English version

Sustainability Report 2024

Financial year 2023

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Presentation

"Once again this year, Arvedi AST publishes its fifth Sustainability Report to share with stakeholders the strategies taken by the company in its environmental transition. 2023 saw the start of the process to obtain **ResponsibleSteel** certification, the global sustainability certification programme for the steel industry. In 2024, the certification arrived, proudly making Arvedi AST **the first company in Italy** to operate to this standard. An ambitious and prestigious goal, which is only the stage of a journey: **net zero to 2050**. The aim is to anticipate this as soon as possible, while pushing ahead with the decarbonisation plan and maintaining competitiveness.

Browsing through the report, the 2023 data shows this. In summary: **- 7.2%** of direct CO_2 emissions; **86%** of the water used is recycled; **90.1%** of the metal produced is recycled; a total of **1,280,000 t** of greenhouse gas emissions are avoided. Also confirming a strong focus on ESG principles, we emphasise that the issue of safety in the workplace is the topmost value at AST. A culture that we cultivate every day in the company and which allows us to record an accident frequency rate that is **60%** lower than the steel industry average.

Arvedi AST's goal is growth: through a major investment plan, **one billion Euro by 2030**, and an expansion of the production range. What worries us is the global scenario and the repercussions on costs, starting with **energy** – the main obstacle for our competitiveness. In addition to this, there are other issues to be discussed at a European level, such as scrap: we need institutional tables at EU level to act to limit the export of stainless steel scrap from Europe to third countries, as this is a strategic raw material, fundamental for the decarbonisation of the sector. Another topic was the wish for the Carbon Border Adjustment Mechanism (CBAM) to be strengthened in order to defend the European market for stainless steel flat products from Asian competition.

The company, which became part of the Arvedi Group in 2022, is one of Europe's most important integrated-cycle steelmaking sites in the stainless steel sector. Turnover exceeds **Euro 2 billion**, more than **2,200** people are employed, and the company produces **one million tonnes** of stainless steel. A company with a **140-year** history based on a passion for outstanding steel. A passion that we continue to develop with a spirit of innovation and a sense of responsibility towards employees, the community and the environment around us.

Dimitri Menecali, engineer
AD Arvedi AST

WE COMBINE 140 YEARS OF EXPERIENCE
WITH THE INNOVATIVE DNA OF THE ARVEDI GROUP

140 YEARS OF HISTORY

In 1884 Terni entered the history of iron and steel production, with the development of the largest industrial complex in all of Italy. A steel mill which becomes the symbol of the modern turning point for the Italian industry.

STRENGTHENED BY A GREAT HISTORY

WE ARE BUILDING A SUSTAINABLE FUTURE

HIGHLIGHTS 2023

PRODUCTION	941,547 tonnes
TURNOVER	2,272,687,319 Euro
EMPLOYMENT	2,212 employees
INTENSITY OF DIRECT CO_2 EMISSIONS	-6.9% compared to the previous year
ENERGY INTENSITY	-4.2% compared to the previous year
WASTE	-15% waste generated in relation to production
RECYCLED METAL CONTENT	90.1%*
RECYCLED WATER	86%
GREENHOUSE GAS EMISSIONS AVOIDED	1,280,000 t thanks to the use of recycled metals

*calculated with respect to solid steel production (slabs) and without including metals recovered from internal steelworks processes, in accordance with Standard 14021

HIGHLIGHTS 2023

RESPONSIBLE STEEL	First Italian company to obtain certification
WASTE RECOVERY	The first-of-its-kind project in Europe
OCCUPATIONAL SAFETY	Rate of accident frequency is 60% less than the iron and steel industry average
TURN URBAN RE-GENERATION	The district for sustainability in the Terni area

Arvedi

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Transparency and social responsibility

Transparency and social responsibility

Although it is not a legal obligation for our company, we are presenting a sustainability report again this year, thus confirming a strong focus on corporate social responsibility and ESG factors. This choice constitutes an act of transparency towards stakeholders and, at the same time, a tool to support corporate strategies in the scenario of ecological transition and sustainable development. The sustainability report (hereinafter also referred to as 'Report') of Arvedi AST (hereinafter also referred to as 'Arvedi AST' or 'AST') contains information relating to the company's impact on the environment, the economy and people, as well as illustrating the sustainability strategy and how, through it, it intends to contribute to the European Union's ecological transition and the United Nations' sustainable development goals.

1.1 Report guide

Reporting period

The reported information refers to financial year 2023 (1 January - 31 December). The data are compared, where possible, with those of previous years in order to be able to assess the evolution of performance; it should be noted, in this regard, that as of 1 January 2023 the pipe factory division was spun off, creating the subsidiary Tubificio di Terni Srl. The report also contains information on certain events after the end of the financial year.

Reporting guidelines and standards

The report was prepared with reference to the 'GRI Sustainability Reporting Standards' published by the Global Reporting Initiative, as indicated in the 'GRI content index' table, which provides evidence of the coverage of GRI indicators associated with each sustainability theme reported.

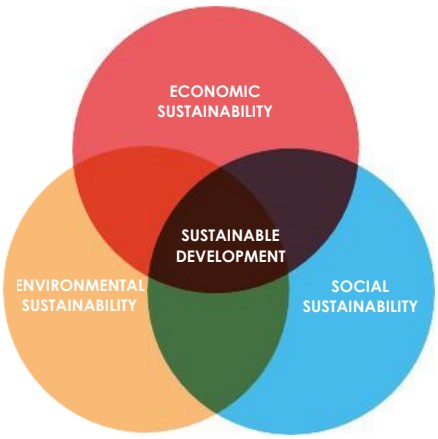
On 1 January 2023, the new GRI Standards, published in October 2021, came into force. The aim is to improve the way organisations report their environmental, social and economic impacts, thereby also improving the quality and consistency of sustainability reports. Compared to the previous GRI Standards 2016, the new Standards have been further aligned with key international references on human rights and sustainability, including:

- United Nations guiding principles on business and human rights
- OECD guidelines for multinational enterprises
- OECD due diligence guidelines for responsible business conduct
- international ILO standards
- ICGN global governance principles

GRI reporting standards enable any organisation to understand its ESG (environmental, social and governance) impacts and to communicate information about their management and the organisation's performance in a transparent and comparable way.

Circularity indicators

In view of the significant role that Arvedi AST's activities play in the transition to a circular economy, some circularity performances are also reported with reference to UNI/TS 11820 technical specifications and ESRS related to the European CSRD directive.



The United Nations' Agenda 2030

The reporting of corporate activities refers to the sustainability goals of the UN 2030 Agenda. Arvedi AST's sustainability activities and strategies are significantly relevant with regard to the following objectives:

- Decent work and economic growth (Goal 8)
- Industry, innovation and infrastructure (Goal 9)
- Sustainable cities and communities (Goal 11)
- Responsible consumption and production (Goal 12)
- Climate action (Goal 13)

1.2 Materiality analysis

The materiality analysis allows the identification of the most relevant sustainability issues (material topics) considering the views of the company and stakeholders. The issues to be considered as material, i.e. most important and significant from the point of view of sustainability, are identified through an assessment of the actual and potential impacts on the economy, environment and people resulting from the company's activities.

The materiality analysis for the Arvedi AST sustainability report carried out in previous years was confirmed for 2023.

The company undertakes to update it periodically with the aim of incorporating methodological updates and evaluating possible changes to the list of material topics according to the evolution of the scenario in which it operates, trends and emerging issues.

CORPORATE GOVERNANCE AND SUSTAINABILITY STRATEGIES

- Company development
- Ethics and corporate governance
- Sustainability strategies and goals
- Supply chain sustainability
- Technology and innovation
- Human rights
- Anti-corruption and legality
- Relations with public and private stakeholders

ENVIRONMENTAL SUSTAINABILITY

- The efficient use of materials and the circular economy
- Efficient use of energy and energy transition
- Product safety and quality
- Greenhouse gas emissions and climate action
- Waste
- Water
- Air quality
- Protecting biodiversity

SOCIAL RESPONSIBILITY

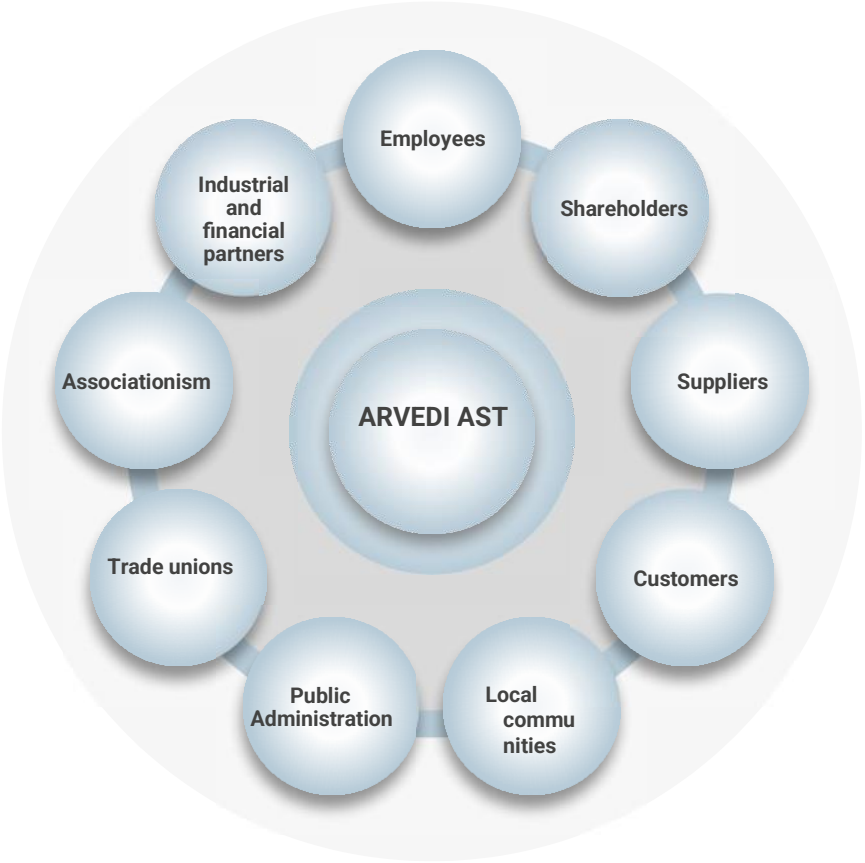
- Work and employment
- Occupational health and safety
- Equal opportunities
- Training
- Corporate welfare
- Relations with the local community
- Social and cultural activities

1.3 Stakeholders

Arvedi AST considers it a priority to develop constant and transparent relations with all stakeholders, including in particular:

- Employees and collaborators
- Shareholders
- Customers
- Suppliers
- Local communities
- Public Administration
- Trade unions
- Social, cultural and environmental associations
- Industrial and financial partners

Arvedi AST's strategic role in the iron and steel sector entails dialogue with national institutions such as the Ministries of Enterprises and Made in Italy, Labour and Social Policies, the Environment and Energy Security, as well as with business associations such as Confindustria and Federacciai, to which Arvedi AST adheres.



Sustainability Report 2024

Arvedi

2

Our commitment to sustainability

2.1 Steel in the ecological transition

Steel, an absolutely indispensable resource for the economy, also plays a very important role in ecological transition and in building sustainable development. Stainless steel is crucial in accelerating the ecological transition in all industries. Arvedi AST works for an ever greener steel: in addition to reducing emissions and climate impact, our main goals are energy efficiency and circularity of production, with a high use of recycled materials.

- The use of steel is essential - not only in strategically important industrial fields such as mechanical engineering, construction, automotive, electrode production, and shipbuilding - but also in numerous applications necessary for the ecological transition: from renewable energy plants to green buildings, from water infrastructure to rail transport.
- Steel is the most recycled material in the world. Present in packaging, machinery, construction, cars, and a thousand everyday objects, it can be reused endlessly to generate new products without losing its original properties, so much so that it can be considered not simply 'recyclable' but a true 'permanent' material. It therefore plays a key role in the transition to a more circular economy.
- The iron and steel industry also plays an essential role in reducing CO2 emissions and in climate policies. The road to decarbonisation envisaged by the Green Deal and by the EU's climate-related goals will entail a profound transformation of the entire energy-intensive industry, with sizeable investments in new low carbon technologies. The Italian iron and steel industry, which has already strongly reduced its emissions since 1990, is committed to this direction. Adequate public policies to support the transition are also needed to ensure the competitiveness of European industry.
- The steel sector has great potential for innovation linked to research and new technologies. A constant effort for the application of the best available technologies has already made it possible, through the years, to greatly improve quality standards, reducing environmental impacts and energy consumption. Today, the application of new digital technologies and the road to "industry 5.0" make for the introduction of advanced automation systems, essential for the competitiveness and sustainability of the steel industry.
- The Italian iron and steel industry can be considered the 'greenest' in Europe. Since the post-World War II period our country, faced with a strong demand for steel and with good availability of ferrous scrap, has in fact favoured electric furnace technology. The Italian iron and steel industry now ranks first in Europe both in the recycling of ferrous scrap and in the use of electric furnace technology. This is why it is at the forefront of the path towards a circular economy and decarbonisation.

A KEY ROLE IN THE CIRCULAR ECONOMY

Also thanks to the fact that it permanently retains its particular properties (resistance, ductility, formability, resistance to corrosion for stainless steels), steel reaches very high recycling rates, which range from 75% for packaging to 85% for construction products and up to 90% for vehicles and machinery.

It is extremely strong and durable, with a very long life cycle; it is more easily separable than other materials in end-of-life products due to its physical properties (specific weight, magnetic properties); it is particularly suitable for reuse and regeneration.

Ferrous scrap is therefore a sort of inexhaustible mine, as steel can be recycled infinitely without losing its original characteristics.

In fact, once the service life of the product has ended, it can be reused for new products and new functions, transforming scrap through production processes with electric arc furnaces.

Circular economy can make it possible to save over 100 million tonnes of virgin raw materials at global level by 2025. According to estimates of the World Steel Association, by 2050 over 90% of the steel contained in consumer products will be recyclable.

In the past 50 years, the steel industry has made huge investments in research and technology to create new grades of advanced and ultra-resistant steel.

It has thus been possible to reduce the weight of many steel components by up to 40%, and optimising the weight of products is an integral part of a circular economy. Steel components, thanks to the ease of disassembly and separation, favour eco-design, reuse, regeneration. Furthermore, the residues of production processes, such as steel slag, can be exploited and used for new products in various sectors.

THE ENVIRONMENTAL BENEFITS **OF ELECTRIC ARC FURNACES**

Electric arc furnaces used by AST guarantee numerous environmental advantages compared to traditional furnaces:

- reduced energy consumption
- reduced CO_2 emissions
- reduced dust
- reduced water consumption
- limited noise

Arvedi

Arvedi AST TERNI

ESG

2.2 Sustainability strategy

By translating the three ESG (environmental, social and governance) principles into concrete objectives, Arvedi AST is committed to:

- reducing greenhouse gas emissions in accordance with the goals set in the 2015 Paris Agreement on Climate Change.
- increasing energy efficiency by adopting appropriate technologies, reducing heat losses, and optimising the management of processes, work times and raw material flows.
- pursuing the 'circular economy model' to manage waste and by-products generated during the production process in order to reduce environmental impact and maximise value recovery.
- curbing the use of water and other natural resources through the experimental application of innovative technologies and the optimisation of recycling systems.
- directing the commitment of governance towards compliance with the ethical principles, transparency and integrity declared in corporate policies, such as the Code of Ethics and Code of Conduct, and promoting a constructive dialogue with all stakeholders: employees, customers, suppliers, authorities, local communities and trade associations.
- supporting and promoting respect for human rights and key labour principles, in line with the principles of Responsible Steel and the United Nations Global Compact, by requiring suppliers to commit to equal opportunities, non-discrimination, fair remuneration, adequate training and healthy and safe work environments for their workers.

The full version of the ESG Sustainability Policy Statement can be found on the company's website.
(https://www.acciaiterni.it/wp-content/uploads/2023/10/Politica-ESG_28_09_2023_IT.pdf).

Sustainability at the core of the Industrial Plan

Environment, labour, safety and production relaunch are the highlights of AST's industrial plan. The plan envisages investments with the aim of a production relaunch that will increase steel production, while focusing on the decarbonisation of the production process and the construction of new plants. The waste recovery project initiated with the Finnish company Tarpojarvi Oj - strategic in terms of circular economy - is being further improved with the aim of ensuring even higher standards in terms of both the environment and the quality of the materials produced. From a social point of view, the commitment is not only to maintain employment levels but also to ensure development prospects in a strategic sector for the national economy.

Corporate social responsibility

Corporate Social Responsibility (CSR) is fully embedded in the corporate culture of Arvedi AST and emphasises its social responsibility profile. A tool that combines economic objectives with ethical ones, commercial performance with social performance to create value for the company and the ecosystem that revolves around it: employees, the territory, stakeholders.

Commitment to human rights

Arvedi AST supports and respects human rights in accordance with the UN Universal Declaration of Human Rights. Furthermore, with the Conflict Mineral Declaration and Policy, it supports the fight against violations of human rights and environmental decline for the extraction and placement on the market of certain minerals that originate from the geographical area known as "conflict region", which includes the Democratic Republic of the Congo (DRC) and neighbouring countries. The Securities and Exchange Commission (SEC) has issued standards that oblige suppliers to provide information on whether the products contain metals extracted in the eastern provinces of the Democratic Republic of the Congo (DRC) and neighbouring countries, where the extraction may, directly or indirectly, finance human rights violations or procure benefits for armed groups. Arvedi AST fully complies with these standards through its absolute commitment to avoid the use of minerals that are not "conflict free".

Arvedi AST also adopts the Extended Mineral Reporting Template (EMRT) created by the Responsible Minerals Initiative (RMI) to enable companies to disclose information about their supply chains, according to the OECD Guidelines on the responsible sourcing of minerals from conflict and high-risk areas.

CF CONFLICT FREE

Arvedi Group
Leaders in environmental sustainability

Just as in 1884, Terni was the protagonist of the second industrial revolution with the founding of the iron and steel site, after 140 years of history it is now the interpreter of a new revolution focused on sustainability, thanks to the impetus given by the Arvedi Group to affirm, in the ecological transition, an iron and steel model that respects the environment and at the same time focuses on innovation to strengthen competitiveness in the markets.

The Arvedi Group is at the forefront of the path towards environmental sustainability, so much so that in 2022 it obtained the international 'net zero emissions' certification (in all types of steel produced), making the steel mills the first in the world with zero CO2 emissions. An achievement which, together with the use of energy totally derived from renewable sources, the exclusive use of recycled raw materials and 99% of waste completely reused, make the Arvedi Group a benchmark for sustainability in the iron and steel sector.

Arvzero is the carbon steel produced by Acciaieria Arvedi in its Cremona plant and processed in all its factories in Cremona and Trieste. It is a steel specifically made to contribute to the reduction of climate-changing or greenhouse gases, produced and managed in such a way that all emissions directly dependent on its production are fully offset according to the parameters set by scope 1 and scope 2 of the Greenhouse Gas Protocol.
In Europe, the carbon intensity of flat-rolled products made by integrated cycle is about 2,100 kg of CO2 per tonne of steel produced. The carbon intensity of flat rolled products produced by Acciaieria Arvedi with electric furnace and ESP technology is 133 kg of CO2 per tonne of steel produced.

100% of the energy used comes from renewable sources. Non-avoidable emissions from the production process are offset through voluntary FORESTRY credits, i.e. the purchase of corresponding CO2 absorbed by new forestation through VCS credits, issued by the leading international standard VERRA.

Arvzero

Arvedi

2.3 Responsible Steel

In 2024, AST was awarded the ResponsibleSteel™ certification, the world's most prestigious sustainability certification programme for the iron and steel industry. AST thus becomes the first Italian steel producer to obtain the certification affirming that it operates according to the most advanced sustainability standards.

The Terni plant, including its Service Centre and Forging Division, have obtained 'core site certification' from the independent auditors DNV Italia. An independent assurance panel reviewed the DNV final audit report and came to the same conclusion as the audit team that Arvedi AST fulfils the ResponsibleSteel™ criteria. The standard is based on 12 principles with more than 200 requirements that set the benchmark for responsible steel production. The DNV audits examined countless aspects related to sustainability issues: governance and ethics; health and safety, human and labour rights; climate change, greenhouse gas emissions and biodiversity; responsible resource management and other environmental impacts; stakeholder involvement and local community relations.

ResponsibleSteel™ is the first international standard to establish certifiable requirements for the responsible processing and production of steel. Responsible Steel is a global non-profit initiative for multi-stakeholder standards and certifications, aiming to be a driving force in socially and environmentally responsible steel production. It was set up to promote and support responsible steel production by addressing the environmental, social and economic issues associated with the iron and steel sector. A wide range of stakeholders were involved in the process of creating the standard, including steel producers, non-governmental organisations, customers, trade associations, trade unions and other stakeholders.

The first Italian company to obtain Responsible SteelTM certification, an important milestone in our sustainability journey.

Annie Heaton CEO
ResponsibleSteel

"This first Responsible Steel site certification in Italy represents an important milestone for the steel industry and the Arvedi Group. Acciai Speciali Terni, a producer of EAF (electric arc furnace) stainless steel, has strong focus on circularity, aiming to reduce waste as much as possible by increasing the use of recycled scrap, reusing refractories and launching a waste recovery project. The plant has also set an ambitious interim target to reduce scope 1 and 2 emissions by 60% by 2028 on the way to a net-zero target by 2050. Equally significant, the plant has demonstrated clear commitment to the welfare of its workers, as evidenced by its solid governance procedures and health and safety policies."

Arvedi

Gian Luca Gigli
Chief Technical Officer
and managing director of AST

INTERVIEW ENG. GIAN LUCA GIGLI, CTO ARVEDI AST

How do you assess the Responsible Steel CERTIFICATION achieved by Arvedi AST?
CTO: For our company, obtaining Responsible Steel certification represents **a milestone** on the path towards sustainability. This recognition **reinforces our commitment** to increasingly responsible production by introducing compliance of all business processes with ESG criteria. The Responsible Steel certification ensures that our production site **meets the highest international sustainability standards**, based on multiple requirements covering social, environmental and governance aspects of steel production.
The certification process included **rigorous independent audits** performed by DNV, which reinforced its accuracy and helped us identify further areas for improvement.

What is THE GOAL of this certification, in the context of environmental, economic and social transition?
CTO: **The goal** is to ensure long-term value for all stakeholders and the local community.
It is not just a certification, but a **public declaration** of Arvedi AST's concrete commitment to produce steel with the well-being of people, the future of our planet and the sustainability of our company in mind. The commitments written in our **ESG Policy** are thus all concretely reflected. With the Responsible Steel certification, we reaffirm our commitment to **reducing greenhouse gas emissions**, aligning ourselves with the goals of the Paris Agreement and actively contributing to the fight against climate change.

How does this recognition affect CUSTOMERS' loyalty and the relationship with SUPPLIERS? CTO: This recognition allows us to be **seen as a global leader** in the responsible production of stainless steel, strengthening our position in the market and increasing the
loyalty of our **customers and partners**.
The company fully recognises the importance of 'responsible sourcing' to contribute to the production of 'sustainable steel' in line with the Responsible Steel criteria.

What benefits does it bring to the LOCAL COMMUNITY and to the EMPLOYEES of Arvedi AST?
CTO: The Responsible Steel certification certainly has a significant impact on **the local community where we are located and on our employees**. The certification guarantees that our

operations meet stringent sustainability standards, resulting first and foremost in a safer and more satisfying work environment for the **employees**. The benefits of the certification extend to the local community through a variety of concrete initiatives based on our commitment to promoting constructive dialogue with all **stakeholders**.

What are your FUTURE goals?

CTO: Looking to the future, we are determined in a process of **continuous improvement**. We are focusing on circularity, energy efficiency and increasing the use of low-carbon energy sources. We are also exploring new technologies and processes to further reduce our greenhouse gas emissions.

We intend to strengthen our commitment to **social responsibility,** and we intend to work closely with Responsible Steel to develop **new standards** and certifications that can guide the industry towards an increasingly sustainable approach.

Arvedi

2.4 Supply chain

Arvedi AST is committed to promoting and adopting sustainable and responsible practices at all stages of its supply chain. To this end, it asks its suppliers to fully comply with ESG principles and adopt sustainable practices, also starting from contractual clauses included in the general conditions of purchase of goods or services. The company asks suppliers to provide a formal declaration of their commitment to these principles, confirming that their company adopts sustainable and responsible practices in Arvedi AST supplies. Purchasing Management reserves the right to assess the adequacy of statements and actions according to the ESG principles and to discontinue or suspend supplies if serious or repeated violations of these principles and practices of sustainability and social responsibility are found.

Respect for the environment

AST requires suppliers to adopt production practices that minimise environmental impact, reducing greenhouse gas emissions, air, water and soil pollution, and promoting energy efficiency and sustainable use of natural resources. AST also calls for a commitment to comply with all applicable environmental laws and regulations including, where possible, taking additional measures to protect the environment.

Social responsibility

AST requires suppliers to ensure respect for fundamental human rights, including workers' rights, freedom of association, non-discrimination and the prohibition of child labour; to provide safe and healthy work conditions for all employees, ensuring compliance with occupational health and safety regulations; and to promote diversity, inclusion and equality of opportunities.

Corporate governance

AST suggests that suppliers manage their activities in an ethical and transparent manner, adopting sound corporate governance practices; promote anti-corruption and anti-money laundering by complying with all applicable laws and regulations; and maintain accurate and documented records of business activities, allowing for traceability of raw materials supplied.

THE SUPPLIER QUALIFICATION PROCESS AT THE CORE OF SUSTAINABLE TRANSFORMATION

AST is committed to promoting an increasingly sustainable supply chain by working with suppliers who share the principles of sustainability. To support this change, a supplier qualification process project was initiated, consisting of several steps, each of which contributes to selecting partners that guarantee high standards of sustainability. Through a supplier selection process, we went from 1,500 to 1,035 active suppliers, selecting sustainability-oriented partners and reducing the environmental and social impact of the supply chain. Through the Kralijc Matrix, the product classes and their suppliers were classified into 4 groups on the basis of 2 variables: the risk of failed supply and the strategic importance of these for the company. The assessment of the latter variable was not limited to economic or operational aspects but also carefully considered sustainability aspects such as environmental impact, worker health and safety, and the energy-saving potential of supplies.

This classification has made it possible to adopt targeted approaches and special strategies, ensuring sustainable resource management and differentiated attention to environmental and social risks, thus contributing to the construction of a responsible and sustainable supply chain. On this basis, the project concerning the qualification pathway was initiated, which consists of the following phases:

1. Application questionnaire
2. Financial soundness analysis
3. Access credentials
4. Prior evaluation questionnaire
5. Approval
6. Feedback to supplier

Already with the first questionnaire, information is gathered to assess the potential supplier's commitment to sustainability. Questions concerning the traceability of CO2 emissions, adherence to the United Nations Guiding Principles on Business and Human Rights and involvement in the UN Global Compact ensure the identification of suppliers who share the same sustainability principles as Arvedi AST. After verifying financial stability, technical requirements and special certifications are also required for certain product classes in order to ensure that partners have the necessary skills and technology to operate in a sustainable manner. In the approval process, for suppliers of strategic product classes, not only their quality and operational efficiency, but also their sustainable practices are assessed through audits at their sites. After approval, they are provided with detailed feedback on their performance, which is monitored through a vendor rating process, highlighting those suppliers that stand out for their commitment. By the end of 2024, the supplier qualification process will be operational for the first 4 phases.

Pending the full flow of supplier qualification, several actions have been implemented as early as the second half of 2023, focusing in this first phase on the following supplier types:

- suppliers operating in the company (co-located companies, service companies);
- providers of temporary employment;
- main suppliers of raw materials.

The actions carried out with regard to the above-mentioned stakeholders were:

- request to subscribe to the code of ethics and share ESG commitments;
- request for formal adherence to the principles of the Responsible Purchasing Policy (https://www.acciaiterni.it/wp-content/uploads/2023/10/Politica-acquisto-responsible_28_09_2023_EN.pdf)

In this first phase, the code of ethics was signed by 100% of the temp firms and 100% of the suppliers working in the company. Formal commitment to the principles of the responsible purchasing policy was signed by 69% of the selected raw material suppliers.

2.5 The sustainability district

An industrial city since the end of the Middle Ages, when several watermills operated in its territory, and then a leading figure of the industrial revolution in the second half of the 19th century - to the extent that it got the name “Italian Manchester” - today Terni is one of the most important industrial areas of our Country. It is no coincidence, therefore, that it is precisely in Terni that the project of a district for sustainability, circular economy and urban regeneration started with TURN - Urban Re-Generation.

Promoted by Confindustria Umbria and supported by the Fondazione Cassa di Risparmio di Terni e Narni, the project had 8 companies as the first founding core, including Arvedi Acciai Speciali Terni, operating in strategic sectors such as steel, renewable energy and green chemistry, allied in the name of sustainable development. To date, 31 companies are involved. TURN's strategic objective is to create a District of Sustainability, Circular Economy and Urban Regeneration, in an area aiming to attract investments oriented towards the search for a synthesis between urban, natural and business contexts. The project consists of three phases.

The first phase was aimed at mapping the good practices in environmental sustainability and circular economy of the 8 sponsor firms, based on 10 Building Blocks defined in accordance with the 17 sustainable development goals identified by the United Nations in the 2030 Agenda. In particular, the 10 Building Blocks were taken by the Sponsors as a reference for the development and implementation of initiatives in the fields of energy, sustainable development and greenhouse gas reduction. The second phase, which ended in April 2023, included:

- the sponsor firms implementing policies, investments and projects designed to further increase their sustainability, energy saving and greenhouse gas reduction performance;
- extending the network with the involvement of new businesses, especially small and medium-sized firms, whilst disseminating and extending the good practices implemented by the sponsor firms;
- in addition, an open and ongoing dialogue has been initiated with local administrations and communities, and communication initiatives will be promoted at national and international level financing the promotion of the territory and comparison with European best practices.

As part of the third phase, TURN's business network achieved in January 2024 the ambitious goal of being the first Italian industrial district to achieve ISO 37101 'Sustainable community management' certification.

Particularly significant are the aggregate results achieved annually by the 31 TURN companies, including:

- the abatement of about 71,000 tonnes of CO2 emitted into the atmosphere, equal to about 7% of the total emissions of the Terni-Narni industrial area;
- the reuse of almost 100% of production scrap and/or waste as raw material in the production cycle or sent for composting;
- production of electricity and thermal energy through co-generation, with reduction of up to 30% of the fuel used;
- the reduction of drinking water consumption by up to 100% thanks to the recirculation of process water and the recovery of rainwater;
- investment in research and development up to 10% of profits (over Euro eight million) to reduce atmospheric emissions and develop innovative and sustainable products;
- involvement of suppliers in projects for waste reduction and the optimisation of production/raw material supply processes;
- reduction by up to 65% of energy consumption for lighting, thanks to the use of LED lighting;
- implementation of dematerialisation and digitisation projects to reduce paper consumption;
- life cycle analyses of products, recognised by certifications such as EPD (Environmental Product Declaration), Carbon Footprint and Eco-Label, as well as numerous product certifications specific to each sector.

SUSTAINABLE DEVELOPMENT GOALS

The project is based on a Poster signed by the participating companies, consisting of ten points linked to the Sustainable development goals of the UN Agenda 2030.

1. Green regeneration of companies and recovery of abandoned areas to create culture and business.

2. Sharing decisions in order to create co-operative networks.

3. Transformation of waste and scrap into raw material to be reintroduced into production cycles

4. Spreading industrial innovation 'by contagion' to drive the territory towards regeneration

5. Support for culture and creativity as a driver of social innovation.

6. Total openness to all innovations, with a pragmatic approach and a long-term vision.

7. Investment in training and acceptance of the risk margins inherent in a development policy.

8. Sharing all regeneration processes with the community.

9. Construction of city networks and integrated territorial policies

10. Creation of a new innovative governance framework in which networking replaces hierarchy.

3

The company

Arvedi AST TERNI

3.1 Company profile

Founded in 1884, the Terni steelworks have always played a leading role in the national industrial landscape. Today Arvedi AST SpA is one of Europe's leading companies for the production and marketing of special steels and in particular stainless flat-rolled products. As of 2022, 85% of the share capital is held by the Arvedi Group SpA, headquartered in Cremona, and the remaining 15% by Thyssenkrupp Nederland Holding B.V, headquartered in Veghel (The Netherlands).
The Arvedi Group - with a production capacity of over 5 million tonnes, 6,400 employees and a turnover of around Euro 6 billion - is one of the most significant European players in the iron and steel industry. Thanks to the development strategies and investment policies implemented, it has modern and in some cases unique European plants, state-of-the-art technologies, specialised know-how and patents, and quality seals and approvals.
The core business of AST consists in rolled flat stainless steel: it is the largest of its kind in Italy and among the main producers in Europe. In addition to flat-rolled products, the company also produces special steel forgings and stainless tubes (the latter were produced directly until 2022; since January 2023, following a spin-off, they have been produced by the new company Tubificio di Terni, a wholly-owned subsidiary of Arvedi AST).

3.2 Productions

Arvedi AST is a leading manufacturer of flat-rolled stainless steel products with an integrated hot/cold production cycle. The production cycle, based on ultra modern technologies, includes electric arc furnaces, AOD/VOD converters, continuous casting, a hot rolling mill, systems for finishing with ecological pickling processes, Sendzimir cold rolling mills, Bright Annealing lines, including one equipped with Skin Pass and Stretch Leveller in line, and a tension leveller system, as well as numerous cutting and finishing lines.
The main products are hot and cold rolled coils and sheets of austenitic, ferritic and martensitic stainless steel, supplied in a wide range of surface finishes and formats. Arvedi AST also produces pre-painted stainless steels, which are manufactured at the Finishing Centre (from 2023 Terni Service Centre). The stainless steels produced by AST are used in numerous applications in transport, household appliances and domestic applications, construction and a wide range of industrial applications. The product range also includes large forgings for the energy, industrial and mechanical engineering sectors (Forging division) and welded stainless steel tubes for the automotive market, for which it is the industry leader, and for decorative and industrial use (until 2022 through the Tubes Division and from 2023 through its subsidiary Tubificio di Terni).

The production centre

Covering a surface of approximately 1,500,000 m^2, it is one of the main integrated production sites in the world. The integrated process makes it possible for the company to gather, in one site, all production stages and to guarantee high quality standards. Arvedi AST can also rely on a logistics service and sales force that serve customers in five continents.

THE PLANTS ARE CONCENTRATED ON AN AREA OF MORE THAN 1,500,000 m^2 AND COVER THE ENTIRE MANUFACTURING CYCLE BEGINNING FROM THE MELT

ELECTRIC FURNACES ARE USED TO PRODUCE AROUND 1 MILLION TONNES OF SPECIAL STEELS PER YEAR

THE CORE BUSINESS IS FLAT-ROLLED STAINLESS STEEL ARVEDI AST IS THE MARKET LEADER IN ITALY AND AMONG THE LARGEST PRODUCERS IN THE WORLD

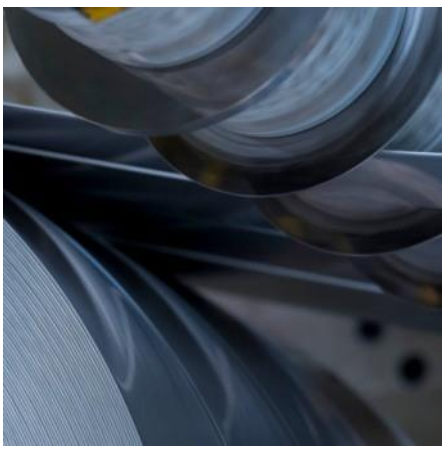
PRODUCTION (tonnes)	2023	2022
Stainless Steel Slabs	923,715	961,784
Forged items	17,832	15,019
TOTAL	**941,547**	**976,803**

The largest artefact ever made since 1884

A Guinness record for Arvedi AST. After complex processing steps, in November 2023 the largest product ever made since 1884 left the Forge Division for Germany: a cylinder weighing 270 tonnes to be installed on a rolling mill for sheet metal production.
It is the largest cylinder used in the world, which to date only a few Asian companies, apart from Arvedi AST, the only one in the West, are able to make.
In a special train over 64 metres long and a two-day journey, the cylinder left Terni for the port of Civitavecchia, where it was unloaded by a special port crane and loaded onto a cargo ship to the port of Rotterdam.

Service centres

In addition to the Terni Service Centre, Arvedi AST has a network of service centres with locations in Milan (Italy), Dortmund (Germany) and Cayirova/Kocaeli (Turkey). In order to restructure the service centres, it was decided to discontinue the production activity of the subsidiary AST Turkey Metal Sanayi Ticaret S.A. as of 31 December 2023 and to transform AST Deutschland into a commercial agency of Arvedi AST with the consequent cessation of transformation activities.



3.3 Product responsibility: quality and safety

Arvedi AST's quality policy aims at the highest product quality and customer satisfaction in accordance with the highest standards of ethical, social and environmental responsibility.
The products comply with international rules and regulations on chemical compositions, mechanical features, and surface finishes. In certain cases, Arvedi AST adopts even stricter standards. The products' safety is also guaranteed by consolidated quality management systems that have been certified by third-party bodies.
The quality management system is certified in accordance with ISO 9001:2015 through the 261796-2018-AQ-ITA-Accredia certificate issued by the certifying body DNV.
The Forging Division has been certified as a Material Organisation in accordance with the standard ASME NCA-3800 (nuclear). The certification was renewed in 2023 with validity to 2025. Already since 2021, the company extended the automotive principles to its Finishing Centre (from 2023 Terni Service Centre) by implementing a quality management system in accordance with the requirements of the IATF 16949 standard and obtaining the relevant certification.
The company also has ISO 14001:2015 certification for its environmental management system and ISO 50001:2018 for energy management.
Arvedi AST operates in compliance with the European directives REACH (protection of the environment and people from potential risks from chemicals) and RoHS (restriction of hazardous substances in electrical and electronic equipment).

Arvedi AST also holds special certifications for:

- products intended for the manufacture of pressured vessels;
- construction products;
- anti-slip features of diamond plates for flooring;
- minimum post-consumer scrap content for austenitic, ferritic and carbon steel;
- stainless steels for maritime uses.

All marketed products comply with European directives and national regulatory framework for food use.

Life cycle assessment and environmental product declaration

Following the LCA (Life Cycle Assessment) study started in 2023, EPDs (Environmental Product Declaration) highlighting the environmental performance of products, verified by an independent third party (DNV), are in preparation.

Product safety

With regard to product safety, the main risks can be attributed to the radioactivity risk and the risk of mix-ups. The radioactivity risk derives from the possibility that scrap originating from applications with a level of radioactivity higher than background radiation may be mixed in with the scrap loads and end up in the furnaces. Special measures are taken to prevent this risk: radioactivity detector panels at the entrances to the plant, radioactivity gauges on all vehicles handling scrap; analyses carried out at the chemical laboratory on samples taken from each casting. This makes it possible to identify the possible presence of even small quantities of radioactive or radioactively contaminated scrap. Should a scrap load be found to contain a radioactivity level higher than background radiation, a procedure is triggered that envisages the immediate segregation of the load, the removal and transport of the radioactive or radioactively contaminated component to the appropriate storage area far from the establishment, and the submission of a report to the competent authorities.

The term “risk of mix-ups” means the probability of a switch happening - at any stage of the cycle - that results in the end customer accidentally receiving a type of steel other than that ordered. This is a potential risk, especially in case the accidental switch involves lower performing steel being accidentally supplied in place of higher performing steel. Several measures are envisaged to prevent this risk: improvement of internal tracking systems for correct and certain identification throughout the slab and coil cycle; complete chemical analysis for antimix verification on all coil samples arriving at the mechanical testing laboratory; further verification on coils and verification of the consistency of weights between hot rolling mill exit and coil weight at the time of shipment; sampling also for all coils that undergo in-line reprocessing; chemical analysis using portable spectrometers at the plant's packing stations; cross-check between hot mill exit weights and weight at packing.

3.4 Governance

The corporate governance system adopted by Arvedi AST is based on the Board of Directors, whose Chairman, with powers under the law and the Articles of Association, also holds the legal representation of the company. Furthermore, in order to ensure better operational management, the company, following the guidelines of the reference shareholder and within the scope of management and coordination, in terms of corporate organisation, appoints delegated bodies (Managing Director and/or Chief Executive Officer), each with specific mandates and related powers.

BOARD OF DIRECTORS

Giovanni Amedeo Arvedi
Chairman

Mario Carlo Arvedi Caldonazzo
Deputy Chairman and Managing Director

Dimitri Menecali
Chief Executive Officer

Angelo Saracino
Managing Director

Gian Luca Gigli
Managing Director

Giancarlo Stringhini
Director

The Board of Directors is supported in its control functions by a Board of Auditors appointed by the shareholders' meeting.

BOARD OF STATUTORY AUDITORS

Pietro Carena
Chairman

Fabrizio Colombo
Standing Auditor

Andrea Parolini
Standing Auditor

System of procedures and delegations

The corporate governance system declines its effectiveness through the articulation of proxies and powers of attorney within the top organisation. The company has adopted a structured approach for the management of the system of delegations and authorisations that is based on the following principles:

- the powers conferred must be consistent with the organisation and with the role and responsibilities of the person granting and the person receiving the delegation;
- the conferral of unlimited powers must be avoided;
- where possible, the "four eyes" principle must be guaranteed (e.g. by joint signature, preventive or *ex post* information flows);
- the system of delegations and authorisations must be communicated and disseminated inside the organisation;

- the system of delegations and authorisations must be promptly updated following changes to corporate organisation and/or governance.

Delegations and functions in environment, health and safety, sustainability

In the field of environment, health and safety, sustainability, delegations of roles are updated in a timely manner to ensure timely compliance with legal obligations with particular reference to environmental protection, occupational safety, plant safety, as well as the management of control over all activities carried out within the company complex. The Sustainability Committee and the Sustainability Projects Body were also established in 2023. The technical coordination and reporting of sustainability projects are entrusted to the Sustainability Projects Body

Sustainability Committee

In order to ensure an even more structured management of sustainability issues, a body was established to steer top management decision-making towards ESG issues. The Sustainability Committee is the link between the Board of Directors and the roles dedicated to the implementation of the various projects. The main tasks of the Committee are as follows:

- oversee and evaluate the organisation's sustainability performance in light of Responsible Steel standards and applicable laws.
- Encourage the integration of sustainability into the business plan and corporate culture, promoting its disclosure at all levels.
- set ESG performance targets and monitor their execution.
- coordinate and monitor sustainability plans and projects and their KPIs.
- examine and approve the structure and content of the Sustainability Report.
- promote projects in the area of energy transition both at the level of process redefinition and at the level of product portfolio.
- identify the most suitable certification initiatives, ESG ratings and carbon disclosure processes to represent the organisation's commitment.
- collaborate with relevant departments within the organisation to implement sustainability initiatives.
- maintain effective communication with internal and external stakeholders on the organisation's commitment to sustainability.
- report periodically to the Board on progress towards sustainability goals and compliance with Responsible Steel standards.

Composition of the Sustainability Committee

Head of Sustainability at Arvedi Group level
Responsibility for the Arvedi AST site, assigned to the CTO (Chief Technical Officer)

Committee members are:

- Members of the Board of Directors
- Factory Manager
- Energy Manager
- Human Resources Director
- Director of Compliance and Governance
- HSE Manager
- Purchasing Manager
- External Relations Manager
- Head of Legal Affairs
- Head of Information Systems
- Research and Development Manager
- Head of Management Control
- Quality Assurance Manager

The corporate governance system adopted by Arvedi AST, in its compliance with the law, is supported by the Group Compliance and Governance department.

Group Compliance and Governance Department

For some time now, Arvedi AST has had a Compliance and Governance department responsible for reviewing and updating the company's body of regulations, by means of first-level Guidelines and Management Procedures, guaranteeing alignment between systems, processes and organisation, for a clear definition of roles and responsibilities in processes and to ensure the internal transposition of the principles enshrined in the AST Code of Ethics and the Arvedi Code of Conduct. It also oversees the development and updating of the Process Model, aimed at defining a common language across the Management System and Organisational Model 231/01, and provides support and coordination in the Business Continuity Model. The Compliance and Governance department provides support for due diligence activities on business partners (agents), suppliers, customers; it takes care of the analysis and updating of Organisational Models 231/01, Codes of Ethics and Conduct, and compliance statements on contracts of particular significance; provides support and coordination with the Supervisory Bodies of group companies.

3.5 Organisational model

The company has adopted an Organisation and Management Model pursuant to (It.) L.D. 231/2001, in order to prevent the risk of committing the offences envisaged by law. The Supervisory Board, appointed by the Board of Directors of Arvedi AST, is made up of three individuals endowed with autonomy, independence and professionalism, with the task of supervising the updating, functioning and observance of the provisions thereof. The Group Internal Auditing department, reporting directly to the Deputy Chairman, has the task of supporting the company in the assessment of the internal control and corporate risk management system; and in coordination with the Supervisory Body, also monitors the application of the procedures and tools adopted for the purposes of compliance of the Organisational Model with the requirements of (It.) L.D. 231/2001.
In the reference period, internal audits were carried out in regard to 231 on specific processes/crimes, in accordance with the supervisory plan established by the SB:

Audit	Date of issuance
Procurement	April 2023
Internal logistics	April 2023
Administrative management and personnel selection	December 2023
Legal and corporate affairs	February 2024

3.6 Code of Ethics

In the context of the sustainable modernisation process undertaken by Arvedi AST, the adoption of ESG (Environmental, Social and Governance) factors is the starting point for moving the company towards environmental transition. A renewal also confirmed by obtaining the core site certification of ResponsibleSteel™, the world's first certification standard for the iron and steel industry.

By resolution of 20 September 2023, Arvedi AST adopted a new version of the Code of Ethics, a document that integrates the Organisational Model pursuant to (It.) L.D. 231/2001. In the new Code of Ethics, the elements of the centrality of the individual, such as non-discrimination, fairness, inclusion and diversity, have been further developed, which are added to the Code of Conduct of the Arvedi Group, which contains the principles of business conduct according to the ethical values of responsibility, transparency, reliability, honesty, credibility and integrity. Among the governance tools, it is relevant to mention how Arvedi AST also adopts a reporting tool for all stakeholders, known as Whistleblowing, which is an integral part of a compliance system that allows the collection of useful reports to improve the system. AST promptly incorporated the legislator's indications in (It.) L.D.24 of 2023, in transposition of a European directive that introduced the whistleblowing tool fully into Italian law.

In parallel with the recent developments in the governance system, AST has consolidated and kept up-to-date, an internal body of procedures aimed at strengthening the internal controls outlined in its Organisational Model and integrated into the Company's various Management Systems, in order to consolidate the principles of legality and maintain the rules of good corporate governance.

The full version of the Code of Ethics can be consulted on Arvedi AST's online website (https://www.acciaiterni.it/art-231-codice-etico/), together with the Policy for the prevention of corruption (https://www.acciaiterni.it/wp-content/uploads/2023/04/Politica-per-la-prevenzione- corruption_firmata.pdf).

Corporate values and commitments

The task of the Compliance and Governance department is to clearly define the fundamental corporate values and commitments that guide the corporate culture, form the basis of policies and influence decisions and behaviour, ensuring the consistent application of these values in all areas of Arvedi AST. Commitment to the prevention of corrupt activities and adherence to the principles of transparency are of paramount importance to the Company, which adopts appropriate behaviour to ensure transparency in business operations. This commitment is also expressed to external stakeholders through the corruption prevention policy, available on the company website.

Internal regulatory corpus

The company has adopted a specific framework for defining the hierarchy of Quality Management System documentation, in order to ensure:

- alignment between the corporate mission, the Code of Ethics, the Guidelines, the Management Procedures, the operational Procedures and instructions, and all other internal regulatory documentation;
- effective and efficient Regulatory corpus.

In this regard, a multi-year programme was defined to update more than 100 documents, also with a view to rationalisation and harmonisation. In the period 2022- 2023, in addition to the issuance of the new Code of Conduct and the revision of AST's Code of Ethics, the following were issued/ revised/ updated: 4 Group Guidelines and 5 Quality Management Procedures.

Monitoring

The company constantly monitors the internal control system. Furthermore, to guarantee that business continuity, and fraud and corruption risks are monitored, the company has defined - adopting a process-based approach- the following control models:

- business continuity model;
- prevention of conflicts of interest*.

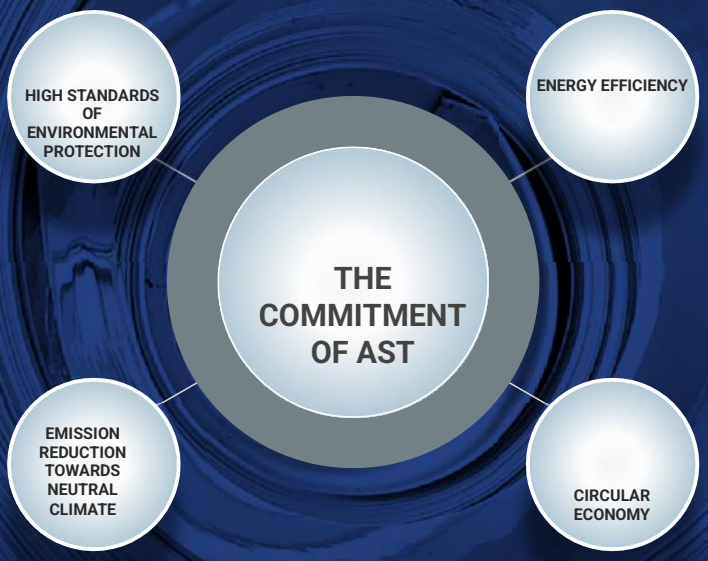
**The prevention of conflicts of interest is carried out by means of various instruments: the obligation for board members and top management to report any situation that may lead to a conflict of interest (this obligation is extended to 'executives', personnel belonging to departments or roles most exposed to risk and to all suppliers); information and training activities; analysis of suppliers to identify any interrelationships between them.*

GDPR (General Data Protection Regulation)

Within Arvedi AST's governance system, special attention is paid to compliance with the provisions of EU Regulation 2016/679. To this end, Arvedi AST, in cooperation with the Group's Legal Counsel, takes care of the adaptation of corporate tools to the requirements of the aforementioned regulation, ensuring the assessment and mitigation of privacy risks.

4

Environmental sustainability: an increasingly green steel mill



4.1 Environmental management

Care for the environment is an absolute priority for Acciai Speciali Terni, all the more so considering the location of its production site in a typically urban context, with high population density, like most industrial settlements dating back to the end of the 19th century. The proximity to the city centre has conditioned the history of the steelworks and has helped to stimulate the adoption of environmental self-regulation criteria, often earlier and more restrictively than required by current regulations.

On the basis of the ISO 14001:2015 Environmental Certification - renewed in 2023 following a successful DNV audit - AST continued the implementation of its Environmental Management System, in a continuous improvement-oriented logic that goes beyond the mere requirement of legislative compliance. The adoption of a "systemic" approach requires the involvement of all the organisations' bodies and departments, each with its own prerogatives and responsibilities, although the role of the corporate bodies EES ("Ecology, Environment and Safety") and ASE ("Service Area"), which are responsible for coordinating and implementing activities related to compliance with and improvement of environmental performance, obviously remains central.

In the implementation of the environmental management system, there is an increasing role for 'delegated managers', who, by virtue of specific formal delegations, and by analogy with what happens with regard to occupational health and safety obligations, are responsible, with adequate decision-making and spending power, for ensuring legislative compliance and implementing company directives within their areas of competence. ASE and EES also promote projects aimed at the proper management of waste materials (waste management through the special ANT/SMA department, and management and treatment of plant waste water) and the reduction of the environmental impact of production site activities. For the management of energy issues, the Energy Department has been in operation for some time, with the aim of developing projects aimed at optimising energy consumption and self-production initiatives.

The full version of the environmental policy statement is published on the company's online site *(https://www.acciaiterni.it/services-solutions/sistema-qualita/#dichiarazioni-di- policy)*.

ENVIRONMENTAL POLICY
GENERAL PRINCIPLES

- Compliance with legal requirements
- Principle of risk-based thinking
- Environmental and climate protection
- Reducing atmospheric emissions
- Prevention and reduction of pollution, spills, leaks, noise and vibrations
- Circular economy
- Sustainable development
- Skill and awareness
- Continuous improvement
- Communication

Certifications

The company adopts certification according to the ISO 14001:2015 standard for its environmental management system. The management system, subject to annual surveillance checks, aims at the continuous improvement of environmental performances to reduce environmental impacts as much as possible, save energy, and protect environmental resources. With regard to energy management, the company holds certification in accordance with the ISO 50001:2018 standard (DNV certificate No. 288012-2019-AE-ITA-ACCREDIA). In this way, the company wishes to develop a management system whose objectives are the improvement of performance, making the use of energy as efficient as possible, protecting the environment in compliance with the criteria of environmental, economic and social sustainability.

Transparency

The data from the continuous monitoring of emissions to the air are notified not just to the Regional Agency for the Protection of the Environment (ARPA), but also to the citizens through screens placed in the municipal library and in various points of the city of Terni. ARPA Umbria has created an App to enable everyone to access the data. Moreover, the company has activated a freephone service number for the environment, which citizens can call for information, reports, and clarifications.

Integrated Environmental Authorisation

In 2023, activities continued to fulfil the requirements of the Integrated Environmental Authorisation.

Risk prevention

The establishment is classified - pursuant to (It.) L.D. 105/15 (implementation of the "Seveso Directive") - as an existing upper-tier establishment due to the presence of hazardous substances (in particular, solutions containing hydrofluoric acid, dusts containing zinc oxide, sodium hypochlorite, gasolines, and naphthas). To prevent risks, the company:

- transmits the notification and the data sections by publishing them on the website of ISPRA [Higher Institute for Environmental Protection and Research], to ensure that all bodies are correctly informed;
- implements an appropriate safety management system; it has also planned operational controls on critical equipment and has provided for the constant planning of personnel information, training and education activities. The effectiveness of the management system is monitored through regular internal audits;
- drafts a detailed "Safety Report" which analyses all possible accidents and indicates the preventive and protective measures that have been adopted;
- has prepared an internal Emergency Plan taking into account the accident scenarios that have been analysed and deemed to be "credible" in terms of probability; it has provided the Terni Prefecture with the information required for drafting the external Emergency Plan for accident scenarios with a possible impact also outside of the establishment.

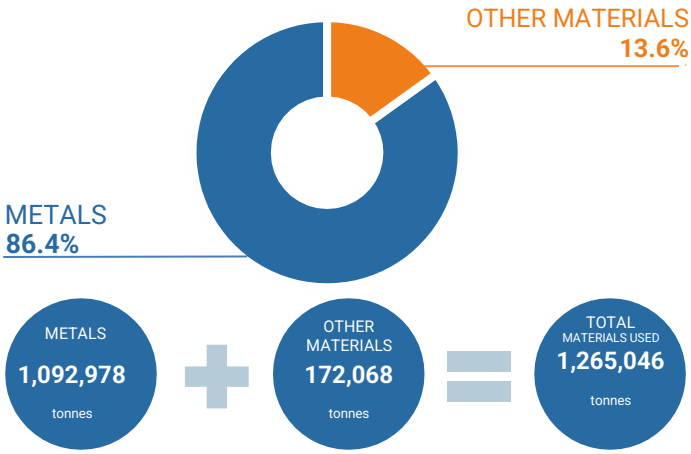
Noise

To check compliance with the limits requested by the acoustic zoning of the Municipality of Terni, the company periodically performs measurements on 9 receptors placed around the establishment, in agreement with the competent authorities. Soundproofing and noise abatement measures were implemented.

4.2 Tangible

The main materials used in the production cycle are stainless steel scrap, carbon steel scrap, ferro-alloys (containing chromium, nickel, silicon, titanium, niobium, etc.). The fusion process also requires the use of electrodes and auxiliary raw materials and additives, such as coal, oxygen and slag treatment agents. The most important material is ferrous scrap, largely classified as *end-of-waste* according to the End-of-Waste legislation and EU Regulation 333/2011.

MATERIALS USED (tonnes)	2023	2022	2021
	1,265,046	**1,306,261**	**1,406,258**
of which metals	1,092,978	1,135,049	1,217,547
of which other materials	172,068	171,212	188,711

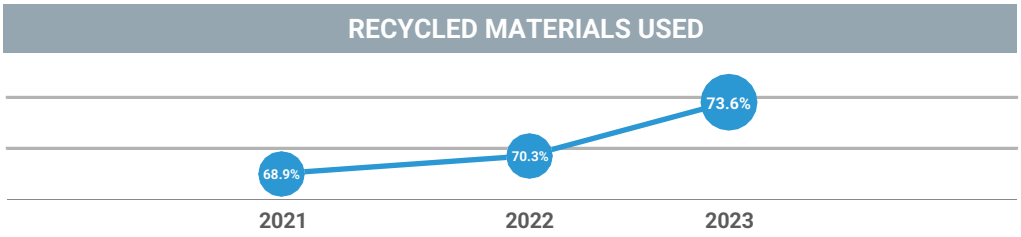


Renewable materials* used in 2023 amounted to 4,433 tonnes and accounted for 0.4% of the total; net of metals this percentage rises to 2.6%.

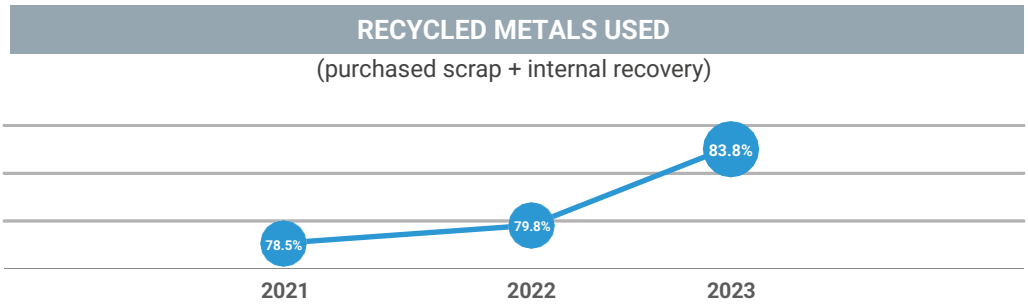
* Renewable materials are those materials of plant origin (wood, paper, cardboard, etc.) that can be regenerated and whose use does not endanger natural resources for future generations.

Recycled materials

Arvedi AST's productions are significantly in line with the principles of circular economy. In 2023, out of a total of 1,265,046 tonnes of materials used, 73.6% will come from recycling scrap and, to a small extent, other materials. Compared to the previous year, there was a further increase (+3.3%). When compared over a longer period of time, the improvement is even more striking: over the past 8 years, the percentage of recycled materials used has increased by more than 18 points, from 55% in 2015 to 73.6% in 2023.



When measured against the metals used, the percentage of metals from recycling is 83.8% (+4% compared to 2022). In addition to 756,079 tonnes from recycling of purchased *end-of-waste* scrap, this also includes 160,174 tonnes of metals from internal recovery of production waste and scrap recovered from Tapojarvi.



METALS (t)	2023	2022	2021
Primary metals	176,725	229,190	263,507
Recycled metals (purchased scrap)	756,079	732,101	769,007
Metals from internal recovery	160,174	173,758	185,033
Total recycled metals (purchased scrap + internal recovery)	916,253	905,859	954,040
Total metals used	**1,092,978**	**1,135,049**	**1,217,547**
Proportion of metals from scrap recycling and internal recovery	**83.8%**	**79.8%**	**78.4%**

RECYCLED MATERIALS USED
73.6%

RECYCLED METALS USED
83.8%

90.1%

RECYCLED METAL CONTENT*

**calculated with respect to solid steel production (slabs) and without including metals recovered from internal steelworks processes, in accordance with Standard 14021. Including these contributions, the recycled content would be over 95%.*

Materials used per unit of product

In 2023, 1.34 tonnes of materials were used for every tonne of production; this is the same value as in 2022 and 2021.

Sustainability Report 2024

Arvedi

4.3 Energy

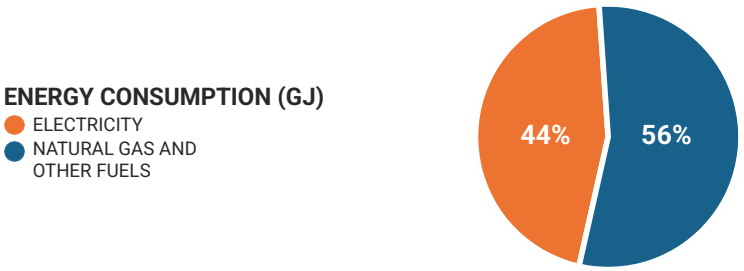
The full version of the company's energy policy statement is published on the company's online site.

ENERGY POLICY

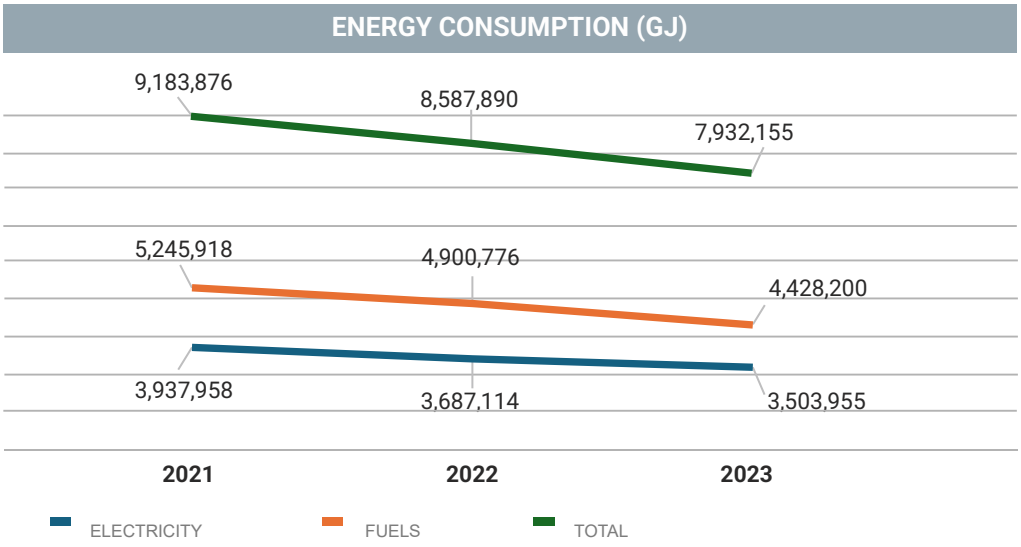
- Energy efficiency, consumption reduction, climate protection and environmental protection
- Sustainable development
- Risk-based thinking and continuous monitoring
- Compliance with legal requirements
- Skill and awareness

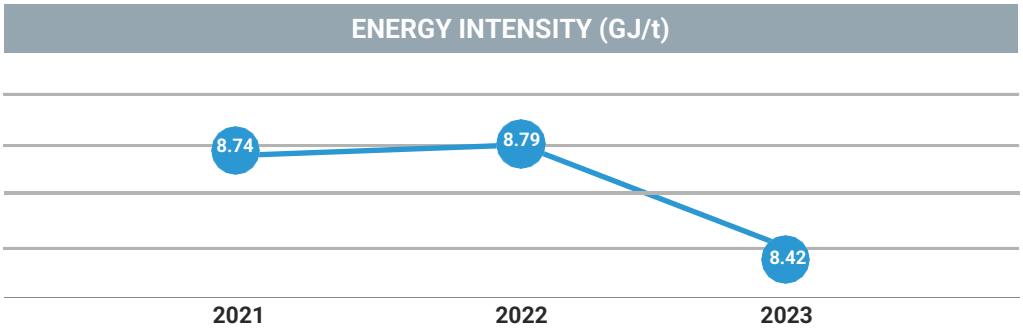
Arvedi AST uses electricity and natural gas: two melting furnaces at the steel mill mainly use electricity, while the heating furnaces for downstream processes are powered by natural gas. The company also uses diesel and petrol for transport and internal handling. In 2023, total consumption was 7,932,155 GJ, a decrease of 7.6% from the previous year. For each tonne of production, 8.42 GJ was consumed (- 4.2% compared to 2022).

ENERGY CONSUMPTION (GJ)	2023	2022	2021
Natural gas	4,418,469	4,889,4226	5,234,373
Diesel	8,907	10,390	10,659
Petrol	824	961	886
Electricity	3,503,955	3,687,114	3,937,958
TOTAL	**7,932,155**	**8,587,891**	**9,918,876**



ENERGY INTENSITY	2023	2022	2021
GJ/t	**8.42**	**8.79**	**8.74**





PLANTS FOR THE PRODUCTION OF RENEWABLE ENERGY

Within the steel complex there are the following plants (owned by third parties) that produce energy from renewable sources:

- 3 photovoltaic systems;
- 2 mini-hydroelectric plants that use the difference in level between the loading tank of the main steel mill and the waste water discharge (following purification) works on the river Nera.

The energy produced is about 8.18 Gwh.

Energy efficiency

The technology of the electrical furnace has obvious environmental advantages, thanks to the recycling of ferrous material, but it also entails high energy consumption. Improving efficiency levels as much as possible and reducing consumption is therefore an important goal for both environmental and cost containment reasons. The company has carried out a number of interventions to improve efficiency levels and reduce consumption, including:

- heating the scrap in the shaft of the electrical furnace with natural gas burners that support the electric arc at the start of the smelting process;
- transferring the still hot semi-finished products directly to the heating furnaces, as happens with the partial "hot load" of slabs in the WB furnace of the hot rolling area;
- "intelligently" switching off the machines that service the production lines, following scheduled shut downs;
- using LED technology light bulbs;
- the heat recovery system in the fumes produced by the heating ovens to produce steam for internal use in the plant.

FURTHER PROJECTS TO INCREASE ENERGY EFFICIENCY

- New 'Walking Beam' slab heating oven
- Optimisation of steam management (replacing steam jet suction stations with mechanical systems)
- Revamping of combustion systems

Heat recovery system

A steam production system makes it possible to recover large quantities of heat (so-called waste heat) originating from the hot rolling system, transform it into steam, and reuse it in the production cycle.

The establishment uses over 230k tonnes of steam per year. Steam that is usually produced with the use of fossil fuels in boilers, while with the heat recovery steam generator the company manages to increase the proportion of steam produced without the use of fossil fuels to 70%.

The installation of a heat recovery boiler makes for the production of superheated steam from the exhaust gases of the WB furnace chimney. Thanks to this system, a significant reduction in natural gas consumption is possible. In addition, this avoids emissions of around 30,000 tonnes of CO2 per year.

STEAM PRODUCTION
AVOIDED GAS CONSUMPTION 15 MILLION m^3 / YEAR
CO_2 EMISSIONS AVOIDED 30,000 TONNES / YEAR

4.4 Greenhouse gas emissions

Arvedi AST is committed to a progressive evolution of its production model towards a zero-emission economy in line with the European Union's climate neutrality goals.

DIRECT EMISSIONS

In 2023, direct emissions (scope 1) amounted to 328,662 tonnes*, a reduction of 10.3% compared to 2022. The intensity of direct emissions, i.e. the amount of CO_2 directly generated by the plant per tonne of production, was 0.349 t/tonne, a reduction of 6.9% compared to the previous year *(*calculated and reported for ETS purposes)*.

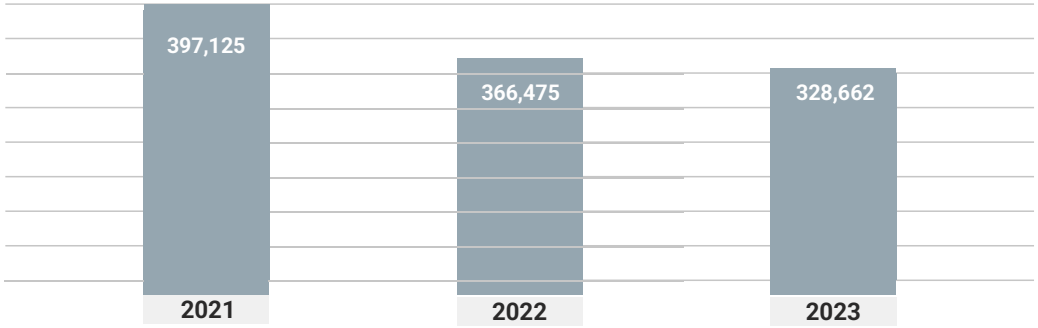
DIRECT CO_2 EMISSIONS (t)

2023	2022	2021
328,662	366,475	397,125

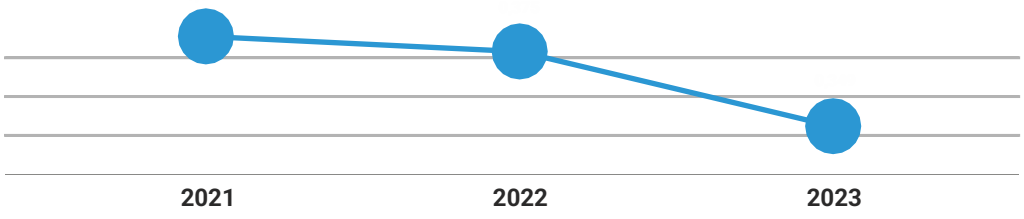
INTENSITY OF DIRECT EMISSIONS (t CO_2/t prod)

2023	2022	2021
0,349	0,375	0,377

DIRECT EMISSIONS (t)



INTENSITY OF DIRECT EMISSIONS (tCO_2/tprod)



INDIRECT EMISSIONS

Indirect emissions (scope 2) related to purchased and consumed electricity amounted to 229,314 tonnes* of CO_2, a reduction of 23.7% compared to the previous year.

INDIRECT EMISSIONS CO_2 (t)		
2023	**2022**	**2021**
229,314	300,397	279,600

**calculated according to the 'location based' approach (Source of emission factors: "Efficiency and decarbonization indicators in Italy and in the biggest European Countries Edition 2024"- ISPRA)*

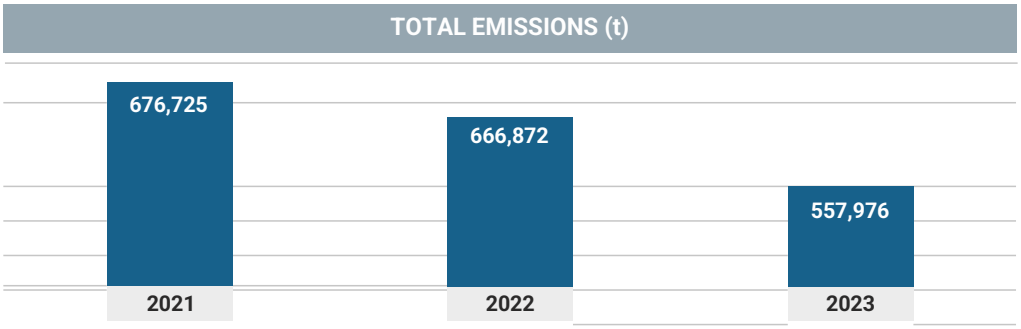
INTENSITY OF INDIRECT EMISSIONS (t CO_2 /t prod)		
2023	**2022**	**2021**
0,243	0,307	0,266

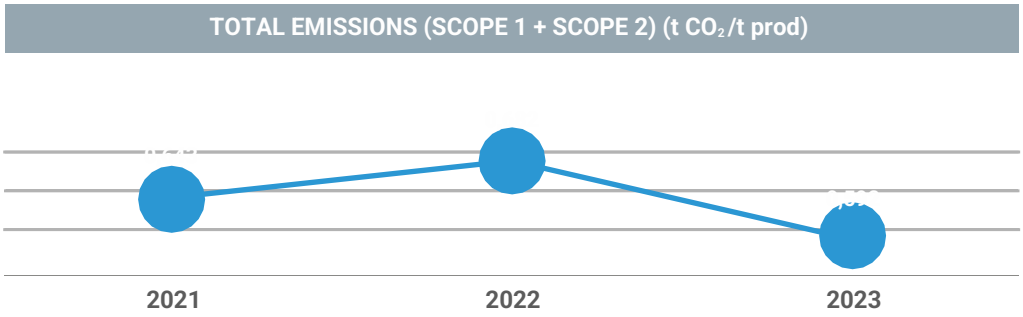
TOTAL EMISSIONS

Total CO_2 emissions (scope 1 + scope 2) were 557,976 tonnes (-16.3% compared to 2022). Relative to production, the emission intensity was 0.592 tonnes of CO_2 per tonne of production, a reduction of 13.2% compared to the previous year.

TOTAL CO_2 EMISSIONS (t)		
2023	**2022**	**2021**
557,976	666,872	676,725

TOTAL EMISSION INTENSITY (SCOPE 1 + SCOPE 2)		
2023	**2022**	**2021**
0,592	0,682	0,643





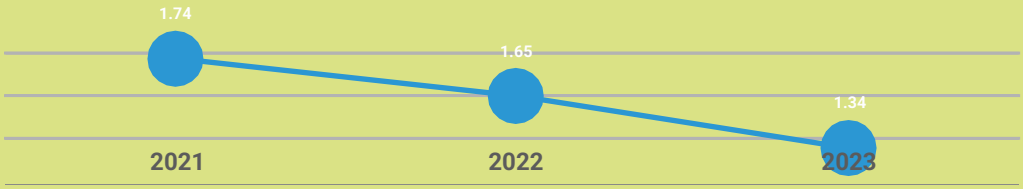
SCOPE 3 EMISSIONS

-23% IN THE LAST TWO YEARS

The intensity of scope 3 emissions, focused on scope 3.1 emissions (mining and production of purchased materials*) and related to tonnes of solid steel produced, has decreased by 23% in the last two years.

**For a steel industry like AST these emissions represent the largely predominant part of scope 3 emissions.*

EMISSION INTENSITY SCOPE 3 (t CO_2/t prod)



The increase in the percentage of scrap used by AST has reduced the dependence on carbon-intensive ferro-alloys, which are a major contributor to the carbon footprint of stainless steels produced in Europe. Action has also been taken towards suppliers to accurately assess the carbon footprint of raw materials and select them accordingly.

THE DECARBONISATION PLAN OF ACCIAI SPECIALI TERNI

Acciai Speciali Terni's path towards climate neutrality will involve profound changes in various areas of company life, particularly in terms of the production technologies adopted, the energy sources used and the raw materials used to produce steel.
These changes will be fully implemented over a timeframe of at least 20 years, during which time AST's journey will be part of the broader global effort to combat climate change, in which various stakeholders are called upon to support the iron and steel industry's efforts, starting with political and financial institutions, the world of research and development, and suppliers of raw materials and plants.

The planning and management of this pathway for AST is the subject of the recently prepared decarbonisation plan, which outlines the various steps that will lead to the achievement of the 'net zero' target by 2050. Along with this long-term goal, short- to medium-term (5 years) **quantitative targets** for the reduction of greenhouse gas emissions directly or indirectly related to AST are defined in the Plan.

SCOPE 1
2028 TARGET:
- 30%

SCOPE 2
2028 TARGET:
- 100%

SCOPE 3.1
2028 TARGET:
- 10%

In addition to the objectives that AST intends to achieve in the various timeframes, the Plan defines the strategies that will be adopted to achieve these objectives and the concrete actions that will lead to the implementation of these strategies.
To achieve the short to medium-term objectives, the main **strategies** envisaged are:

- increased circularity (increased percentage of scrap metal used);
- energy efficiency;
- use of renewable energy sources.

In the medium to long term, the identified strategies include:

- use of raw materials from green processes;
- use of zero-impact energy carriers (biogas, green hydrogen);
- capture/compensation of residual emissions that cannot otherwise be eliminated.

Among the most important **actions** already undertaken to achieve the short-term goals are:

Replacement of the 'Walking Beam' slab heating furnace

The new furnace will lead to a reduction of about 40% in CO2 emissions compared to the current ones, thanks to:

- Heat recovery technologies and high efficiency insulation solutions;
- Advanced automation and digital packages based on Artificial Intelligence;
- Possibility of working with up to 100% hydrogen (resulting in zero emissions).

Use of electricity from renewable sources

Purchase of renewable electricity of Guaranteed Origin (GO certificates) for 30% of total consumption in 2024 and 100% in 2025.
The monitoring of the Plan, with the possible updating of objectives, strategies and actions in relation to the progress of the results achieved as well as the evolution of the regulatory, technological and market scenario, is the subject of periodic meetings of the Sustainability Committee.


NET
ZERO

RISKS AND OPPORTUNITIES RELATED TO CLIMATE CHANGE

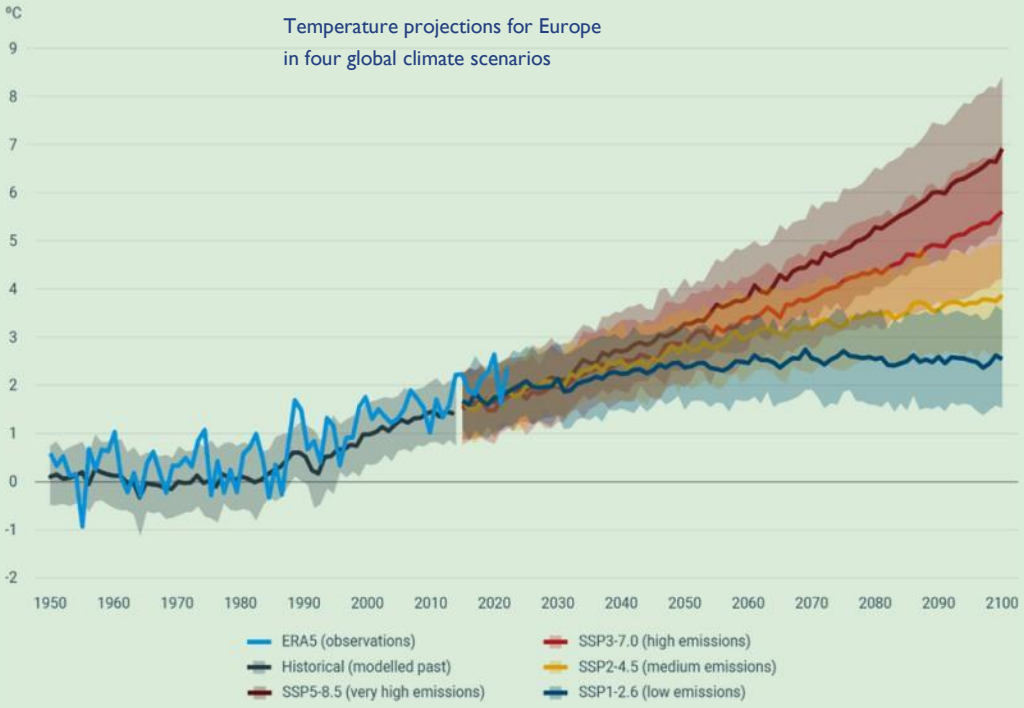
Climate scenarios

In its Communication 'Managing climate risks - protecting people and prosperity' (March 2024), the European Commission highlights some crucial issues in relation to climate risk management:

"**Europe will face higher overall temperatures,** the risk of more intense and frequent heat waves, prolonged droughts, more intense precipitation, less snow. The reports of the Intergovernmental Panel on Climate Change (IPCC) state this clearly. Climate impacts have already arrived and risks will continue to increase in the coming decades and beyond due to the inertia of the climate system, even if ambitious cuts in global emissions will reduce potential damage. In February 2024, the Copernicus climate change service reported that the global average temperature for the previous 12 months had exceeded 1.5 degrees Celsius above pre-industrial levels. The outlook for Europe is presented in the European Environment Agency's first European Climate Risk Assessment (EUCRA). In the best case scenario, in which we limit global warming to 1.5 degrees compared to pre-industrial levels, Europe - which is warming at twice the global rate - will have to learn to live with a climate that is 3 degrees warmer and, as a result, face exponentially more heat waves and other extreme weather phenomena."

"Every climate change disaster will put a strain on the economy, with loss of productivity and lives, direct damage, reduced growth potential and pressure on public budgets. When investments are redirected for reconstruction after damage, the amount available for productive investments is reduced. The interactions between different parts of the financial system are not well understood and climate risks may push existing vulnerabilities beyond critical thresholds for these systems. Public budgets are the main source of coverage for these risks, but they are already strained by high debt levels. Implicit contingent liabilities stemming from climate risks could jeopardise the fiscal stability and sustainability of Member States. The risks for the EU economy could be significant.
In light of existing data and lack of knowledge, it cannot be excluded that climate-related risks are currently underestimated. This can create disorderly reactions in the market, e.g. when extreme events occur or are likely to occur. Insurance coverage of climate-exposed assets and property is low in the EU, with significant variations between Member States and climate-related hazards, and is likely to decline further as premiums rise as climate-related events increase in frequency and severity."

Climate-related risks pose a serious threat to the resilience of EU companies.
Almost half of EU companies are concerned about natural hazards, but less than a third of companies have invested or plan to invest in mitigating the impact of natural hazards. Climate resilience is a matter of maintaining social functions, but also of competitiveness for economies and businesses, and therefore jobs. For businesses, climate risks are among the main risks of the coming decades.
Whether it is exposed supply chains, increasingly limited access to insurance, vulnerable national assets, the loss of biodiversity on which economic sectors depend, or insufficient protection of people, recovery from increasingly intense climate catastrophes will absorb more and more capacity and capital for the unprepared. The European Central Bank and the European Systemic Risk Board have recognised that climate risks can affect financial stability in many ways and have advocated the need for a robust system-wide macroprudential strategy to address these risks. At the same time, EU companies, including SMEs, have the potential to become leaders in some of the market segments that build resilience."



source EUCRA

Projected trends of major climate-related hazards in Europe

source EUCRA

Land regions	Northern Europe			Western Europe			Central-Eastern Europe			Southern Europe		
	Past	Future		Past	Future		Past	Future		Past	Future	
		Low	High		Low	High		Low	High		Low	High
Mean temperature	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗
Heat wave days	□(*)	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗
Total precipitation	↗	↗	↗	↗	/	↘	↗	↗	/	↘	↘	↘
Heavy precipitation	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗
Drought	↗	↘	↘	↗	/	↗	↗	/	↗	↗	↗	↗

European regional seas	Past	Future
Sea surface temperature	↗	↗
Sea level	↗	↗

Risks and opportunities

The industrial sector is not commonly perceived as an economic sector that is particularly vulnerable to climate change; on the contrary, the opportunities that the necessary actions for the ecological transition could offer to a number of production firms are sometimes emphasised. From this point of view, also the iron and steel industry - thanks to products related to the development of new technologies and new markets - is among the sectors that can seize new opportunities related to the ecological transition, as we have also seen in a previous chapter. Particularly significant - considering the already high circularity rates of the steel industry in Italy and, in this context, of AST - are also the opportunities related to the transition to a circular economy, which is not only a necessary condition to achieve the goal of climate neutrality but also a factor of greater efficiency and economic competitiveness for companies.

However, also for the steel industry, as for the entire industrial system in general, climate change entails many potential risks. Financial risks, related to higher costs that may influence the company's economic performance and competitiveness. But also, first and foremost, physical risks related to the increase in the frequency and intensity of extreme weather events (violent rainfall, floods and landslides, droughts, fires) that may affect industrial activities and infrastructures located in the most vulnerable areas. While uncertainties remain about quantitative estimates of the frequency and magnitude of events, global warming will have the effect of intensifying the hydrological cycle and increasing the frequency of flood events in large parts of Europe. Therefore, also for the iron and steel industries, the climate change adaptation strategy has to be based on a set of complementary approaches and measures to manage the risks associated with the increase of extreme weather events, within the framework of the National climate change adaptation plan and the prevention measures adopted by regional and local institutions.

In this general context, AST assesses the risks and opportunities for climate change, and defines the measures to be taken, with particular reference to energy and environmental strategy. In view of the changed operating environment resulting from climate change (which also requires changes in established management choices) and its effects on the cost structure, financial choices and corporate value creation, the disclosure of risks and opportunities will be progressively expanded and deepened. Following the recommendations of the Task Force on climate-related financial disclosure, focusing on the risks and opportunities of climate change on companies and the consequent actions to be taken, the main types of risks and opportunities, and their impacts on corporate business, are grouped into two categories:

- risks and opportunities arising from changing fiscal variables (acute risks related to extreme weather events, and chronic risks related to gradual but structural changes in climate);
- risks and opportunities arising from evolving ecological transition scenarios (related to regulatory and normative changes, emission limits and carbon pricing, energy and raw material costs, carbon-free technology development trends, investments for innovative activities and new markets, sustainable finance measures to support the ecological transition, etc.).

Also in view of steel's role in the ecological transition, AST adopts strategies financially aimed at fully seizing opportunities, and at complementing them with operational best practices. The strategic objective, in relation to the risks and opportunities arising from climate change, is to mitigate the risks and maximise the opportunities with a positioning that takes into account the medium- and long-term outlook.

UMBRIA

FIRST REGION IN EUROPE
TO INCLUDE THE CLIMATE CRISIS IN ITS STATUTE

In 2023, the Regional Council, highlighting the serious risk and the local and global consequences of climate change, included in the Statute of the Umbria Region, a principle according to which 'the Region adopts and promotes policies aimed at supporting the ecological transition and the progressive reduction of the anthropogenic causes of climate change, in harmony and in agreement with all national and international levels, with a view to achieving climate neutrality'.

Arvedi

4.5 Air emissions and air quality

The company takes numerous measures to reduce emissions, in compliance with the strict conditions prescribed by the Integrated Environmental Authorisation. At the main emission points (furnaces and converters), continuous monitoring of dust, carbon monoxide and gaseous effluent process parameters is carried out, with telematic data transmission to Arpa Umbria. The company also carries out long-term sampling of dioxins and furans on emissions from electric furnaces.

EMISSIONS	U.M.	2023	2022	2021
NO_x	t	586	510	729
PM	t	19	14	17
VOC	t	93	74	144
HAP*	kg	672	479	432

**Cr+Hg+Ni+Mn+IPA*

EMISSIONS PER UNIT OF PRODUCT		2023	2022	2021
NO_x	(kg/t)	0.62	0.52	0.69
PM	(kg/t)	0.02	0.01	0.02
VOC	(kg/t)	0.09	0.07	0.13
HAP*	(kg/t)	0.0007	0.0004	0.0004

OZONE-DEPLETING SUBSTANCES

For its cooling systems, heat pumps, fire-proof systems, the company uses fluorinated gases (e.g. HFC) that are not included in the ozone-depleting substances but are, however, subject to the regulatory framework on greenhouse gases and are, therefore, subject to annual disclosure. Type R-22 HCFC gases, which are considered ozone-depleting gases, are still present in just a few cooling systems. As envisaged by the regulatory framework, this type of substance is being progressively phased out, as, at each maintenance, it is replaced by other types of gas.

THE REPLACEMENT OF HFC-23 GAS

Among hydrofluorocarbons, HFC-23 has the highest global warming potential (GWP) of 14,800. In other words, one tonne of emissions of this gas is equivalent to 14,800 tonnes of CO_2.

Given its use, especially in the plant's fire-fighting systems, and in order to improve the environmental impact generated by any leaks, but also to contribute to a decisive reduction in the use and marketing of this potent greenhouse gas, AST decided in 2022 to gradually replace it with another gas, equivalent or superior in terms of performance efficiency, but with a much lower GWP: this is NOVEC 1230 gas, also identified by ISPRA as a valid alternative to HFCs on the market.

In addition to having no impact on the ozone layer, this gas has a GWP < 1.
Replacement activities are nearing completion.

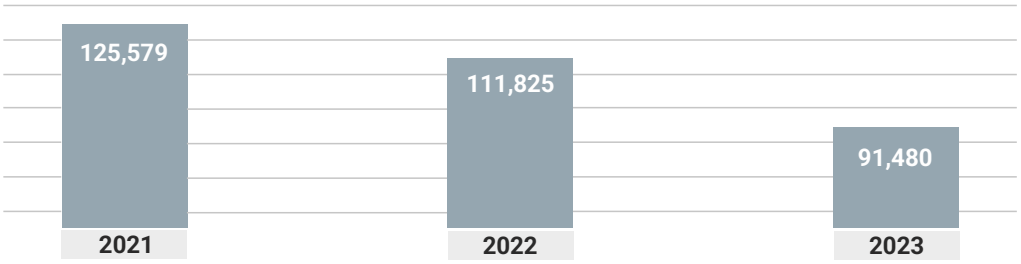
4.6 Waste

The waste generated by the company* in 2023 amounted to 91,480 tonnes (-18.2% compared to 2022) of which 72,011 tonnes were hazardous and 19,469 tonnes non-hazardous. 0.097 tonnes of waste were generated for every tonne of production, a 15% reduction from the previous year, and the figures show a gradual improvement over the three-year period. Hazardous waste was almost entirely sent for disposal (94.2%), only 5.8% for recovery. A higher percentage of non-hazardous waste was sent for recovery (34.6%) and the remainder to landfill (65.4%). The percentage of total waste sent for recycling or other forms of recovery was 11.9%. In addition to the slag recovery project, which will be discussed later, and the recovery of refractory materials, the company is engaged in a progressive process of recovering certain types of waste (EWC codes 170302, 170504, 170904) documented annually within the MCP (Monitoring and Control Plan). Other materials, such as machining residues, flue gas abatement dust, rolling flakes and grinding slabs, are also reused (with the qualification of by-products) through recovery processes.

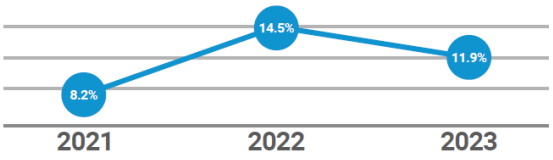
** Net of production waste (managed by other companies)*

WASTE (t)	2023	2022	2021
Hazardous waste	72,011	85,453	91,048
- of which destined for disposal	*67,853*	*84,412*	*90,705*
- of which earmarked for recovery	*4,158*	*1,041*	*343*
Non-hazardous waste	19,469	26,372	34,531
- of which destined for disposal	*12,729*	*11,207*	*24,535*
- of which earmarked for recovery	*6,740*	*15,165*	*9,996*
TOTAL	**91,480**	**111,825**	**125,579**

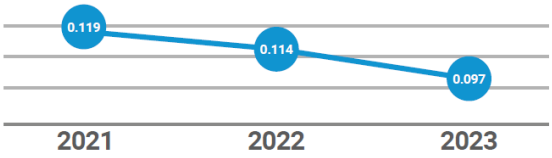
WASTE (t)



WASTE SENT FOR RECOVERY (%)



WASTE PER PRODUCT UNIT (t_{ref}/t_{prod})



WASTE MANAGEMENT	2023		2022		2021	
	t	%	t	%	t	%
sent for recovery	10.897	*11,9%*	16.206	*14,5%*	10.339	*8,2%*
disposal	80.583	*88,1%*	95.619	*85,5%*	115.240	*91,8%*
TOTAL	**91.480**	***100%***	**111.824**	***100%***	**125.579**	***100%***

TREATMENT PLANTS

The site has a plant (Dorr Oliver) for the treatment of landfill leachates, aqueous waste solutions, and aqueous liquid waste produced by groundwater remediation operations. In 2023, it treated 63,793 tonnes of leachate and 10,414 tonnes of aqueous solutions, producing 16.8 tonnes of sludge.

A system is also in operation for the reuse of waste water from the plant, partially replacing the water used to make up for evaporation losses in the closed cooling circuit (evaporation towers) serving the ACC area's fusion and refining plants, with a saving of about 50 m^3/h of water.

REUSE OF HEAT-RESISTING MATERIALS

A special plant reuses the refractory materials by feeding them back into the production cycle, partially replacing the lime. This avoids sending about 15-20k tonnes of waste to landfill per year and also helps to reduce lime consumption.

SLAG

In addition to the waste data that can be formally attributed to the company, from a substantive point of view it is also necessary to take into account the relevant waste data, which will be discussed in more detail in section 5.3. The waste, although derived from the plant's own production, is managed by third parties (Tapojärvi and Ilserv).

SLAG	2023	2022	2021
TONNES	289,071	308,142	359,816

The data pertaining to slag earmarked for disposal are influenced by variations in stocks, which is why they may not correspond exactly to variations in production.

4.7 Water

Water is mainly used for industrial use and, to a much lesser extent, for services such as watering yards and green areas, sanitation, etc. Water for industrial use is mainly taken from the Velino river. Water extracted from the pipelines is destined exclusively for civil uses. The area in which the plant is located is classified as 'medium-high' water stress. The drawn water is entirely returned, net of evaporation, to the Nera river. In other words, there is no real consumption of the water resource, since the drawn water, once used in the production cycle and subsequently purified, is fed back into the Nera river (into which the waters of the Velino flow).

DRAWN WATER (m^3)	2023	2022	2021
Surface water	145,269,956	145,666,142	148,180,360
Sources/wells	760,825	1,051,766	1,051,766
Rainwater	-	-	-
Aqueduct	1,368	1,276	619
TOTAL	**146,032,149**	**146,719,184**	**149,417,893**

RECYCLED WATER

The company continuously monitors usage in order to reduce consumption and adopts two different ways of reusing water resources: true recirculation (closed loop) and recirculation in the sense of cascading water from one production process to another. A very high percentage of water is reused in that way. In 2023, the amount of recycled water was 125,449,718 m^3, corresponding to 86% of the drawn water.

RECYCLED WATER (m^3)	2023	2022	2021
Recycled and reused water	125,449,718	126,630,730	127,919,178
Drawn water	146,032,149	146,719,184	149,417,893
Percentage of recycled water to drawn water	86%	86%	86%

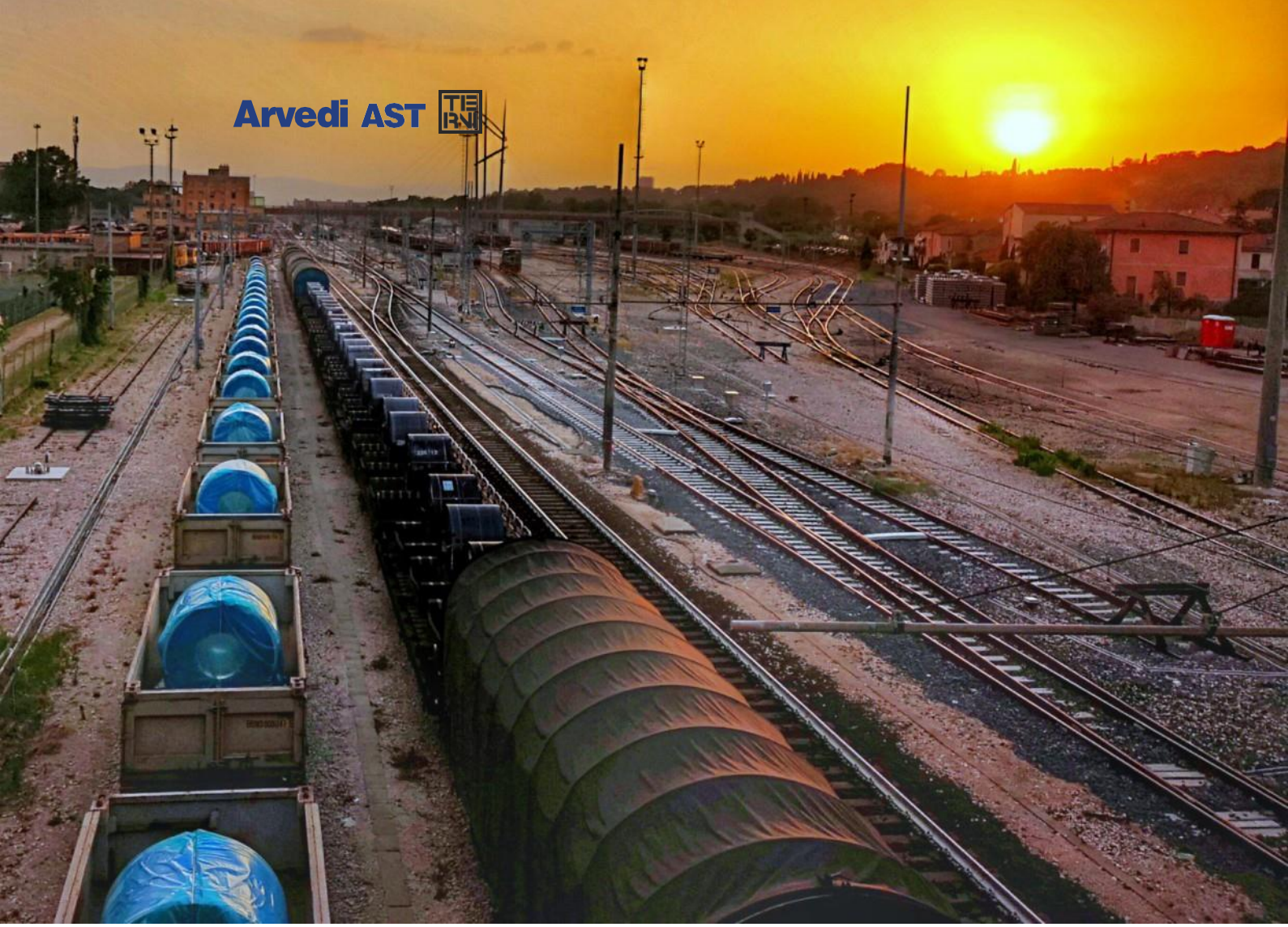
86%

RECYCLING AND REUSE OF DRAWN WATER

PURIFICATION AND DISCHARGES

The water used by the company is purified through a chemical treatment plant. Inside the establishment there are also additional purification systems for the "on-site" treatment of certain specific types of waste water, which must comply with concentration limits similar to those for discharge in surface water bodies before they flow into the main sewer system of the company.

In 2023, water discharges amounted to 153,319,502 m^3. Constant monitoring ensures compliance with the limits laid down by the regulatory framework in force with regard to waste water discharges that are introduced into surface bodies of water or into the municipal sewer system. The discharge concentration values of the various parameters provided for by the regulations in force and the AIA are largely respected, due to the adoption of the best available techniques (BAT); in particular, as far as metals are concerned, the Ni and Cr values are more than one hundred times below the limits and equal on average to 0.016 mg/l and 0.018 mg/l, against limit values of 2 mg/l for both metals.



4.8 Transportation

AST has progressively developed the use of rail transport and intermodal transport modes that enable the movement of goods while reducing road journeys and polluting emissions. In particular, the company has steadily consolidated its vocation for rail transport, reaching more than 50% rail transport on both PF (outbound) and MP (inbound) shipments.

OVER

50%

OF GOODS
ARE TRANSPORTED BY RAIL

4.9 Biodiversity

Arvedi AST's industrial activities are not located in protected areas of significant biodiversity value.
Certain corporate properties that concern Sites of Community Importance (SCI) and Special Protection Areas (SPA) are only concerned by the ducts with which water is extracted from the river Velino and brought to the establishment.

5

Accelerating the transition to circular economy

Arvedi AST TERNI

5.1 Accelerating the transition

Arvedi AST is committed to the transition to an increasingly circular economy. Already today, productions, as shown by the data reported in this chapter, are to a significant extent marked by the principles of circularity. Arvedi AST mainly uses materials from recycling and recovery processes, progressively improving its performance in the efficient use of resources. The data also show that the amount of waste generated gradually decreases and the amount of waste sent for recovery increases. This strategic commitment is also reflected in important projects that have already been realised, such as the plant for the recovery of refractory materials, or are in progress, such as the one for slag recycling. At the same time, leveraging the circularity of production allows the company to contribute to the reduction of greenhouse gas emissions and pursue the goal of decarbonisation. A circular economy is in fact one of the pillars of the strategy to achieve climate neutrality, as the use of recycled materials instead of virgin raw materials significantly reduces the carbon footprint. Thanks to the use of recycled metals in 2023, Arvedi AST avoided the generation of around 1,280,000 tonnes of CO_2.

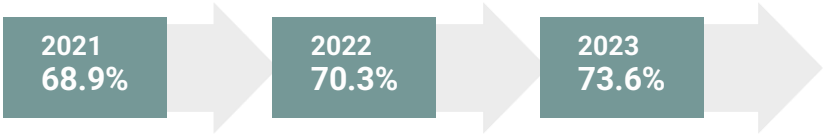
A STRATEGIC MATERIAL FOR CIRCULAR ECONOMY

The life cycle of steel is potentially infinite. The steel sector is therefore of fundamental importance for the affirmation of a circular economy model. The steel production cycle is already a virtuous example of circular economy: all steel products, from those with a shorter life cycle (e.g. packaging) via those of an average life (e.g. motor vehicles) and all the way to the longer-lasting ones (such as construction products) reach recycling rates that are already very high, with points of excellence in Italy. In addition to the recycling of end-of-life products, there is also the recovery of scrap from production and transformation processes, which is fed back into the production cycle. In fact, production involves the generation of waste and residues: most of these materials, if properly managed, can be recovered and valorised within the production process itself or through industrial symbiosis solutions. Recycling plays an increasingly important role, also thanks to evolving technologies. Approximately one quarter of global steel production is carried out in electric arc systems with the use of ferrous scrap as secondary raw material. This technology, mainly used in Europe and North America, also makes it possible to reduce greenhouse gas emissions by up to 70% compared to the use of virgin materials in traditional plants. Italy is the leading country in Europe: production with electric cycle accounts for 84% of the total, against an average of 43.9% in the EU and 28.9% worldwide. The Italian iron and steel industry is among the best performing in the world in terms of circularity and efficiency in the use of resources.

5.2 Circularity performance

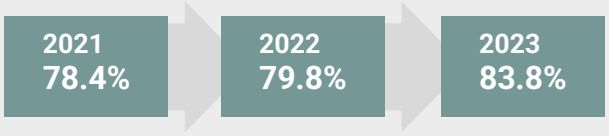
CIRCULARITY RATE

It measures the share of recycled materials in the total materials used. The higher this percentage, the more virtuous the production cycle. Thanks to the technological choice of electric ovens and the high use of recycled materials, AST achieves very important results. The circularity rate of materials increases year after year.



Circularity rate in the use of materials

If calculated only on the quantity of metals used in production, the circularity rate is even higher, reaching 83.8% in 2023 (+4% compared to 2022). This percentage includes both the use of purchased and recycled scrap and metals from production waste recovery processes in the plant.



Circularity rate in the use of metals

RECYCLED METAL CONTENT

The recycled metal content, calculated with respect to solid steel production (slabs) and without including metals recovered from internal steelmaking processes in accordance with 14021, is 90.1%. If these contributions were included, the recycled content would be over 95%.

90.1% **RECYCLED METAL CONTENT**

THE AMOUNT OF RECYCLED METALS USED FOR AST PRODUCTION IS EQUIVALENT TO THE WEIGHT OF OVER

90
EIFFEL TOWERS

ENVIRONMENTAL BENEFITS OF CIRCULARITY

For every tonne of recycled steel scrap

- emissions of 1.4 tonnes of CO2* are avoided
- 652 kWh of energy are saved**
- the consumption of 1.1 t of iron ore, 630 kg of coal, 55 kg of limestone, 287 litres of oil is avoided
- 2.3 m^3 of waste are avoided in landfills

**(World Steel's LCA methodology)*
***(Bureau of International Recycling methodology)*

In 2023, thanks to the use of recycled metals, AST avoided the emission of approximately

1,280,000

tonnes of CO_2 corresponding to emissions generated by

OVER
700k CARS

with an average mileage of 10,000 km

Thanks to the use of recycled metals Arvedi AST in 2023 avoided energy consumption of approx.

597,400 MWh

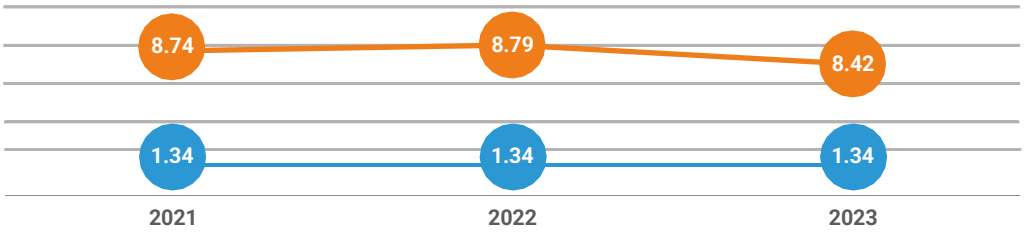
corresponding to the electricity consumption of approximately **213,000** Italian **households***.

**based on the average consumption of 3-person households (Source: ARERA)*

RESOURCE-USE EFFICIENCY RATE

It indicates the consumption of materials and energy per unit of product: the lower this value, the more efficient the use of resources.

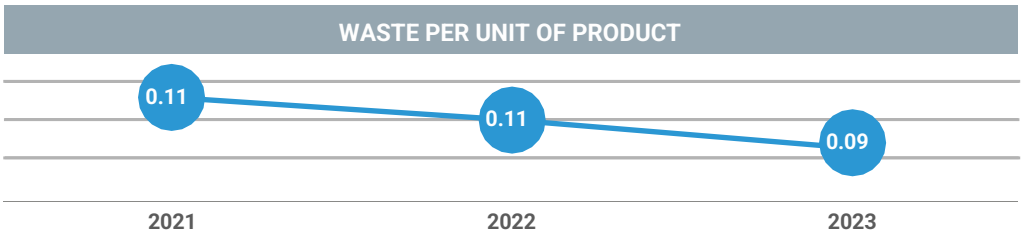
RESOURCE EFFICIENCY	2023	2022	2021
MATERIALS (t/t)	1.34	1.34	1.34
ENERGY (Gj/t)	8.42	8.79	8.74



ENERGY (Gj/t)
MATERIALS (t/t)

WASTE MANAGEMENT

The transition to a circular economy requires a progressive reduction of waste and an increase in material recovery both within the production cycle and downstream of production. A significant indicator in this respect is the quantity of waste per unit of product. If measured net of waste (the management of which is outsourced to other companies), this ratio was 0.097 tonnes of waste per tonne of production in 2023, a further reduction from the previous two years (0.114 t in 2022 and 0.119 t in 2021). The share of waste sent for recovery was 11.9%.



WATER RESOURCES MANAGEMENT

Within the plant, water recycling methods are adopted, either through a closed circuit or by reusing water between different production stages. By 2023, 86% of the drawn water will be recycled.

86% **RECYCLING AND REUSE OF DRAWN WATER**

5.3 Waste recovery

Focusing more and more on a circular economy: this is the path taken with the project for the recovery of slag from steel processing.

Each year, the production process generates over 300,000 tonnes of slag. Of this, about 40% comes from the furnace melting process ('black slag') and about 60 per cent from the converter refining process ('white slag').

The project makes it possible to significantly increase the recovery of residual materials generated by the steelmaking process, and most of all slag, representing 1/3 of the steel produced.

The project for the integrated service of slag management, slag recovery and marketing of recycled materials was awarded through an international tender to Tapojärvi Oy, a Finnish company committed to the development of a circular economy and the search for new solutions for the reuse of materials from steel mills. Steel mill slag, having been subjected to recovery processes, can be reused for various purposes, starting with the production of aggregates for road substrates, for cement or asphalt mixes. Other more advanced and value-added applications are being studied.

THE ENVIRONMENTAL BENEFITS OF SLAG RECOVERY

The recovery of slag generates multiple environmental benefits. In particular:

- the new treatment method (intended for reuse) will produce a significant improvement in environmental quality in the areas surrounding the industrial site, with a reduction in dust and noise compared to the current situation;
- the use of slag instead of the extraction and use of natural materials contributes to reducing the overall environmental impact, as demand for aggregates in construction is growing constantly and the use of quarries causes an unsustainable loss of territory;
- no longer considering slag as waste to be disposed but as material to reuse will activate a virtuous material recovery process, in accordance with the principles of circular economy.

THE NEW SLAG RAMP

AST has voluntarily decided to include in the so-called 'slag project' (which, according to the initial AIA requirements, was supposed to cover only slag recovery) also the implementation of measures aimed at containing diffuse emissions, which impact the nearby district of Prisciano, by proposing the construction of a closed and suctioned slag ramp where slag cooling operations could be carried out.

In fact, the current configuration of the 'Slag Ramp' is of 'semi-open' type, as is the case in some European stainless steel production sites, while in others such processing is carried out completely in the open. The cooling of stainless steel slag in an enclosed and suctioned environment has not yet found any application, due to technical/operational problems (e.g. heat dissipation inside the building) and due to the greater distances from urban settlements, which make it common to carry out these operations outdoors or in a semi-open environment (e.g. simple canopies), since the spread of dust is not a particular problem.
Although aware of these technical difficulties, Arvedi management has applied all its expertise to find an efficient solution through studies and experiments on processes and applicable technologies.

In June 2023, AST and Tapojärvi presented the definitive version of the new 'slag ramp' project. This project involves the confinement in a closed and aspirated environment of the cooling activities of the “white waste” from the converter, which, disintegrating during cooling, causes the spread of dust. In order to optimise the cooling mode in relation to the subsequent Metal Recovery phase (with recovery not only of metal but also of filler and aggregates derived from the slag and suitable for reuse), a rapid cooling mode will be adopted indoors, with spreading of the slag in thin layers, without the use of water, thus avoiding the formation of steam, which is the main vector for the raising and diffusion of dust. The slag, poured at about 1000 °C, quickly reaches a temperature of about 300 °C, and then quickly reaches a temperature (about 100 °C) suitable for the iron removal process at the new Metal Recovery.
The black slag (from the electric furnace), which does not produce dust, will instead be cooled in the existing (semi-enclosed) Slag Ramp, where the material spilled in the square will undergo a similar spreading operation, in order to minimise the thickness of the slag layer and accelerate cooling.

The authorisation process for this 'non-substantial' modification was carried out through the two Services Conferences of 19/07/2023 and 19/09/2023 and led to the positive conclusion, with prescriptions, of the administrative process (D.D. Umbria Region No. 10453 of 09/10/2023).

Pending the definitive realisation of the new slag ramp project, a series of transitional measures were also proposed by AST and Tapojarvi, and incorporated into the AIA, some of which have already been implemented and others that will be implemented according to the planned timetable, such as:

- modification of the route of the vehicles used to deliver slag to the Valle landfill;
- installation of a wheel-washing system to serve vehicles leaving Metal Recovery;
- intensification of the cleaning of the areas concerned by means of a motorised sweeper;
- confinement of waste storage areas indoors;
- integration of existing vegetation barriers.

In July 2023, a protocol was signed between the Regional Environmental Protection Agency and the company Tapojärvi, which provides for a special campaign to analyse the waste produced at the Arvedi Acciai Speciali Terni site. On this basis, following an agreement with ANAS, Tapojärvi decided to entrust ARPA Umbria, in an initial experimental phase linked to the production of the first batch of fillers, with the task of carrying out slag analyses. The analyses are aimed at verifying the suitability characteristics for their reuse. The required environmental permits were obtained from Tapojärvi for both the cooling activities ('slag ramp') and the 'aggregate maturation' areas, with a view to their reuse as building materials. Furthermore, field testing of the "filler" (another product derived from waste, which has already obtained product certification) in road construction has already been undertaken.

ARPA umbria
agenzia regionale per la protezione ambientale

TAPOJÄRVI

ANAS launches asphalt trial
made from steel processing residues produced by Arvedi AST

In December 2023, Anas started testing an innovative asphalt made from steel processing residues, produced by Arvedi AST. The bituminous mixture was applied for the first time on a 300-metre stretch along the national road 209 Valnerina in Ferentillo. The aim of the experiment was to test the characteristics of this mixture on a full scale. Being made from artificial and recycled material derived from industrial processes, the new asphalt reduces the use of virgin natural materials and thus the impact on the environment. This is the second experiment carried out by Anas in Umbria, after the one in 2021 on the E45. The project is promoted by the Umbria Region, with the technical-scientific support of the Centro Sperimentale Stradale Anas in Cesano and the supervision of Arpa Umbria. The work was carried out with material (artificial filler) supplied by Tapojarvi Italia Srl.

6

Social sustainability: work, safety, community

6.1 Relations with the local community

Since its inception, the history of the steelworks has been intertwined with the history of the city of Terni. Its presence has generated economic and employment benefits for the area, but it has also been an integral part of its social and cultural fabric.

Institutions such as the Corporate Health Insurance Fund (CMA) and the Terni Workers' Circle (CLT) represent welfare initiatives aimed at employees and their families but also open to the local community. The corporate welfare system is characterised by its ability to go beyond the perimeter of the company and create value in the local economic and social fabric by supporting the demand for services.

The CLT's presence is important and diverse in the cultural, recreational and sports sector. Arvedi AST's support for improving sports facilities and accommodation has been constant, benefiting not only the employees but also the citizens. In particular, in 2023 the CLT carried out numerous cultural initiatives, thus confirming itself as much more than just a business club. Events such as musical reviews, awareness courses on jazz, classical music, opera, contemporary art and photography exhibitions, concerts and performances have been advertised and organised in the library, the tent structure and in the open spaces in the park on Via Muratori in Terni. In addition, during the summer, the CLT organised the Summer Sport Campuses with almost 3,000 enrolments in the months of June to September, with a formula that is very popular with families as it allows youngsters to get to know, deepen their knowledge and try their hand at many sports in a playful way, right in the city centre.

6.2 Employment

The management of labour policies and conditions is governed by national regulations and the relevant national collective agreement. The Organisation, management and control model and the Code of Ethics specify all aspects relating to the protection of relations with staff and social partners.
Other than contractual references, the company envisages specific procedures for the recruitment and training stages. There are no risks to the right of freedom of association and collective bargaining, as the company complies with the regulatory provisions and the provisions of the national sector collective bargaining agreement. 100% of the employees are covered by the national collective agreement (CCNL for workers in the metalworking and plant installation industry).

Industrial relations
During 2023, labour relations were based on dialogue in order to maintain proper industrial relations. In this context, it should be noted that:

- on 27 January, an agreement was signed with the trade unions that provides for a new performance bonus (PDR) to be paid to employees for 2023, variable according to the achievement of production and quality improvement targets;
- on 29 December 2023, the Company and the Trade Unions agreed on the extension to 2024 of the Company Supplementary Agreement-Contract signed on 3 December 2014 at the Ministry of Economic Development, with regard to Sunday attendance, night work surcharges, on-call allowance, performance bonus and loyalty bonus.

6.3 Employees

2,212 EMPLOYEES

As at 31 December 2023, the company had 2,212 employees. There were 2,318 at the end of 2022, but it must be considered that from 1 January 2023 the employees of the pipe factory division merged into the new company Tubificio di Terni S.r.l, controlled by AST, and that following the spin-off, 132 employees have been transferred to the new company since that date, while 9 have been seconded there since 15 February 2023.

5.1% of employees are women, 94.9% men. The primary age group is between 30 and 50 (63.7%), followed by the over-50s (34.3%), and the under-30s (2%). In terms of occupational classification, 72.7% were blue collar workers, 21.2% white collar workers, 5.2% middle management and 0.9% executives. Only 1 employee has a fixed-term contract, and 9 part-time employees; all others are open-ended and full-time.

EMPLOYEES	2023	2022	2021
TOTAL	**2,212**	**2,318**	**2,303**
of whom men	2,099	2,199	2,186
of whom women	113	119	117
on a permanent employment contract	2,211	2,317	2,301
on a fixed-term contract	1	1	2
of whom full time	2,203	2,309	2,291
of whom part-time	9	9	12

PROFESSIONAL CLASSIFICATION 2023

	MEN	WOMEN	TOTAL	%
PRODUCTION WORKERS	1,609	-	1,609	72.7%
OFFICE WORKERS	377	93	470	21.2%
MIDDLE-RANKING MANAGERS	94	20	114	5.2%
EXECUTIVES	19	-	19	0.9%
TOTAL	**2,099**	**113**	**2,212**	**100%**

EMPLOYEES BY GENDER AND AGE GROUP

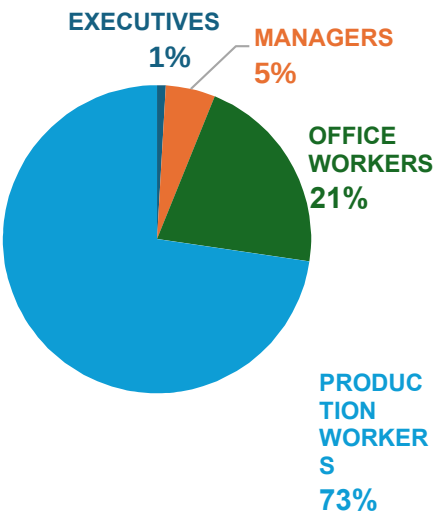
	2023		
	<30	30-50	>50
MEN	42	1,359	698
WOMEN	2	49	62
TOTAL	**44**	**1,408**	**760**

EMPLOYEES BY PROFESSIONAL CATEGORIES AND AGE GROUPS

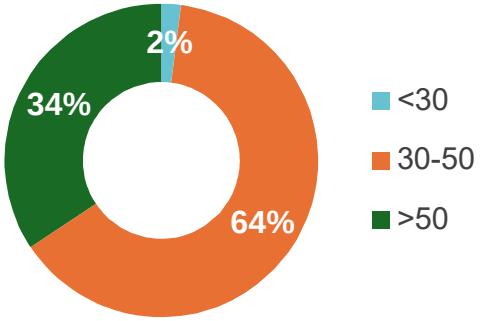
	<30	30-50	>50	TOTAL
PRODUCTION WORKERS	38	1,140	431	1,609
OFFICE WORKERS	6	228	236	470
MIDDLE-RANKING MANAGERS	-	36	78	114
EXECUTIVES	-	4	15	19
TOTAL	**44**	**1,408**	**760**	**2,212**

During 2023, there were 79 recruitments (74 men and 5 women) against 185 terminations of employment (174 men and 11 women). Most of the recruitments related to the 60 workers are due to the stabilisation of staff on temporary contracts. There were also 4 changes of category from blue collar to white collar and 5 changes from white collar to middle management.

PROFESSIONAL CATEGORIES



AGE BANDS



PROTECTED CATEGORIES

Vulnerable categories include 100 employees, 91 of whom are men and 9 women. The new three-year agreement with ARPAL Umbria (effective from 1 December 2023) provides for the company to fulfil its obligations under Law 68/99 by hiring 55 disabled people to be gradually integrated over 3 years.

NON-EMPLOYEES

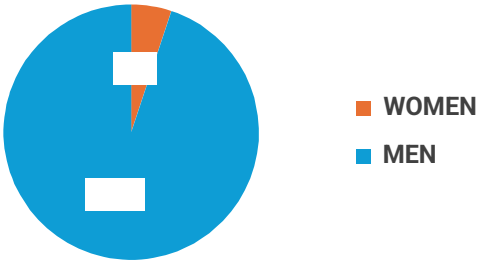
The company also employs 55 non-employees*, of whom 45 are temporary workers, 9 are self-employed with non-occasional professional services and 1 intern.

**This number does not include employees of contractors who worked at the plant in 2023.*

6.4 Equal opportunities

The Code of Ethics commits Arvedi AST to promoting equal opportunities in the work and treatment of its employees. The company is committed to ensuring that there is no form of discrimination in the workplace with regard to gender, ethnicity, nationality, sexual orientation, religious beliefs, political opinions and trade union membership. Among the employees, there are 113 women, accounting for 5.1% of the total. Among white-collar workers there are 20%, among middle management 18%. The board consists of 6 men and no women. Return to and continuation of work after parental leave is governed by national laws and contractual rules; parental leave implies job retention.

	EXECUTIVES	MIDDLE-RANKING MANAGERS	OFFICE WORKERS	PRODUCTION WORKERS	TOTAL
Men	19	94	377	1,609	2,099
Women	-	20	93	-	113
TOTAL	**19**	**114**	**470**	**1,609**	**113**



ARVEDI AST FOCUSES ON FEMALE EMPOWERMENT

According to data provided by the steel community Siderweb, women employed in the steel sector in Italy are still a minority share with only 5% of the workforce. But if you look at the first transformation of steel, the 'gender gap' narrows and women workers jump to 13%. Arvedi AST observes with attention and interest the data on the increasing number of women choosing to pursue an academic career in the Stem (science, technology, engineering, and mathematics) disciplines. These choices contribute both to combating gender stereotypes according to which women are more inclined to follow humanistic rather than technical-scientific courses of study and to strengthening their presence in the steel sector. This is nothing new for AST, and in the rolling and steel mill departments and in the areas of process engineering, quality, raw materials and energy, we already have a number of women with technical profiles, even in top positions. But a greater female presence in the steel industry can only bring benefits: that is why the company has been selecting women for some time to enrich the professional and cultural diversity within the work teams.

6.5 Training

In 2023, AST continued to invest in the training of its employees, through AST Academy, to ensure the consolidation and enhancement of skills through a wide range of training offerings. Training hours for employees amounted to 26,960, with an average of 12.2 hours per capita. AST Academy also developed training activities for non-employees, reaching a total of about 30,000 hours of training.

EMPLOYEE TRAINING	TOTAL HOURS			HOURS PER CAPITA		
	2023	2022	2021	2023	2022	2021
	26,960	**28,475**	**28,456**	**12.2**	**12.3**	**12.3**

PER CAPITA HOURS OF TRAINING BY PROFESSIONAL CATEGORIES AND GENDER			
	2023		
	MEN	WOMEN	TOTAL
Executives	66	-	66
Managers	873.5	237.5	1,111
Office workers	6,536	875.5	7,412
Production workers	18,371.5	-	18,372
TOTAL	**25,847**	**1,113**	**26,960**

AST ACADEMY ACTIVITIES	SAFETY TRAINING	ENVIRONMENTAL TRAINING	TECHNICAL TRAINING
hours	**22,000**	**50**	**7,950**

MODALITIES OF TRAINING ACTIVITIES	FRONTAL TRAINING	ON-THE-JOB TRAINING	E-LEARNING, VIRTUAL CLASSROOM TRAINING
hours	**25,100**	**2,500**	**2,400**

Safety training

Below are the activities carried out for compulsory safety training in 2023:

- Basic corporate training (State-Regions Agreement - worker training of 21/12/2011);
- Training on specific risks (State-Regions Agreement - worker training of 21/12/2011);
- Confined environments and updates (It.) P.D. 177/11);
- First aid and updates ((It.) M.D. 338/2003);
- High/medium risk fire prevention and updates ((It.) M.D. 10/03/98);
- Individual Fall Protection Devices ((It.) L.D. 81/08);
- Forklift drivers and forklift truck update (State-Region agreement on equipment of 22/02/2012);
- Bridge cranes operators ((It.) L.D. 81/08);
- Aerial platforms and updates (State Agreement-Regions on equipment of 22/02/2012);
- Supervisor training (State-Regions Agreement - worker training of 21/12/2011);
- WSR training.

COURSE	COMPETENT PERSONS	HOURS PROVIDED
FIREFIGHTING HIGH AND MEDIUM RISK	193 Trained and updated	**2,.430**
FIRST-AID OFFICERS	258 Trained and updated	**3,.665**
FORKLIFTS OPERATORS	205 Trained and updated	**1,240**

COURSE	TRAINED PEOPLE	HOURS PROVIDED
BRIDGE CRANES OPERATORS UPDATE	**515**	**2,060**

Environmental training

In 2023, the project phase for e-learning training on corporate environmental procedures was completed, which will involve the entire company population and future employees. Use of the course by staff will be possible from the second half of 2024

ENVIRONMENTAL TRAINING COURSES	TRAINED PEOPLE	HOURS PROVIDED
MASTER'S DEGREE IN PROPER WASTE MANAGEMENT In order to ensure knowledge of the correct handling of waste and its documentation in full compliance with regulations	**1**	**20**
WASTE FACILITIES TECHNICAL DIRECTOR In order to impart the knowledge to manage the different flows of incoming and outgoing waste and for proper plant management, both in terms of regulations and day-to-day operation.	**1**	**30**

Technical/professional training

In 2023, 7,950 hours of training targeted at specific area needs were provided.

PROFESSIONAL TRAINING COURSES	TRAINED PEOPLE	HOURS PROVIDED
Schneider Electric inverter TRAINING -use of interface SW for monitoring, diagnostics and programming of the supplier's proprietary equipment.	**11**	**88**
ABB inverter TRAINING - use of interface SW for monitoring, diagnostics and programming of the supplier's proprietary equipment.	**12**	**96**
Coswin TRAINING - use of SW for plant maintenance/management	**50**	**200**
UNI11632 TRAINING - Regulatory framework for supervisors of pressure control and measuring systems for natural gas	**13**	**104**
TRAINING Switching Conversion Process of Training and Competence Maintenance of personnel with safety tasks (Train Driving and Preparation); Supervision and monitoring of the traction vehicles used by AST to carry out manoeuvres inside/outside the junction; Management of emergency situations and/or anomalies in service.	**47**	**1552**

Ethics and compliance training

Several training sessions were held in 2023, as part of the 'Compliance Programme', aimed in particular at new recruits, also illustrating the whistleblowing system, a topic on which a training session was also held for the AST Management Committee. With reference to the Organisational Model 231, special training was provided for key officers with particular focus on the management of periodic information flows. In addition, specialised training sessions were held during the period, following up on internal audit measures for particular cases.

COURSES	TRAINED PEOPLE	HOURS PROVIDED
"Compliance in a nutshell" course; staff training on Compliance and Governance (Antitrust, Anti-bribery, GDPR, Anti-money laundering, Whistleblowing)	**26**	**43**
"Antitrust in law" course	**12**	**48**
"Whistleblowing" course	**10**	**10**
"Model 231-SB and information flows" course	**18**	**40**
"Compliance - Supplier register" course	**30**	**30**

In 2023, training delivered digitally, via the Teams video conferencing platform, has also become increasingly popular.

COURSE	DESCRIPTION
ENGLISH LANGUAGE TRAINING	During 2023, language training continued, with 40 participants taking part for a total of 1,200 hours. At the end of their training
BASIC AND ADVANCED EXCEL TRAINING	In the current year, an Excel course was set up for basic and advanced level. A total of 606 hours were provided for 48 participants
VAT	In the current year, teaching continued for the VAT refresher course involving 30 participants for a total of 120 hours.
REACH ROHS	Introduction to the REACH Regulation and interactions with product regulations. 1 participant 8 hours.
MOBILITY MANAGER	Evaluating the home-work journeys of their employees with impact on the environment, health and safety of people and the road network in cities 1 participant 8 hrs.

6.6 Occupational health and safety

The company adopts management systems that aim to prevent possible risks and measures to protect the safety and health of staff. As well as compliance with the provisions of the applicable regulatory framework on health and safety and the national Collective Bargaining Agreement, since 2008 the company signed the Safety Protocol, which has since been renewed multiple times. The company has also voluntarily chosen to certify its occupational health and safety management system in accordance with the requirements of the international management standard ISO 45001:2018.

This commitment can also be seen in the document 'Occupational health and safety policy', which was drawn up on the basis of the analysis of occupational health and safety risks inherent in AST's activities. The full version of the document is available on AST's online site *(https://www.acciaiterni.it/wp-content/uploads/2023/10/Politica-SSL_28_09_2023_IT.pdf)*.

The health and safety policy evaluates achievements and defines new ones, consistent with the company's approach to continuous improvement. AST is subject to the 'major accident hazards' legislation (the so-called 'Seveso Directive') and therefore has a special 'Major accident hazard prevention policy'.

Safety activities

The activities carried out in 2023 concerned, in addition to what is obviously already planned for compliance with regulations, both plant-structural activities and aspects related to the dissemination and rooting of the 'safety culture' at every level of the company organisation, and also with reference to contractors. In particular:

- ISO 45001 certification was renewed following the positive outcome of the audit carried out by the certification body DNV-GL;
- work continued on projects for the modernisation, from the safety point of view, of production facilities and electrical installations, and those relating to workplaces;
- With regard to management aspects, the audits provided for in the annual plan were carried out, which also covered aspects relating to the management of contract works;
- activities aimed at enhancing the 'safety culture' continued;
- in relation to 'major-accident hazards' obligations, an updated version of the Major Accident Prevention Policy Document (DPPIR) was issued after consultation with workers' representatives.

ISO 45001 Certification

The ISO 45001 standard makes it possible to:

- providing safe and healthy workplaces, preventing work-related injuries and illnesses and improving work performance;
- identify risks and initiate controls for their management;
- create the best working conditions in the organisation;
- reduce work accidents and occupational diseases;
- involve and motivate staff through better and safer working conditions;
- also guarantee compliance with international standards to customers and suppliers.

Major accident hazards

AST falls under the scope of the regulations on major accident hazards (so-called Seveso Directive), mainly in connection with the use of hazardous acid mixtures used in the treatment of steel strips. For this reason, the company adopts a special management system, based on the 'Policy for the prevention of major accident hazards', which defines the organisation, resources and procedures aimed at preventing such risks. In 2023, as in the past, no major accidents occurred at the plant.

Safety risks

The main safety risks in the plant are related to the use of dangerous substances and mixtures, suspended loads, fire/explosion, contact with moving parts, working at heights. None of these potential hazards caused 'high-consequence injuries' in 2023. The actions taken to limit the risks identified are mainly related to preventive and protective measures, analysed in the risk assessment documents and verified through dedicated internal audits and inspections; the main ones include the choice and distribution of appropriate PPE, adoption of management and operational procedures, information, education and training activities, and proper management of inspections and maintenance on equipment, machinery and facilities.

Health risks

All specific health risks are periodically assessed according to the applicable technical standards. The risks with the greatest impact on the causes of occupational diseases are manual handling of loads, exposure to noise, exposure to vibrations, risks of exposure to carcinogens, risk of chemical agents. Based on the results of risk assessments, special improvement plans are prepared. In particular, we highlight the provision of noise barriers, the enhancement of extraction and abatement systems for pollutants, the use of manual handling aids for loads, the optimisation of the ergonomic aspects of workstations and storage of materials and equipment, and health surveillance.

Training

The training of and provision of information to workers on safety rules is fundamental. This activity is implemented when each worker is hired and upon transfers, job changes, introduction of new work equipment, technologies, potentially dangerous substances or preparations. Workers must regularly participate in refresher courses.

Operating procedures

The work activity is then regulated through specific Operative Safety Procedures (OSP), which guide the worker when carrying out his/her activity to prevent the occurrence of an accident or exposure to substances, temperatures, noises and any other factor that could cause a disease. Particular attention is paid so that all workers are issued with and use Personal Protection Equipment (PPE).

Corporate departments

A specific corporate department is tasked with ensuring compliance with the regulatory framework by supporting the preparation and update of the Risk Assessment Document, ensuring that systems and procedures comply with the law and guaranteeing personnel training. The factory's RSU also includes a safety committee. There is a worker's safety representative (WSR) in the plant. The implementation of the fire policy is entrusted to the ATS/ANT corporate body, which has a structure consisting of a service manager and the company fire-fighting officers. The plant has an in-house first aid station, staffed 24 hours a day by specialised medical personnel, which ensures emergency interventions in case of injuries, with the support of the fire-fighting team.

Accidents

In 2023, 20 accidents occurred among employees, with a frequency index of 5.9 (which is significantly lower than the national average for the steel sector, which was 15.7 in 2022). The accidents were mainly caused by slipping or tripping (12) and material handling. No fatalities or serious injuries were reported. There were also 45 cases of occupational diseases.

Frequency Rate: number of accidents with an absence of more than 1 day/number of hours worked x 1,000,000

Severity Index: days of absence due to accidents/ number of hours worked x 1,000,000

ODR: cases of occupational disease/number of hours worked x 1,000,000

EMPLOYEE ACCIDENTS	2023	2022	2021
Accidents (*absence > 1 day*)	20	22	15
Frequency rate	5.9	5.9	3.8

EMPLOYEE ACCIDENTS AT WORK	HOURS WORKED	ACCIDENTS *(with absence >1 day)*	SERIOUS ACCIDENTS *(with absence >6 months)*	LOST DAYS	FREQUENCY RATE *(Frequency rate)*	SEVERITY RATE *(Severity Index)*
year 2023	**3,371,420**	**20**	**0**	**790**	**5.9**	**234.3**

OCCUPATIONAL DISEASES - EMPLOYEES	2023	2022	2021
Occupational disease cases	45	75	71
Occupational disease rate (ODR)	13.3	20.3	18.1

Non-employees

During 2023, there were 26 accidents involving workers not employed by AST (including not only temporary workers but also employees of contractors), of which one was serious. Temporary workers are involved in safety-related activities in the same way as employees. Through the single documents on the assessment of risk from interference and CSPs, AST provides contractors with information on the risks present in the plant; the main contractors are involved in activities aimed at the 'safety culture'.

ACCIDENTS TO NON-EMPLOYEES	2023	2022	2021
Accidents *(absence > 1 day)*	26	21	21
Frequency rate	14.5	11.7	11.9

HEALTH PROJECT

AST recently presented the results of the 'Health project', conducted in collaboration with the Department of Medicine and Surgery (Section of Occupational Medicine, Respiratory Diseases and Occupational and Environmental Toxicology) of the University of Perugia. The survey involved a sample of over 400 workers for three specific projects: assessment of cumulative metal exposure; assessment of the effect of occupational and non-occupational risk factors on the respiratory system; assessment of workers' lifestyles and implementation of health promotion interventions.

CUMULATIVE METAL EXPOSURE ASSESSMENT

The results are comforting in that they show values that are not only below the 'limit values' but also, with the exception of a very few cases that were quickly returned, equal to or below the so-called 'reference values', i.e. those that characterise the population that is not occupationally exposed.

EVALUATION OF THE EFFECT OF OCCUPATIONAL AND NON-OCCUPATIONAL RISK FACTORS ON THE RESPIRATORY SYSTEM

The study did not show any particular criticalities in the observed population and indeed recorded improved data in 2018 compared to 2015, thanks in part to the prevention strategies in the workplace and the training implemented. The analysis of 442 subjects, observed over a period of about five years, revealed a possible average annual decline in certain groups of workers, particularly those most exposed to possible pneumopathogenic agents.

LIFESTYLE ASSESSMENT AND IMPLEMENTATION OF HEALTH PROMOTION INTERVENTIONS

The study involved workers of Arvedi AST and workers of the Azienda Ospedaliera Santa Maria di Terni - examining variables such as socio-demographic aspects, smoking habits, alcohol consumption, physical activity, dietary habits and anthropometric variables - and made it possible to plan and implement special initiatives that, integrating risk prevention in the workplace, will help to promote better levels of health and well-being. In this sense, Arvedi AST has already implemented awareness-raising actions regarding tobacco control, good eating habits - also involving the company canteen - and targeted programmes to combat overweight and obesity.

6.7 Corporate welfare

The company welfare system, which has a long and well-established history, relies first and foremost on the Corporate Health Insurance Fund and the Terni Workers' Circle (CLT).

Thanks to the Corporate Health Insurance Fund, AST employees and their families have been able to take advantage of medical services that supplement and improve on those provided by the National Health Service since 1968, which are provided directly at clinics located close to the plant. It also provides indirect assistance through reimbursements of external services. The number of members as at 31 December 2023 is 3,445, of which: 1,303 employees and 1,614 dependent family members, 344 pensioners and 184 dependent family members. The number of services provided directly within the outpatient clinics was 25,695, of which 13,844 were specialist examinations, 10,869 dental services and 982 physiotherapeutic services. The necessary financial means originate from the contributions of the persons registered. Arvedi AST contributes by supplying the facilities and the administrative services. The management is entrusted to a Management Board whose members are appointed equally by the company and the trade unions.

The Terni Workers' Circle (CLT), founded in 1927 as an employees' recreational club, is also a reference point for citizenship, thanks to its heritage consisting of cultural, recreational and sports facilities (library, conference hall, bar-restaurant, green park with children's playground, outdoor gymnasium, covered stage for events). The number of members of the Terni Workers' Circle as at 31 August 2023, including family members who can benefit from CLT services at favourable conditions, is 10,834, of which 3,976 are employee members, 952 are retired employees and 5,906 are external members.

Welfare plan

AST also provides its employees with a dedicated digital platform that allows workers to spend the amounts provided for in the metal-mechanics industry collective bargaining agreement, company agreements, and PDR conversion into welfare. AST, together with the RSU, has, since 2017, set up a Welfare Plan that allows workers to benefit from services also aimed at families, children, and those who have an elderly or non-self-sufficient family member. The initiative represents a concrete measure that supplements employees' income, as it makes it possible to use an articulated package of flexible benefits which do not constitute employment income and are, therefore, exempt from tax.

Through a specific web platform, the employee can decide how to use the welfare credits due, by choosing between:

- reimbursement of education expenses for their children
- reimbursement of costs incurred for the provision of assistance to elderly or non-self-sufficient relatives
- vouchers for goods and services (food shopping vouchers, fuel vouchers, SIM recharge cards, vouchers for shopping and technology)
- free time (Terni Workers' Circle, gym memberships, cinema, theatres) and personal care
- on demand travel service
- health (Corporate Health Insurance Fund, vouchers for visit to specialists, medical check-ups, dentist cards)
- payments to supplementary pension funds

In 2023, employees were able to independently manage a wide range of choices between goods and services, using both the amounts provided by AST (Euro 200 as a 'fuel bonus' and Euro 200 in welfare services for all employees, and the additional Euro 300 in services for employees with dependent children), and the amount of Euro 200 in welfare services established by the collective bargaining agreement for the category. Initiatives aimed at the families of employees also include the awarding, in November 2023, of 125 annual scholarships to reward deserving children and 316 book vouchers.

CORPORATE HEALTH INSURANCE FUND

1,303 PERSONS REGISTERED
3,445 PERSONS RECEIVING ASSISTANCE

TERNI WORKERS' CIRCLE

10,834 PERSONS REGISTERED

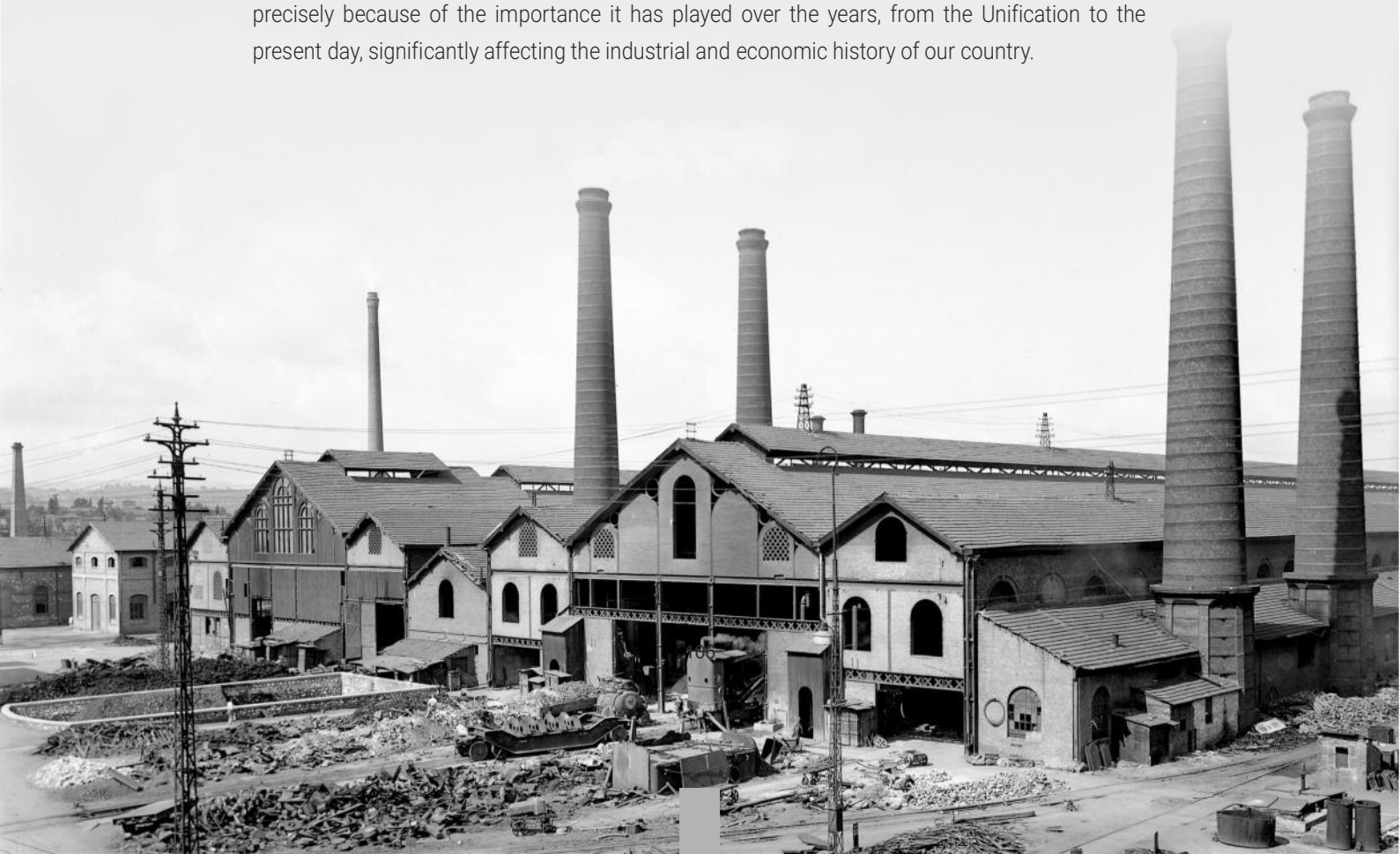
of whom
3,976 employee members
952 retired employees
5,906 external members

6.8 Cultural activities

Throughout its history, Terni's steelworks have always been culturally relevant. Suffice it to say that many a time it has been film sets that have made cinema history. The first time was in 1933 with the film 'Acciaio' (Steel), directed by German director Walter Ruttmann and based on an original subject by Luigi Pirandello, starring, among others, steelworker Vittorio Bellacini. Subsequently, the steel mills returned to the centre of other films or were used as a film set, for Vittorio De Sica's 'I sequestrati di Altona' (1962), Luchino Visconti's 'La caduta degli dei' (1969), Alberto Bevilacqua's 'La Califfa' (1970) and the TV film 'In arte Nino' (2016). There are also numerous testimonies related to culture and art. These include the pictorial cycle dedicated to the 'Acciaierie di Terni' by Renato Guttuso, the works of Arnaldo Pomodoro and those of the American sculptor Beverly Pepper.

THE HISTORICAL ARCHIVE

The Historical Archive preserves the documentation produced by AST throughout its long history. The material preserved consists of paper, photographic and audiovisual documents that together cover a chronological span from 1873 to the first decade of this century. The Archive was declared by the Archival and Bibliographic Superintendence of Umbria and Marche to be of considerable historical interest due to its 'absolute and priority importance for the economic and social history of the Umbrian region and the entire Italian nation'. Through the preservation and enhancement of documents, AST promotes industrial culture, studies and research in this field. It is one of the most important business archives both at a local level, for the role played by the company in the transformation of the city of Terni in economic, urban and social terms, and at a national level precisely because of the importance it has played over the years, from the Unification to the present day, significantly affecting the industrial and economic history of our country.

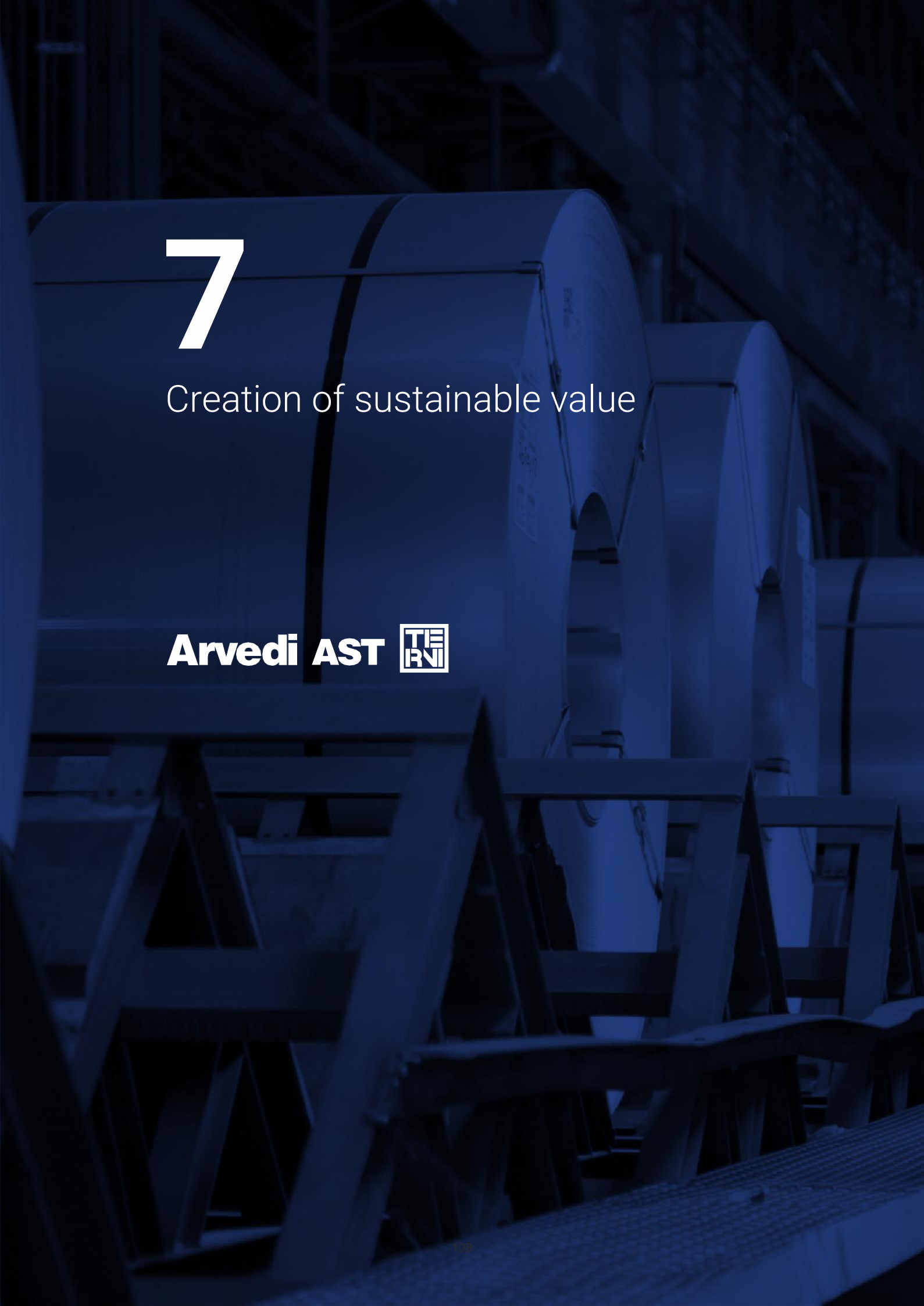


THE LIBRARY

AST's Historical Library has been declared of 'exceptional cultural interest' by the Ministry of Culture, as it constitutes a bibliographical complex of 'value, rich in rare and unique specimens'. A book collection, preserved in its original location, comprising a bibliographic heritage of around 5,000 works including monographs and periodicals. Started in 1884 with the birth of the industrial site, the collection bears witness to a 'Company System' that was the technical-scientific documentation centre for its technicians and workers until the first 50 years of the last century.

Most of the collection covers a time span from the early 19th century to around 1960, with the presence of some volumes from the 21st century. A destination for scholars, researchers and lovers of history and the territory, the Library still represents, together with the Historical Archive, a fundamental tool for the study and in-depth economic and social study of Umbria and the entire country, and bears witness to an exceptional cultural interest in the history of the largest industrial complex, established immediately after the unification of Italy and which was defined 'the most beautiful iron and steel workshop in the world'.

Time, wartime events and various demolitions have changed much of the original layout. Among the spaces still in use are the management building and the historic Library building. Its "severe and austere" beauty, characterised by very high soffits and imposing wooden shelving that envelops the entire room, has also inspired the great artists of cinema, so much so that it has served as the backdrop for important films: from Luchino Visconti, who in 1969 chose it for some scenes of La Caduta degli Dei to the last shot in 2016 for the Rai fiction dedicated to Nino Manfredi.



7

Creation of sustainable value

Arvedi AST TERNI

7.1 Strategy

Arvedi AST promotes the creation of long-term sustainable value by endeavouring to:

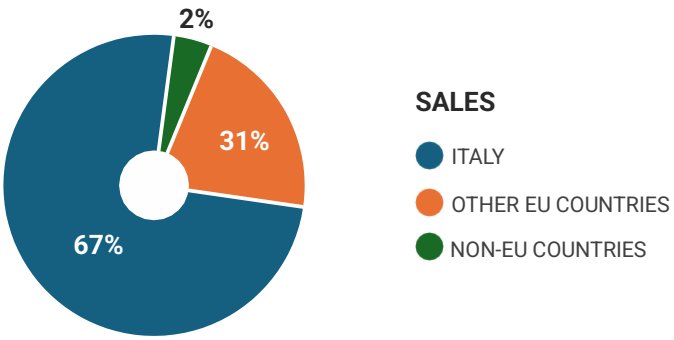
- consolidate the sustainability of the business model
- promote the development of innovative products
- invest in the growth of the company
- promote an efficient use of resources
- guarantee a solid financial structure
- seek operational efficiency
- manage corporate risks
- use research and innovation as a stimulus.

The company intends to maintain a leading position in the stainless steel flat products market both in Italy and abroad, with an increased focus on cold rolled products and an increase in sales to end users. Customer orientation, whose needs are at the centre of the production and sales process, remains the cornerstone of the company's entire business. To ensure customer loyalty and the development of new business relationships, the company aims at continuous improvement and constant strengthening of the quality of its products and services. Quality increasingly involves the entire production process in terms of efficiency (product and service quality), efficiency (cost reduction) and flexibility (responsiveness to change required by the market). Innovation, improvement of the production process and products, environmental sustainability, focus on end-users, and enhanced customer service are the main guidelines of the company's activities.

7.2 Results

The company's economic, financial and balance sheet data are published in the accounting documents and in the annual financial statements, prepared in accordance with the law. Please refer to them for detailed information. The sustainability report highlights some particularly relevant economic performance and information from the point of view of sustainability, and in particular the economic value generated and distributed to stakeholders.

TURNOVER	2023
euro/000	**2,272,687**



SALES 2023	ITALY	OTHER EU COUNTRIES	NON-EU COUNTRIES
euro/000	**1,513,243**	**699,499**	**59,945**

INVESTMENTS

Investments for the year 2023 amounted to Euro 48,718. About 70% concerned 3 major projects:

- installation of cold-rolled line No. 8 (LAF8) and Sendzimill 11 (ZMILL11): LAF8 is a combined type, as it can process both hot-rolled steel coils and cold-rolled steel coils. The Zmill 11, closely connected to Line 8, will have to laminate the coils to achieve the desired thicknesses;
- defining the layout of the new PIX3: as part of a rationalisation of processing costs, lines previously used at the Terni Service Centre (CST) were transferred to this new department created within the AST site;
- redefining the layout of part of CST: the T5 and Slitter 8 lines were repositioned and partially revamped and a new automated packaging line was purchased.

In 2024, the investment policy includes measures to decarbonise and diversify supply, with the aim of increasing cold-rolled production.

7.3 Economic value generated and distributed

The company's activities are not only a profitability factor, but also generate significant economic benefits for a number of stakeholders: employees (direct and indirect remuneration), shareholders (distributed profits), public administration (taxes and duties), lenders (financial burdens), the community (donations and investments), suppliers (value of goods and services). The information on the economic value generated and distributed below therefore provides an indication of how they have created wealth for stakeholders.

ECONOMIC VALUE GENERATED (Value of production)	2023
euro/000	**2,364,612**

DISTRIBUTED ECONOMIC VALUE (euro/000)	2023
HUMAN RESOURCES	**127,436**
SUPPLIERS	**2,228,741**
SHAREHOLDERS	**-**
LENDERS	**27,387**
PUBLIC ADMINISTRATION *	**628**
COMMUNITY	**216**

**It is also noted that AST received Euro 54,003 in subsidies from the public administration in 2023 (mainly in application of the measures to contain the increase in energy costs for energy-intensive companies)*

Suppliers

53.9% of the value of supplies of goods and services was provided to local (national) suppliers.

SOURCE OF SUPPLIES	%
Italy	53.9%
Other Countries	46.1%
TOTAL	**100%**

7.4 Tax

Legality and transparency are a point of reference in the management of fiscal activities by the company, through behaviour oriented towards compliance with fiscal regulations. Consistent with these values - and with the awareness that taxes are important sources of public revenue and are essential for the macroeconomic stability of any country - the fixed tax approach aims to ensure the correct determination and settlement of taxes due by law, preventing the risk of incurring tax violations or abuse of the principles and finalities of the tax system.

AST is committed to applying tax legislation by ensuring that the spirit and purpose of the regulations are respected, and by adopting a reasonable and responsible interpretation of the legislation in force. The company is aware that through the development of its business it has the opportunity to contribute to the state's tax revenue and to support the economic and social development of the territories in which its factories are located. It is also aware of the importance that these flows have for the collective well-being, and also for this reason adopts a behaviour consistent with the principles of legality, correctness and transparency.

TAXES *(euro/000)*	2023
Income taxes *	**3,071**
Other taxes	**(3,699)**
Total	**(628)**

** the figure for direct taxes is positive due to deferred taxes and consolidation income*

7.5 Environmental expenses and investments

Expenditure on environmental protection in 2023 amounted to Euro 33,698. The investments (Euro 1,371) mainly concerned the continuation of activities to ensure compliance with the requirements of the Integrated Environmental Authorisation (such as the hydraulic regulation of the slag storage area), the adaptation of part of the plant's chimneys to allow the safe analysis of fumes, and the construction of noise barriers in areas considered sensitive.

ENVIRONMENTAL EXPENSES (euro/000)	2023
Prevention of emissions	10,138
Protect the waters	10,141
Waste management	12,355
Prevention of noise pollution	85
Prevention of soil pollution	979
TOTAL	**33,698**

ENVIRONMENTAL INVESTMENTS (Euro/000)	2023
Prevention of emissions	560
Protect the waters	277
Waste management	303
Prevention of noise pollution	191
Prevention of soil pollution	39
TOTAL	**1,371**

7.6 Research and development

In 2023, research activities related to projects started in previous years continued. In particular:

- The conclusion of the CIP - Coil Intelligent Processing project, financed by the MISE, mainly concerned the finalisation of software modules for the data management system;
- The activity in collaboration with the University of Perugia, which aims to develop a sensor capable of monitoring the degradation of acid transport pipes, consisted of a series of laboratory tests to calibrate the sensor;
- The four-year Horizon Europe HEPHAESTUS project, started in 2022, continued. One of its objectives is the study and construction of a treatment plant for waste dust collected from EAF and AOD furnaces, with a view to their re-use.
- Internally developed activities also continued around three main figures:
- Innovative projects mainly related to new green energy technologies;
- Projects in cooperation with customers for the optimisation of the company's products and for new special applications required by the market;
- Projects aimed at process and product improvements.

European Commission

8

Appendix

8.1 Methodological notes

Previous sustainability reports

AST has undertaken sustainability reporting on a voluntary basis since 2018.

Reporting period

This report covers the financial year 2023 (1 January - 31 December). When comparing with previous years, it must be taken into account that the pipe factory division was spun off, creating the subsidiary Tubificio di Terni srl as of 1 January 2023. The periodicity of the report publication is set according to an annual frequency.

Materiality analysis

The reporting contents were prepared from the results of the materiality analysis conducted in previous years, confirmed for 2023. This analysis made it possible to identify the material, i.e. most relevant aspects.

Further information

Other non-financial information can be found in the Annual Report 2023 and in the Report on Operations. Further information can be found on the company's website (https://www.acciaiterni.it).

GRI 301-1 Materials used

The unit of measurement is given in weight (t) by applying appropriate technical conversion coefficients from volumes or units where necessary. Data are aggregated into 'non-renewable materials' and 'renewable materials'. Materials do not include fuels used as energy sources.

GRI 301-2 Recycled materials used

The input of recycled materials consists mainly of purchased scrap, as well as metals and basic granulate from in-plant recovery processes.
The indicator " % of recycled materials used" is calculated as "Total input of recycled materials used/Total input of materials used".
The indicator " % recycled metals used" is calculated as "Total recycled and utilised metals input/Total metals input used".
Both indicators include the quantities of material recycled internally and reused in the production process.

GRI 302-1 Energy consumption

Energy consumption quantities were converted to GJ using the fixed conversion factors or conversion factors given in the table below and derived from the

ENERGY				
	Unit of measure	Conversion unit	2023	Source
Electricity	*kWh*	*GJ*	**0.00360**	Constant
Natural gas	*Smc*	*GJ*	**0.03429**	NIR: National Inventory Report 2023. Tab A6.1 (1)
Petrol	*l*	*kg*	**0.75000**	Conventional fuel and biofuel specifications (Ann. 1 Decree MISE 13.02.2013) (4)
	kg	*GJ*	**0.04313**	NIR: National Inventory Report 2023. Tab A6.2
Diesel	*l*	*kg*	**0.84000**	Conventional fuel and biofuel specifications (Ann. 1 Decree MISE 13.02.2013)
	kg	*GJ*	**0.04285**	NIR: National Inventory Report 2023. Tab A6.2

GRI 305 – 1 Direct greenhouse gas emissions (scope 1)

Direct emissions were calculated on the basis of the methodology used for ETS purposes.

GRI 305 – 2 Other indirect greenhouse gas emissions (scope 2)

Indirect emissions, from electricity consumption, are reported as location- based and calculated on the basis of national emission factors for electricity consumption for the year 2023 (preliminary estimates: 235.6 g CO_2/kWh) as made available by ISPRA in September 2024 ("Efficiency and decarbonisation indicators in Italy and in the biggest European Countries-Edition 2024").

GRI 305 – 3 Other indirect greenhouse gas emissions (scope 3)

The reported figure refers to an internal calculation of scope 3.1 emissions related to purchased raw materials. This class is by far the most important one for EU manufacturers of electric ovens. It was calculated from the balance of all raw materials used in 2023, considering emission factors shared in the Eurofer work groups on stainless steels.

GRI 305 - 7 Relevant air emissions

The data relate to the quantities calculated by the company in accordance with the E-PRTR criteria (system for the communication of AIA data entered in the E-PRTR "European Polluant Release and Transfer Register" pursuant to art. 4 of Decree of the President of the (It.) Republic 157/2011 that implements Regulation (EC) 166/2006).

We deemed that the emissions of dusts (essentially originating from the steel mill department and, to a lesser extent, from processing downstream from hot and cold rolling) and of NOx (essentially originating from the combustion of methane in the heating and processing furnaces located in the hot and cold rolling areas, and, to a lesser extent, by the steel mill emissions) were considerable.

Emission data for the most relevant chimneys (furnaces and converters) and those of the steam boiler chimneys are calculated on the basis of flow rates, operating hours and mass flows recorded by the SME. The figures for all remaining emissions (around 100) are an estimate based on the annual checks carried out on these emissions. It should be noted that in cases where the concentration value is below the detection limit, a value equal to half of this limit is considered. The data are those also reported in AST's E-PRTR register.

Other methodological notes

For the sake of correct representation of performance and to ensure the reliability of the data, the use of estimates has been limited as much as possible, and where they exist, they are based on the best available methodologies and appropriately reported.

Some data are rounded to the nearest unit: downwards if after the decimal point there is a value less than 50 or upwards if after the decimal point there is an amount greater than or equal to 50.

8.2 GRI Table of Contents

Declaration of use

Arvedi AST reported the information mentioned in this GRI content index for the period from 01/01/2023 to 31/12/2023 according to the "with reference" option.

GRI 1 used

GRI 1- Fundamental Principles - version 2021

Global Reporting Initiative

GRI STANDARDS	INFORMATION NOTICE	POSITION (Chapter/Paragraph)	NOTES
GRI 2 General information *2021*	2-1 Organisational details	3.1 -3.4 -3.5	
	2-2 Entities included in the organisation's sustainability reporting	1.1 -8.1	
	2-3 Reporting period, frequency and point of contact	1.1 -8.1	*Period: 2023 Frequency: annual*
	2-4 Review of information	4.4	*Compared to the previous report, the figure for direct CO2 emissions in 2021, which due to a typing error had a deviation of about 1%, has been corrected.*
	2-5 External assurance		*The report is not subject to external assurance*
	2-6 Activities, value chain and other business relationships	2.4 -3.1 -3-2	
	2-7 Employees	6.3	
	2-8 Non-employees	6.3	
	2-9 Governance structure and composition	3.4	
	2-10 Appointment and selection of the highest governing body	3.4	
	2-11 Chairman of the highest governing body	3.4	
	2-12 Role of the highest governing body in impact management control	3.4 -3.5	
	2-13 Delegation of responsibility for impact management	3.4 -3.5	
	2-14 Role of the highest governance body in sustainability reporting	3.4 -3.5	
	2-15 Confits of interest	3.6	
	2-16 Communication of critical issues	3.5	
	2-17 Collective knowledge of the highest governance body	3.4	
	2-22 Sustainable development strategy statement	Presentation	
	2-23 Policy commitments	2.2 -2.4 -4.1	
	2-24 Integration of policy commitments	2.2 -2.4 -4.1	
	2-25 Processes to remedy negative impacts	3.5	
	2-26 Mechanisms for seeking advice and raising concerns	3.5	
	2-27 Compliance with laws and regulations	3.4-3.5-4.1 -6.2	
	2-28 Membership of associations	1.3	
	2-29 Approach to stakeholder involvement	1.2 -1.3	
	2-30 Collective agreements	6.1	

GRI 3 Tangible topics *2021*	3-1 Process for determining material subjects	1.2	
	3-2 List of material topics	1.2	
	3-3 Managing tangible topics	4.2 - 4.3 - 4.4 - 4.5 - 4.6, 4.7 - 4.9 – 6.1 – 6.3 – 6.4 – 6.5 – 6.6 – 6.7 -7.3 – 7.4	
GRI 201 Economic performance *2016*	201 -1 Direct economic value generated and distributed	7.3	
	201 -2 Financial implications and other risks and opportunities due to climate change	4.4	
	201 -4 Financial assistance received from the government	7.3	
GRI 205 Anti-corruption *2016*	205 -3 Confirmed incidents of corruption and actions taken	8.2	*No incidents of corruption were detected*
GRI 206 Anti-competitive behaviour *2016*	206 -1 Legal action for anti-competitive behaviour, antitrust and monopolistic practices	8.2	*No anti-competitive, anti-trust and anti-competitive behaviour and monopolistic practices were found*
GRI 207 Taxes *2019*	207 -1 Approach to taxes	7.4	
	207 -2 Tax-related governance, control and risk management	7.4	
	207 -4 Country reporting	7.4	
GRI 301 Tangible *2016*	301 -1 Materials used by weight or volume	4.2	
	301 -2 Recycled input materials used	4.2	
GRI 302 Energy *2016*	302 -1 Internal energy consumption within the organisation	4.3	
	302 -3 Energy intensity	4.3	
GRI 303 Water and effluents *2018*	303 -1 Interactions with water as a shared resource	4.7	
	303 -2 Management of water discharge impacts	4.7	
	303 -5 Water consumption	4.7	
GRI 304 2016 Biodiversity	304 -1 Operational sites owned, leased or managed in or near protected areas or in areas of high biodiversity value outside protected areas	4.9	
GRI 305 Emissions 2016	305 -1 Direct greenhouse gas (GHG) emissions (Scope 1)	4.4	
	305 -2 Indirect greenhouse gas (GHG) emissions from energy consumption (Scope 2)	4.4	
	305 -4 Intensity of greenhouse gas (GHG) emissions	4.4	
	305 -6 Emissions of ozone-depleting substances	4.5	
	305 -7 Nitrogen oxides (NOx), sulphur oxides (SOx) and other relevant air emissions	4.5	

GRI 306 Waste *2020*	306 -1 Generation of waste and significant waste-related impacts	4.6	
	306-2 Managing significant impacts of waste	4.6	
	306-3 Waste generated	4.6	
GRI 308 Environmental assessment of suppliers - *2016*	308-1 New suppliers selected on the basis of environmental criteria	2.4	
GRI 401 Employment *2016*	401-1 New recruitments and employee turnover	6.2	
	401-2 Benefits provided to employees	6.7	
GRI 402 Labour/management relations - *2016*	402-1 Minimum notice periods for operational changes	6.2	
GRI 403 Occupational health and safety *2018*	403-1 Occupational health and safety management system	6.6	
	403-2 Hazard identification, risk assessment and accident investigation	6.6	
	403-3 Occupational health services	6.6	
	403-4 Worker participation and consultation on occupational health and safety, and communication thereon	6.6	
	403-5 Occupational health and safety training for workers	6.5 - 6.6	
	403-6 Workers' health promotion	6.6	
	403 -9 Work injuries	6.6	
	403 -10 Occupational diseases	6.6	
GRI 404 Training and education *2016*	404 -1 Average hours of training per year per employee	6.5	
	404 -2 Employee skills refresher programmes	6.5	
GRI 405 Diversity and equal opportunities *2016*	405 -1 Diversity in governing bodies and among employees	6.4	
GRI 406 Non-discrimination *2016*	406 -1 Incidents of discrimination and corrective measures taken	6.4	*No incidents of discrimination were detected*
GRI 413 Local communities *2016*	413 -2 Operations with significant actual and potential impacts on local communities	6.1 - 6.7 – 6.8	
GRI 414 Social assessment of suppliers *2016*	414 -1 New suppliers selected on the basis of social criteria	2.4	
GRI 416 Customer health and safety *2016*	416 -1 Assessment of health and safety impacts of product and service categories	3.3	
	416 -2 Incidents of non-conformities relative to health and safety impacts of products and services	8.2	*No incidents of non-conformities were detected*
GRI 417 Marketing and labelling *2016*	417 -2 Incidents of non-conformities with labelling and product and service information	8.2	*No incidents of non-conformities were detected*
	417 -3 Incidents of non-conformities with marketing communications	8.2	*No incidents of non-conformities were detected*
GRI 418 Customer privacy *2016*	418 -1 Founded complaints regarding breaches of customer privacy and loss of customer data	8.2	*No substantiated complaints about breaches of customer privacy, or incidents of leakage, theft or loss of customer data were detected*

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