65%	1,237	2,067	3,304	63%
Low voltage	km	1,097	4,167	5,264	79%	1,126	4,043	5,169	78%	1,155	3,945	5,100	77%
Total	km	2,465	6,486	8,951	72%	2,530	6,206	8,736	71%	2,603	6,025	8,628	70%

[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	2020	2019	2018	2017
	km	113	113	113	112

Municipalities supplied with electricity and gas out of a total of 116 South Tyrolean municipalities	Unit	2020	2019	2018	2017
	No. municipalities	96	96	98	98

Customers connected to the electricity grid	Unit	2020	2019	2018	2017	YtY variation
	No. PODs[2]	235,585	233,335	232,207	229,000	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	2020	2019	2018	2017	YtY variation
	TWh[3]	2.7	2.6	2.6	2.5	-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	2020	2019	2018	2017	YtY variation
Primary HV/MV substations	No.	37	37	36	33	0%
Secondary MV/LV substations	No.	4,131	4,121	4,112	4,025	0%
MV switching substation	No.	45	46	48	47	-2%

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

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

	Unit	2020	2019	2018	2017	YtY variation
SAIFI (Frequency of interruptions per customer)	No.	1.91	1.51	1.73	1.69	27%
SAIDI (Power outage duration per customer)	Minutes	29.82	28.07	27.36	20.74	6%

Asset integrity

Figure 10: Energy avaibility {GRI EU 30}

Availability factor *1		Unit	2020	2019	2018	2017
Energy source	Hydro	%	88.88	86.43	87.67	89.76
	Photovoltaic	%	not available	not available	not available	not available

Figure 11: Environmental incidents

	Unit	2020	2019	2018
Number of environmental incidents	No.	2	0	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

Figure 12: Proportion of spending on local suppliers[1] {GRI 204-1}

	Unit	2020	2019	2018	2017
Percentage of products and services purchased locally (based on expenditure in EUR)	%	36	35	27	34
Percentage of works purchased locally (based on total works expenditure)	%	72	42	36	41
Percentage of services purchased locally (based on total service expenditure)	%	20	39	22	51
Percentage of products purchased locally (based on total product expenditure)	%	21	18	19	15
Percentage of contracts awarded locally (based on number of contracts)	%	58	62	60	59

[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.

Figure 13: New suppliers that were screened using environmental and social criteria {GRI 308-1; GRI 414-1}

	Unit	2020[1]	2019	2018	2017
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).

Figure 14: Significant investment agreements and contracts that include human-rights clauses or that underwent human-rights screening[1] {GRI 412-3}

	Unit	2020	2019	2018	2017
Number of significant investment agreements and contracts that include human-rights clauses	No.	information unavailable	information unavailable	0	0
Percentage of significant investment agreements and contracts that include human-rights clauses	%	information unavailable	information unavailable	0	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".

Green Mission

Water

Figure 15: Water {ALP6; ALP 7}

	Unit	2020	2019	2018	2017	YtY variation
Water released for minimum flow	litres per second	38,919	38,926	38,883	38,178	0%
Incidents of non-compliance with MVF (minimum vital flow) requirements	No.	1	0	0	0	100%

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

	Unit	2020	%	2019	%	2018	%	YtY variation
Total energy consumption within the organisation from non-renewable sources:	TJ	1,168	32%	1,204	34%	1,117	36%	-3%
Gasoline	TJ	25	1%	78	2%	36	1%	-67%
Natural gas	TJ	738	20%	751	21%	741	24%	-2%
Electricity for own consumption (produced and acquired)	TJ	404	11%	375	11%	340	11%	8%
Total energy consumption within the organisation from renewable sources:	TJ	2,478	68%	2,340	66%	1,981	64%	6%
Palm oil	TJ	2,125	58%	1,997	56%	1,708	55%	6%
Wood chips	TJ	168	5%	173	5%	167	5%	-3%
Electricity for own consumption (produced and acquired)	TJ	185	5%	170	5%	106	4%	9%
Heat for own consumption (acquired)	TJ	-	0%	-	0%	-	0%	0%
Total energy consumption within the organisation	TJ	3,646	100%	3,544	100%	3,099	100%	3%

Figure 17: GHG emissions[1] {GRI 305}

	Unit	2020	2019	2018	YtY variation
Gross direct (Scope 1) GHG emissions[2]	tCO$_2$e	45,483	52,709	45,019	-14%
Biogenic CO$_2$ emissions[2]	tCO$_2$e	11,364	3,551	3,368	220%
Gross location-based energy indirect (Scope 2) GHG emissions[3]	tCO$_2$e	34,878	34,662	34,559	1%
Gross market-based energy indirect (Scope 2) GHG emissions[4]	tCO$_2$e	25,596	39,393	44,538	-35%
Gross other indirect (Scope 3) GHG emissions[5,7]	tCO$_2$e	2,833,961	32,096	27,931	8,730%
Total location-based operational (Scope 1 & 2) GHG emissions	tCO$_2$e	91,725	90,882	82,946	1%
Total market-based operational (Scope 1 & 2) GHG emissions	tCO$_2$e	82,443	95,653	92,925	-14%
Total GHG emissions location-based	tCO$_2$e	2,925,686	122,978	110,877	2,279%
Total GHG emissions market-based	tCO$_2$e	2,916,404	127,749	120,857	2,183%
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	
Operational GHG emissions intensity (Scope 1 & 2 – market-based) ratio for the organisation[6]	tCO$_2$e/MWh of produced energy (gross)	0.01	0.02	0.02	
Total GHG emissions intensity (Scope 1, 2 & 3 – location-based) ratio for the organisation[6]	tCO$_2$e/MWh of produced energy (gross)	0.55	0.03	0.02	
Total GHG emissions intensity (Scope 1, 2 & 3 – market-based) ratio for the organisation[6]	tCO$_2$e/MWh of produced energy (gross)	0.55	0.03	0.03	

[1]The main gases included are CO_2, CH_4, N_2O and SF_6.

[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 loses (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 tCO_2e) and non-renewable energy electricity (1,931,484 tCO_2e). 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	2020
Scope 1	%	2
Scope 2	%	1
Scope 3	%	97

Emissions avoided	Unit	2020
Scope 1[1]	tCO_2e	1,935
Scope 2[2]	tCO_2e	674
Scope 3[3]	tCO_2e	2,159,539
Total emissions avoided[4]	tCO_2e	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

Figure 18: Number of customer accounts[*1][*2] {GRI EU 3}

Type	Unit	2020	2019	2018	2017	YtY variation
Electricity customer accounts	No.	275,000	261,000	236,000	193,000	5%
Heating customer accounts	No.	1,844	1,772	1,716	1,674	4%
Gas customer accounts	No.	64,000	61,000	60,000	59,000	5%
Total customer accounts	No.	340,844	323,772	297,716	253,674	5%

[*1]Customer accounts = active connections to the grid (POD) as per 31 Dec.
[*2]Smart Region customer accounts are not included.

Figure 19: Monthly average of calls answered at toll-free number[*1] {ALP 1}

	Unit	2020[*2]	2019	2018	2017
Monthly average of calls answered – green number	%	96	97	97	97

[*1]Includes only calls made to the green number of ASS.
[*2]In 2020, we recorded a 65% increase in calls received at the call centre (base year 2019).

Figure 20: Customer complaints[*1] {ALP 2}

	Unit	2020	2019	2018	2017	YtY variation
Number of complaints within the reporting period	No.	448	403	533	587	11%
i. thereof number of complaints registered within the reporting period[*2]	No.	448	402	533	587	11%
ii. thereof number of complaints addressed within the reporting period[*3]	No.	446	401	533	587	11%
Number of unaddressed complaints including prior periods[*4]	No.	0	2	0	0	-100%
Resolution rate customer complaints within the reporting period, addressed within 30 days[*5]	%	99.3	100	100	100	
Complaint rate (no. of complaints per 100 clients)	Rate	0.13	0.13	0.18	0.23	

[*1]Includes only customer complaints from ASS. Complaints from GGP are not included.
[*2]One complaint was launched in 2019, but only registered in 2020.
[*3]Two complaints were registered in 2019 and addressed in 2020.
[*4]Four complaints which were registered in December 2020 and were addressed in January 2021.
[*5]As of 2019, response time is 30 days; for 2017 and 2018, response time was 40 days.

Figure 21: Customer satisfaction index {ALP 3}

	Unit	2020[*3]	2019	2018[*2]	2017
Customer satisfaction index[*1]	%	not available	not available	87	not available
Customer satisfaction index – clients business	%	not available	not available	85	not available
Customer satisfaction index – clients private	%	not available	not available	89	not available

[*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

Figure 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	2020	2019	2018	2017	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	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.

Figure 23: Incidents of non-compliance concerning marketing communications[1] {GRI 417-3}

Number of incidents of non-compliance concerning marketing communications	Unit	2020	2019	2018	2017	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

Figure 24: Customer privacy {GRI 418-1}

	Unit	2020	2019	2018	2017	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%

Figure 25: Other indicators related to cybersecurity

	Unit	2020	2019	2018	2017	YtY variation
During the year, Alperia's protection systems blocked (daily average):						
spam emails	No.	2,000	4,000	3,000	5,000	-50%
malicious connection attempts	No.	1,000	6,000	22,000	20,000	-83%
Each month, Alperia identifies and blocks an average of:						
viruses	No.	530	2,930	70	17	-82%
pieces of spyware (software that collects information about a user's online activity)	No.	27	31	40	22	-13%
malicious, suspicious or prohibited internet activities	No.	2,800,000	2,000,000	1,000,000	600,000	40%
malicious or unauthorised applications	No.	360	200	120	80	80%
malicious or prohibited items of content	No.	54,000	250,000	250,000	300,000	-78%

Employees

Employee development

Figure 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	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017	2020	2019	2018	2017
Women	Persons	261	230	195	193	244	211	182	189	17	19	13	4	173	147	121	119	88	83	74	74
	%	24	23	21	21	22	21	19	20	2	2	2	0	16	14	13	13	8	8	8	8
Men	Persons	826	787	750	747	779	750	708	730	47	37	42	17	807	769	729	726	19	18	21	21
	%	76	77	79	79	72	73	75	78	4	4	4	2	74	76	77	77	2	2	2	2
Total[1]	Persons	1,087	1,017	945	940	1,023	961	890	919	64	56	55	21	980	916	850	845	107	101	95	95
	%	100	100	100	100	94	94	94	98	6	6	6	2	90	90	90	90	10	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 for 2019 are calculated for total employees, whereas in the 2018 Sustainability Report they were calculated for employment contract/type.

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

New employee hires		Total					under 30	31-40	41-50	51+
	Unit	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	26	21	13	9	24%	9	11	6	0
	%	30	28	22	26					
Men	Persons	62	54	46	25	15%	25	25	11	1
	%	70	72	78	74					
Total new employee hires	Persons	88	75	59	34	17%	34	36	17	1
Total headcount per 31 Dec.	Persons	1,087	1,017	945	940	7%				
New employee hire rate	%	8	7	6	4					

*1Hydrodata 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	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	19	7	10	4	171%	5	5	4	5
	%	24	12	19	10					
Men	Persons	60	52	44	36	15%	9	8	8	35
	%	76	88	81	90					
Total employee turnover	Persons	79	59	54	40	34%	14	13	12	40
Total headcount per 31 Dec	Persons	1,087	1,017	945	940	7%				
Employee turnover rate	%	7	6	6	4					

[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.

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

Average training hours per employee – gender

	Unit	2020	2019	2018	2017	YtY variation
Women	Hours	17.1	15.9	14.9	not available	7%
Men	Hours	20.4	21.6	19.7	not available	-6%
Total	Hours	19.6	20.3	18.7	not available	-4%

Average training hours per employee – employee category

	Unit	2020	2019	2018	2017	YtY variation
Top management (directors and direct reports)	Hours	34.1	28.2	31.5	not available	21%
Middle management (2nd and 3rd level)	Hours	33.2	25.3	28.4	not available	32%
Employees	Hours	16.4	19.2	16.5	not available	-14%

Figure 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	2020	2019	2018	2017
Women	%	3	3	4	0
Men	%	2	3	3	0
Total	%	2	3	4	0

Percentage of employees receiving regular performance and career development reviews – employee category

	Unit	2020	2019	2018	2017
Top management[2]	%	5	19	36	100

Middle management[*3]	%	11	15	9	0
White-collar and blue-collar employees	%	1	0	1	0

[*1]Currently only newly approved Career Development Reviews are included. 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]Includes directors and direct reports.
[*3]Includes 2nd and 3rd level reports.

Diversity and equal opportunity

Figure 30: Diversity of governance bodies and employees {GRI 405-1}

Diversity of governance bodies[*1]		Total					under 30	31-40	41-50	51+
	Unit	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	5	5	4	4	0%	0	0	1	4
	%	42	42	33	33		0	0	8	33
Men	Persons	7	7	8	8	0%	0	0	1	6
	%	58	58	67	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	2020	2019	2018	2017	YtY variation	2020	2020	2020	2020
Women	Persons	261	230	195	193	13%	30	96	76	59
	%	24	23	21	21		3	9	7	5
Men	Persons	826	787	750	747	5%	88	234	195	309
	%	76	77	79	79		8	22	18	28
Employees with disabilities	Persons	24	23	24	29	4%	1	4	8	11
	%	2	2	3	3		0	0	1	1
Total	Persons	1,087	1,017	945	940	7%	118	330	271	368
	%	100	100	100	100		11	30	25	34

Figure 31: Ratio of basic salary and remuneration of women to men {GRI 405-2}

Ratio of basic salary and remuneration of women to men	Unit	2020	2019	2018	2017[*4]
Top management[*1]	Ratio	0.62	0.69	0.77	0.78
Middle management[*2]	Ratio	1.07	1.03	0.93	1.06
White-collar employees	Ratio	0.92	0.95	0.87	0.83
Blue-collar employees[*3]	Ratio	not applicable	0.78	0.62	0.75

Percentage of female employees per category	Unit	2020	2019	2018
Top management[*1]	%	20	19	12
Middle management[*2]	%	18	17	15

	Unit	2020	2019	2018
White-collar employees	%	35	33	32
Blue-collar employees[3]	%	0	0,4	0,4

Percentage of employees per category based on total number of employees	Unit	2020	2019	2018
Top management[1]	%	8	8	6
Middle management[2]	%	11	10	10
White-collar employees	%	58	57	57
Blue-collar employees[3]	%	24	25	26

[1]Includes directors and direct reports.
[2]Includes 2nd and 3rd level reports.
[3]Data not representative, as there is only one woman in this category, who is not a specialised worker.
[4]Data was restated due to a change in calculation methodology.

Figure 32: Parental leave[1] {GRI 401-3}

		Men				Women			
	Unit	2020	2019	2018	2017	2020	2019	2018	2017
Total number of employees that were entitled to parental leave[2]	Persons	30	25	16	42	11	12	7	13
Total number of employees that took parental leave[3]	Persons	19	21	14	17	11	12	7	13
	%	63	84	88	40	100	100	100	100
Total number of employees planned to return to work in the reporting period (2020) after parental leave ended	Persons	17	21	14	17	3	6	7	8
Total number of employees that returned to work in the reporting period (2020) after parental leave ended	Persons	17	21	14	17	2	2	6	8
Return-to-work rate[4]	%	100	100	100	100	67	33	86	100
Total number of employees that returned to work in 2019 after parental leave ended that were still employed 12 months (ending in the reporting period 2020) after their return to work	Persons	19	14	15	9	3	6	6	4
Retention rate[5]	%	90	100	88	100	150	100	75	100

[1]Based on the entitlements with starting date after 1/1/2020.
[2]Based on total entitlements known to the employer with starting date after 1/1/2020.
[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 is higher than 100% due to the fact that an employee from a newly acquired business was included in 2020 and not in 2019.

Figure 33: Work-related ill health {GRI 403-10}

Employees	Unit	2020	2019	2018	2017	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.	16,698	11,729	10,033	10,717	42%
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%

	Unit	2020	2019	2018	2017	YtY variation
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.	1,721,452	1,613,516	1,454,474	1,396,937	7%
Hours scheduled to be worked	No.	2,086,963	1,950,015	1,822,584	1,824,863	7%
Absentee rate (absentee days per 1,000 hours worked)[3]	Rate	8.0	6.0	5.5	5.9	33%

[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	2020	2019	2018	2017	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.

Health and safety at work

Figure 34: Work-related injuries {GRI 403-9}

Employees[1]	Unit	2020	2019	2018	2017	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.	14	14	13	13	0%
Injuries that result in restricted work or transfer to another job	No.	not applicable	not applicable	not applicable	not applicable	
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.	1,721,452	1,613,516	1,454,474	1,396,937	7%
Lost work days[5]	No.	320	427	293	192	-25%
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	8.13	8.68	8.94	9.31	-6%
Lost-day rate (per 1,000 h)	Rate	0.19	0.26	0.20	0.14	-30%

Contractors[*1]	Unit	2020	2019	2018	2017	YtY variation
Fatalities	No.	0	0	0	not applicable	0%
High-consequence work-related injuries (excluding fatalities)[*2]	No.	0	0	0	not applicable	0%
Injuries that result in days away from work	No.	16	2	1	not applicable	700%
Injuries that result in restricted work or transfer to another job	No.	not applicable	not applicable	not applicable	not applicable	
Injuries that result in medical treatment[*3]	No.	0	0	0	not applicable	0%
Other significant injuries diagnosed by licensed healthcare professional[*4]	No.	0	0	0	not applicable	0%
Hours worked	No.	770,223	656,616	584,353	not applicable	17%
Lost work days[*5]	No.	73	86	13	not applicable	-15%
Rate of fatalities as a result of work-related injury (per 1,000,000 h)	Rate	0.0	0.0	0.0	not applicable	0%
Rate of high-consequence work-related injuries (per 1,000,000 h)	Rate	0.0	0.0	0.0	not applicable	0%
Rate of recordable work-related injuries (per 1,000,000 h)	Rate	20.77	3.05	1.71	not applicable	582%
Lost-day rate (per 1,000 h)	Rate	0.09	0.13	0.02	not applicable	-28%

[*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.

Development and innovation

Innovation, research and development

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

	Unit	2020	2019	2018	2017	YtY variation
Number of employees working on R&D projects	Persons	110	88	46	not available	25%
Employee hours on R&D projects	Hours	not available	not available	not available	not available	
Total R&D expenditure	EUR	2,148,484	1,560,934	1,056,717	1,554,248	38%
thereof						
EU projects	EUR	185,223	167,293	393,169		
other Innovation projects	EUR	1,963,262	1,393,641	663,548		

Figure 36: Sustainable products and services[*1] {ALP 4}

	Unit	2020	2019	2018	2017
Share of revenues with sustainable products and services	%	46	40	49	46

[*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.

INDEPENDENT AUDITORS' REPORT {GRI 102-56}

ALPERIA SPA

INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10, OF LEGISLATIVE DECREE NO. 254/2016 AND ARTICLE 5 OF CONSOB REGULATION NO. 20267 OF JANUARY 2018

YEAR ENDED 31 DECEMBER 2020

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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

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 (hereafter the "Group") for the year ended 31 December 2020 prepared in accordance with article 4 of the Decree and approved by the Management Board on 31 March 2021 (hereafter the "NFS").

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 2019, by the GRI - Global Reporting Initiative (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 standard.

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* (hereafter "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.

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4. Understanding of the following matters:
   - business and organisational model of the Group with reference to the management of the matters specified by article 3 of the Decree;
   - policies adopted by the Group with reference to the matters specified in article 3 of the Decree, actual results and related key performance indicators;
   - 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 Ecoplus Srl and Edyna 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 Ecoplus Srl and Edyna 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.

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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 Dcember 2020 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.

Trento, 20 April 2021

PricewaterhouseCoopers SpA

Signed by   *Signed by*

Alberto Michelotti   Paolo Bersani
(Partner)   (Authorised signatory)

This report has been translated from the Italian original solely for the convenience of international readers. We have not performed any controls on the English translation of the NFS 2020 of Alperia Group.

NOTE ON METHODOLOGY {GRI 102-45, 102-48, 102-49, 102-50, 102-51, 102-52, 102-54}

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 2020 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 2020 Consolidated Financial Statements

Business Unit	Company	Investment (%)	Plants (No.)
Parent company	Alperia S.p.A.		
Energy production	Alperia Greenpower S.r.l.	100	32 hydroelectric power plants; 7 photovoltaic systems (Bolzano)
	Ottana Solar Power S.r.l.	100	1 photovoltaic park
	Alperia Vipower S.p.A.	77	2 hydroelectric power stations
Sales & trading	Alperia Trading S.r.l.	100	
	Alperia Smart Services S.r.l	100	
	Alperia Sum S.p.A.	70	
Networks	Edyna S.r.l.	100	
	Edyna Transmission S.r.l.	100	
Heat & services	Alperia Ecoplus S.r.l.	100	5 district heating plants
	Biopower Sardegna S.r.l.	100	1 biomass power plant
Smart Region	Alperia Fiber GmbH	100	
	Alperia Bartucci S.p.A.	60	
	Hydrodata S.p.A. (NEW)	50.51	
	Alperia Innoveering S.r.l. (NEW)	51	
	Gruppo Green Power S.r.l.	100	
	Unix Group S.r.l.	100	
	Bluepower Connection S.r.l.	100	
	Green Energy Group S.r.l.	100	

The companies Gruppo Green Power S.r.l., Bluepower Connection S.r.l. and Green Energy Group S.r.l. were merged into the Alperia Group in 2019. Group-level data integration has not yet been fully implemented. Data have not been consolidated in the following areas:

- Customer satisfaction
- Marketing and transparent communication

Hydrodata S.p.A. was merged into the Alperia Group in 2020. Group-level data integration has not yet been implemented.

A change in the accounting methodology for financial data in 2020 has led to the recalculation of 2019 values in order to make them comparable to 2020 data. For this reason, the values for 2019 have been restated in the following chapters:

- Integrated strategy
- Economic value

The Alperia Sustainability Report is published annually. The report has been prepared in accordance with GRI Standards: Core Option.

CONTACTS {GRI 102-53}

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