# Y E A R I J SUSTAINABILITY R E P O R T

FERALP



Y E A R

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# LETTER TO S

WE'RE COMING OUT OF A YEAR OF RECOVERY, WHEN EL IN SPITE OF ONGOING STRUCTURAL ISSUES AND HIST OF GROWTH TOWARDS EMERGING FROM THE LONGE EXPORTS AND TO THE NEW-FOUND CONFIDENCE OF CO

The steel industry has been no exception and 2017 closed positively. According to the World Steel Association (WSA), Italy is still the second European producer of long products behind Germany, the first EU producer of rebar, and even the third producer worldwide of wire rod. Operating between the two largest steel-producing countries in the European Union, the Feralpi Group has benefited from the favourable situation and expectations are positive for 2018 too.

Feralpi wanted to go further though, and not be limited to just reaping the benefits brought about by a period of expansion, albeit moderate. There are intrinsic reasons underpinning the Group's success, factors which go well beyond the strategies that have made Feralpi a Group with a more international, diverse and vertical approach. These factors have been consistently nurtured over time with foresight, and concern the fundamental strategies and choices made by the Group.

Firstly, there is innovation, which is pursued with cuttingedge technological choices that support the increasingly widespread digitalisation of all company activities and follow the development of industry 4.0 models. These choices are anything but automatic or taken as read. They require a capacity for analytical forecasting, interpretation and quick reaction. These skills are based on widespread cognitive intelligence, which Feralpi possesses, and make human capital the Group's real competitive asset in the long term. As a result Feralpi continues to invest in research and training at all levels.

Secondly, there is the adoption of circular models, as opposed to linear models which are no longer sustainable. Feralpi's new philosophy is circularity, and this is where planning efforts converge. For their part technology and innovation feed the development of circular systems, focusing on increasingly sophisticated and efficient recycling solutions. Our objective may seem idealistic, but it's been set by our planet. There is a need for 'genetic mutation' to enable the environmental impact of the steel industry to change from negative to positive. If this isn't yet possible, we are working on creating methods to achieve this in the future. We are spurred on by the fact that steel is already a completely recyclable material.

Feralpi is encouraged in this vision by the increasing awareness of the importance of sustainability at all levels, and by a more mindful and critical opinion provided by national and international institutions, and by the public at large. In this context Feralpi wishes to contribute significantly to achieving the sustainable development goals (SDGs) clearly set out by the United Nations. Not only can these goals be shared, they must also not be delayed. Institutions and companies share this enormous responsibility, which the Confederation of Italian Industry (Confindustria) is also appealing for, that has defined and promoted a manifesto organised into ten points so that corporate social responsibility - and this is our choice too enables change from a virtuous model to a proper system capable of creating shared value for the area and the community.

Fifty years have passed since Feralpi was established, and we have laid down strong roots wherever we've been operating during this half century. We've done this in line with the founder's motto, convinced that respect for humankind and the environment is essential.



However, we could never reach this goal without the commitment, dedication and professionalism of the people we work with. We are immensely grateful to our fantastic team and to everyone else who has helped in various ways to make Feralpi what it is today - not just a group, but a family, a certainty.

AS FAR AS WE'RE CONCERNED THIS MEANS INCLUSIVENESS, RESPECT AND DEVELOPMENT. TO PUT IT AS SIMPLY AS POSSIBLE : **THE FUTURE.** 

# TAKEHOLDERS IROPE SHOWED SOLID DEVELOPMENT IN ALL SECTORS

IROPE SHOWED SOLID DEVELOPMENT IN ALL SECTORS. FORIC IMBALANCES, ITALY HAS SHOWN CLE AR SIGNS ST RECESSION SINCE THE WAR, MAINLY THANKS TO MPANIES.



Giuseppe Pasini Chairman of Feralpi Group



### FERALPI HOLDING CORPORATE POSITIONS



### **Board of Directors**

Chairman **Giuseppe Pasini** 

Vice Chairman

Cesare Pasini

Managing Director Giovanni Pasini

Directors:

Maria Giulia Pasini Marco Leali Andrea Tolettini Alessandra Tolettini Guido Corbetta



### **Board of Statutory Auditors**

Chairman Giancarlo Russo Corvace

Standing Auditors Alberto Soardi Stefano Guerreschi

### **GROUP HIGHLIGHTS**

31.12.2017

31.12.2016

SHAREHOLDERS' EQUITY (€/000)

398,531

PROFIT/LOSS FOR THE YEAR PERTRAINING TO THE GROUP (€/000)

TURNOVER (€/000)

NET OVERALL VALUE ADDED (€/000)

TECHNICAL INVESTMENTS (€/000)

STEEL PRODUCED (t, 000)

NUMBER OF SITES (SUBSIDIARIES ONLY)

COUNTRIES WHERE THE GROUP OPERATES

END-OF-PERIOD WORKFORCE

I,4U

TRAINING HOURS DELIVERED

22,084

423,525 D THE GROUP (E/000) 29,998 1,198,970 143,829

> 36,861 2,495

> > 15

1,511\*

23,379

\*including Presider and MPL



























## **1. IDENTITY, MISSION AND STRATEGY**

What is now the Feralpi Group was established as Feralpi Siderurgica in 1968 in Lonato. In a year when the Italian model of industrial growth was heavily challenged, a group of entrepreneurs from Brescia, led by Carlo Nicola Pasini, who believed in manufacturing and the development of steel for the building trade in the Italy that was experiencing an economic boom, created an organisation that has become international and one of the big players in national industry.



#### The Group's development is marked by the following steps:

lattice girders, flat and customised shaped welded mesh)

and Steelfer S.r.l. (representative agency operating in the steel industry);



infrastructure projects

15

The motto of Feralpi *"Produce and grow while respecting humankind and the environment"* captures the vision of the founder Carlo Nicola Pasini, who believed industry must be guided by principles of sustainability to create wellbeing for all involved.

Feralpi's mission is not only to produce a wide range of steels for various purposes, such as the building construction industry through to quality solutions requiring special steels, but to do so in as a sustainable way as possible. This means keeping consumption and emissions to a minimum, using the best technologies available, and filing new patents resulting from activities centred on research and innovation.

Managing the cyclical nature of the steel industry demands operational flexibility and a sound financial position. As a result Feralpi makes the allocation of retained profit a priority, in order to support development and continually pursue innovation in three strategic areas - production efficiency, plant safety, and environmental protection.

Feralpi is proceeding with the long-term strategies adopted to date, which involve diversification, the use of the best technologies available, directing investment in research and development, developing human resources, safeguarding the environment, safety in the workplace, and taking ownership of corporate social responsibility as a unifying vision of the various aspects.



#### Strategic aims are pursued through:

- Strengthening presence in the special steels sector;
- **Reinforcing downstream processing operations** to diversify and verticalise the business, making the chain shorter to reach end customers and meet their requirements more quickly;
- Increasing focus on product quality;
- Seeking new markets abroad to offset the persistent weakness in the Italian market;
- **Developing process innovation,** reinforced by ongoing research, often in partnership with external international organisations.

#### THE FOLLOWING TERMS ARE KEY TO THE FERALPI STRATEGY:

- diversification of the business;
- verticalisation of activities;
- **integration** of roles in a group that is increasingly complex and diverse;
- internationalisation of activities and markets;
- **innovation** as the main element of competitiveness.

Throughout the year the Feralpi Group has continued its long-term plan to review the governance system, to strengthen the integration of the Group in terms of production (process control and planning), management (expansion of the SAP environment and gradual IT integration), the supply chain (coordination of main procurement procedures), and sales (management of complex customer relationships brought about by the increasing importance of products made to order).



# 2. CORPORATE STRUCTURE

The Group's parent company is Feralpi Holding S.p.A., with registered headquarters at 15 Via Aurelio Saffi in Brescia and operational headquarters at 11 Via Carlo Nicola Pasini in Lonato del Garda (BS). Feralpi has production premises in five countries in the European Union (Italy, Germany, France, Czech Republic and Hungary) and commercial premises in Algeria. The organisation chart below shows the Feralpi Group in its entirety, with subsidiaries and associates, each identified by business area.

The Group's structure consists of a core business, which focuses on steelmaking activities, and a number of companies engaged in other activities, including environmental services. In particular, the steel division is coordinated by Feralpi Siderurgica S.p.A., which operates as a sub-holding, and it's split into the Italian division, which also controls companies operating in France and Algeria, and the German one, which includes all companies operating abroad under the Feralpi Stahl brand.

### **FERALPI GROUP'S STRUCTURE 2018**



# **3. CORPORATE GOVERNANCE**

The Group is managed at a sectorial level through Feralpi Holding S.p.A., which owns the subsidiaries and the associates, either directly or through subholding companies. The Group's governing body is the Holding Company's Board of Directors, which is elected by the shareholders and comprises eight directors, including the Chairman with executive powers, Vice-Chairman and Managing Director.

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The Board meets every month, and represents a stable, family shareholder base, whose representatives have managerial roles and also hold some corporate positions. With the exception of the independent director who is not a shareholder, board members are selected on the basis of skills and experience gained at Feralpi, in accordance with informal procedures based on trust among shareholders.

The Board of Directors determines the group's economic, social and environmental strategies in consultation with international market specialists and assesses and approves social and environmental initiatives proposed by the Sustainability Committee.

The Board of Directors is also the main point of reference to which critical business issues, resulting from the activity performed by the Supervisory Board (SB) and the Sustainability Committee in their respective roles, are reported. In more general terms, the aim of the Sustainability Committee is to support the Board of Directors in understanding aspects on preventing social and environmental risks.

With regard to non-financial reporting, the Board approves the Sustainability Report, which is the main document illustrating the Group's social and environmental impact, and identifying the corresponding risks and opportunities.

The Group Chairman, who also chairs the Sustainability Committee, informs the Board of the committee's activities. Following the issue of European Directive no. 95/2014/EU on non-financial reporting, the Feralpi Group decided to switch to sustainability reporting on an annual basis starting from 2017.

### THE GROUP'S GOVERNANCE STRUCTURE



As required by law, a three-member board of statutory auditors supported by a secretary is appointed by the shareholders' meeting. The Board of Directors appoints the Supervisory Board and the Sustainability Committee, led by the chairman of the Holding Company's Board of Directors, who personally contributes to integrating the company's mission with the corporate social responsibility (CSR).

The strategic aims of Feralpi's social and environmental policy are defined in discussion with major stakeholders, such as personnel and the relevant communities, during regular consultations and surveys on opinions.

**The Feralpi Group has adopted a Code of Ethics**, in accordance with Italian Legislative Decree no. 231/2001, which establishes guiding principles for the behaviour and conduct of all Feralpi Group employees and collaborators (http://www.feralpigroup.com/wp-content/uploads/2015/12/codice\_etico2017\_ENG.pdf).

The Code of Ethics is reviewed regularly following legislative amendments. The latest version was reviewed by the Feralpi Holding's Board of Directors on 17 March 2017, and subsequently extended to all companies within the Group.

Anonymous and protected reporting channels are in place in the event of breaches of the Code of Ethics. These channels ensure confidentiality for anyone reporting breaches and are addressed to the Supervisory Boards set up in the Group's main companies.

With the recent takeovers and consolidation of new organisations in the Feralpi Group, new companies are included in the governance model. On 29 March 2018, the Boards of Directors at Fer-Par and Feralpi Profilati Nave approved their model in accordance with legislative decree 231/2001.

#### 3.1. Supervisory Board (SB) activities

As of 31<sup>st</sup> December 2017 four SBs are operating within the Group in Feralpi Holding, Feralpi Siderurgica, Acciaierie di Calvisano and Nuova Defim.

In the first two companies the SB is a collective body with three members, whereas the SB at Acciaierie di Calvisano and Nuova Defim is a single-member body, represented by a supervisor.

The collective SBs met four times during the business year, and have a company employee acting as the controller, and two external members with expertise in specific environmental and safety legislation. The experience of the external members, one of whom is appointed Chairperson, benefits the Group's companies as they are kept up-to-date on the relevant issues.

During the financial year, members of the SBs advised the companies Fer-Par and Feralpi Profilati Nave on the application of the corporate governance model.

### PRINCIPLES OF THE CODE OF ETHICS IN RELATION TO STAKEHOLDERS

General principles in relationships with all stakeholders



Specific principles that guide relationships with each stakeholder

- Shareholders: truth and transparency;
- Personnel: diligence and professionalism;
- Suppliers and customers: cooperation;
- Public Administration: transparency;
- Community: safeguarding the environment, sustainable development.

# AWARDS AND RECOGNITION

• In December 2017 Workplace Health Promotion (WHP) certificates were awarded to companies that took part in the project at the headquarters of the Associazione Industriale Bresciana (Brescia Industrial Association) and in Como, at the headquarters of ATS Insubria. Among these were Feralpi Siderurgica, Feralpi Holding, Acciaierie di Calvisano, Fer-Par and Nuova Defim.

#### 3.2. Antitrust compliance programme

Feralpi operates in an industry with a limited number of large transnational producers. The structure of the market, therefore, makes safeguarding competition a sensitive subject.

The implementation of the antitrust compliance programme continued during 2017.

A training seminar for personnel was organised on 4<sup>th</sup> May 2017 on the subject of Company Antitrust Regulations, which covered antitrust legislation, the company's position on the domestic market and the risk of unlawful conduct.

Feralpi deems it necessary to continue in its efforts to train and raise awareness among personnel in relation to complying with fair competition laws .

On 19<sup>th</sup> July 2017, the Competition and Markets Authority fined eight national steel companies for a total amount of  $\in$ 142.7 million for breaching antitrust legislation. Part of this fine amounting to 29.4 million was imposed on the subsidiary Feralpi Siderurgica S.p.A.

The charge was based on a complaint relating to the fortnightly reporting of market prices. This reporting took place in public meetings by comparing supply and demand at the Brescia Chamber of Commerce. Similar activities are still normally carried out at Chambers of Commerce under the control of the Ministry for Economic Development, without being the object of any complaint. Feralpi Siderurgica promptly submitted an appeal to the regional court, convinced of having always operated in compliance with legislation. At the same time the company requested to pay the fine in instalments, which was granted, and since November 2017 was paying monthly amounts which was to continue for thirty months. On 12<sup>th</sup> June 2018 the Lazio Regional Court granted the company appeals and cancelled the penalties imposed by the Antitrust Authority.

• Feralpi Siderurgica, Acciaierie di Calvisano and Fer-Par are among the first companies in Italy to be awarded the Confindustria quality mark (BAQ 2018) for their schemes alternating work and education in the 2017-2018 academic year.

 The Feralpi Siderurgica supplementary agreement signed in July 2017 deserved the mention and analysis published in the ADAPT publication with the title "Storie di azione e contrattazione collettiva – L'integrativo Feralpi Siderurgica: un accordo nel solco della grande trasformazione del Lavoro" (Stories of action and collective negotiation - The supplementary agreement from Feralpi Siderurgica: an agreement steeped in the significant transformation of work). ADAPT is an organisation set up in 2000 by Professor Marco Biagi to promote comparative study and research in the world of employment and industrial relations.

#### 3.3. Sustainability Committee activities

The Feralpi Group Sustainability Committee carried out its official activities regularly and met six times in 2017. During the year the number of members was supplemented with senior members from companies recently taken over by the Group, and therefore went from seventeen to twenty-three members operating in Italy and Germany. The Committee has a strategic role in defining the Group's sustainability policies, and reports directly to the Board of Directors, with the direct participation of the Group Chairman. The work of the Sustainability Committee is regularly reported to the Board of Directors, which is responsible for assessing opportunities and risks presented, and approving proposed lines of action.

During the meeting on 21<sup>st</sup> February 2017, the Committee dealt with the consequences of introducing legislative decree 254/2016 (Italian implementation of the European Directive on non-financial reporting) on reporting Feralpi sustainability, the status of the SAP application in the Group's companies, the possibility of obtaining the Environmental Product Declaration (EPD) for hot-drawn products by Feralpi Siderurgica and Acciaierie di Calvisano, Feralpi equity interest in QCumber, the system for measuring, managing and communicating the company's socio-environmental impact, and the participation of the Group's factories located in Brescia province in the Local Conciliation Alliance, where this is set up at a local level.

The meeting on 17<sup>th</sup> February via conference call with the management of Feralpi Stahl was dedicated to, among other things, the consequences of implementing EU Directive 95/2014 on non-financial reporting in the German legal system.

At the meeting on 6<sup>th</sup> June, the main aspects surrounding the reporting of the 2015-2016 Sustainability Report were discussed, in addition to internal and external communication methods. The digital education academy initiatives and the report on the Group's R&D and Industry 4.0 programmes were also discussed.

The meeting on 4<sup>th</sup> July via conference call with the management of Feralpi Stahl was mainly dedicated to the internal and external communication of the Sustainability Report, the comparative analysis of the results of the climate survey, and the methods for communicating results to personnel. At the meeting on 12<sup>th</sup> October, the observations of the external auditor regarding the 2015-2016 Sustainability Report were discussed, considering the 2017 report too, and the new version of the GRI reporting standards. These topics were also discussed in the subsequent meeting on 7<sup>th</sup> November with the committee members of the Riesa branch.



• Feralpi Holding achieved an award at the Assolombarda Auditorium on 6<sup>th</sup> April 2018 in Milan entitled "Industria Felix - La Lombardia che compete" (The Industria Felix award - The Lombardy that Competes) in the category for large companies based in Brescia, for best performance of the 2016 business year and balance sheet performance at a provincial level. The event was organised by the Industria Felix cultural association in conjunction with Cerved and the support of the Guido Carli LUISS University and Confindustria in Lombardy.

• On 20<sup>th</sup> February 2018 Feralpi Stahl received recognition for energy efficiency and environmental safeguarding measures, and it is the first company in Saxony to be included on the select list of *Klimaschutz-Unternehmen.*  • During the financial year the engineering thesis by Matthias Groll, deputy manager of the Feralpi Stahl steelworks, received two awards - the Bernhard von Crotta award and the Eduard Maurer award from the Institut für Eisen - und Stahltechnologie, the German institute for steel technologies. Groll's thesis was on materials science specialising in steel technologies and carried out at TU Bergakademie Freiberg. • In December 2017 Mathias Schreiber, the Environmental Manager at the Riesa premises, obtained a doctorate with distinction from TU Bergakademie Freiberg, with a thesis on long-term research carried out on dust collection systems, showing how factories can adopt a pioneering role in safeguarding the environment in the international steel market.

























### **1. THE GROUP'S CSR POLICY**

Feralpi have made principles of economic, social and environmental sustainability their own, and believe that companies shouldn't just be limited to being efficient, but should also operate as aware social and cultural players through an open approach with all stakeholders.



Consequently Feralpi's strategies are in line with the Manifesto by Confindustria on the social responsibility of Industry 4.0 companies, especially taking ownership of the principles inspired by the United Nations 2030 Agenda for sustainable development, which aim to:

- Raise awareness of the social and environmental issues that have most impact on Italian companies, adopting the best environmentally-friendly technologies, a circular economy approach, and engaging accordingly with the supply chain;
- Promote the integration of sustainability in the company's own governance policy;
- Promote company initiatives in support of SDGs (Sustainable Development Goals);
- Deliver training on sustainability, the features of the 2030 agenda and the SDGs;
- Adopt management systems that ensure integrity and good conduct and prevent corruption;
- Develop research into solutions to sustainable development issues which encourage new business models;
- Foster public-private partnerships in the pursuit of the aforementioned objectives.



Feralpi has identified prioritised channels for adapting Corporate Social Responsibility in line with the 2030 Agenda. More precisely, Feralpi has updated its decision to create shared value for stakeholders by moving in four directions innovation and infrastructure (SDG no. 9), sustainable cities and communities (no. 11), responsible consumption and production (no. 12), and the fight against climate change (no. 13).

Fair, responsible and sustainable industry is further supported through investment in activities, technologies and processes designed to reduce impact on the environment, and by consolidating the value created when a company combines sustainable development with the ability to be sound and competitive in all the markets where it operates. In practice, companies have the responsibility of contributing to increase the inclusiveness, safety, durability and sustainability of communities. In the case of Feralpi, these objectives are pursued through environmentally-sustainable products and processes geared towards innovation and less consumption.

During 2017 the company continued with its commitment by adopting a set of initiatives to benefit younger generations, promote industry and a strong work ethic, and capitalise on aspects of local culture in areas where the Group operates at an international level.

All actions implemented by the parent company and its subsidiaries are organised, implemented and shared with stakeholders transparently, using an open and inclusive multi-stakeholder approach. **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



2 RESPONSIBLE CONSUMPTION AND PRODUCTION



Through the Group's companies, Feralpi belongs to a network of national and international associations, which are important for company business. These associations can be split into four sectors:

With regard to the representation of trade interests, all of the Group's Italian companies are part of the Confindustriale network through the Federacciai industry Association, the Federmeccanica union federation, and local associations where premises are situated (Associazione industriali di Brescia, Unione industriali di Como and Unione Industriali di Torino). The Feralpi Group belongs to Ramet, which is an environmental research organisation, for the study and monitoring of impact in the workplace and the community. The German subsidiaries belong to the federation of steel companies, Wirtschaftsvereinigung Stahl (German equivalent of Federacciai), the Saxony industrial association, Industrieverein Sachsen Chemnitz and the local association for companies, Vereinigtes Wirtschaftsforum Riesa. Feralpi Stahl also belongs to Deutscher Ausschuss für Stahlbeton e.V. in Berlin, the committee for the definition of German industrial standards (DIN), for the improvement and circulation of products for the building trade. Feralpi Holding belongs to the Italian Association for family businesses (Aidaf) which defends and promotes the traditional model of Italian family businesses.

In the area of research Feralpi Siderurgica belongs to Associazione italiana metallurgia, for the promotion of science and technology of materials and applications, and *Sismic*, a technical Association for the promotion of seismic steels for reinforced concrete, in addition to Ente nazionale italiano *di unificazione* (Uni), for the study of voluntary technical standards and CSMT, a multi-industry and technological service centre. Feralpi Siderurgica and Acciaierie di Calvisano belong to the *Reach* Ferrous Slag Consortium, which assists member companies in registering with *Echa* - an EU agency which promotes the safe use of chemicals and deals with the registration, evaluation, authorisation and restriction of chemical substances. Feralpi Siderurgica attends managerial round tables set up by IEFE Osservatorio sulla Green Economy at Bocconi University, which offer a unique occasion for the academic world and companies to discuss, share and work on green issues.

With regard to technical associations, Feralpi is regularly involved with *Riconversider*, the Federacciai consultancy firm that deals with company organisation, technological innovation and the management of funding provided for in national and European legislation, and Unsider, an Italian steel organisation that promotes the awareness of international standards. Together with other companies, Feralpi Holding set up *Fondazione Csr*, which is a national study centre for the control and management of company risk, of which the goal is to spread a culture of safety. Feralpi Siderurgica belongs to Associazione Industriale Riciclatori Auto (AIRA). ESF belongs to the Institute for building materials FEhS-Institut Duisburg, it is part of the German organisation of steel disposal companies BDSV Bundesvereinigung Deuscher Stahlrecycling - und Entsorgungsunternehmen e.V. and of ESN Entsorgergemeinschaft der Deutschen Stahl - und NE-Metall-Recycling-Wirtschaft e.V. ESF also belongs to the Saxony port and traffic association, Sächsischer Hafen-und Verkehrsverein e.V. Dresden.

In the specific area of the development of **social responsibility**, Feralpi Holding has been registered with the Italian *CSR Manager Network* since 2004, whose members include professionals and managers involved in corporate social responsibility, with the aim of promoting the culture of sustainability and developing relationships with major research centres worldwide. Feralpi Holding is a partner of *Istituto per i valori d'impresa* (Isvi), which promotes sociallyorientated company development, and a member of *Fondazione Sodalitas*, the main Italian association for promoting the practice and principles of corporate social responsibility.

## **2. FERALPI GROUP STAKEHOLDERS**

Since 2004 the Feralpi Group has been adopting initiatives designed to recognise its stakeholders, and establish a tradition of communication and involvement with the main players that has its roots in the company's original identity. The application of guidelines on GRI Standards was an opportunity to obtain an up-to-date list of stakeholders and assess the relative importance of their involvement with company activities. Stakeholders were identified over time on the basis of cost-opportunity analysis, partially through regularly monitoring opinions provided by the stakeholders themselves, and partially through discussion with their institutional representatives (local government authorities and union representatives). Their relative importance was assessed during meetings with departmental managers and directors, training sessions on CSR developments, and courses on the new edition of the FESP<sup>1</sup> Manual, updated to reflect GRI Standards.

### STRATEGIC FERALPI GROUP STAKEHOLDERS





<sup>1</sup> FESP (Feralpi Environmental and Social Program) is the information archiving program which also calculates monitoring indicators relating to Feralpi CSR policies.

# 3.COMMUNICATION WITH STAKEHOLDERS

Feralpi has developed various communication tools to facilitate open, transparent dialogue, and an inclusive approach to further relationships with all stakeholders. The www.feralpigroup.com and www.feralpi.de websites provide up-to-date information, and guaranteed access to digital platforms reserved for customers, suppliers and employees.



## **PORTAL FIGURES FOR**

www.feralpigroup.com

88.544 51.054 16.7% 13.241 207.953 2.35

session/visits (+28.9% with respect to 2016)

total users (+24.6% with respect to 2016)

new users

users from mobile devices and tablets (+45% with respect to 2016)

pages viewed (+17.30% with respect to 2016)

pages/session (average number of pages viewed during a session)

In the period in question the volume of traffic increased with respect to the previous year in terms of users, number of sessions and pages displayed. The trend has remained consistently higher than those recorded in 2016 and shows various peaks in the region of 500 visits in just one day. The significant increase in visits also shows the increasing loyalty of visitors. The increase in new users was in double figures in 2017 and the number of users viewing the site in English increased too.

These results correlate to the ongoing update of all sections of the site, including institutional and technical areas, and more media-based sections with news and events.

The fact that 25.9% of visits are made from mobile telephones shows that the website (developed on a responsive platform) meets the information needs of users on the move.



1 Jan. 2017 - 31 Dec. 2017

Created in 2005 on the initiative of various employees, the company magazine **VerdeFeralpi** is aimed at a wide audience to keep Group personnel, customers and suppliers up-to-date. The magazine is published in Italian and German. Copies are distributed to more than 3,000 recipients, including Group personnel, customers, suppliers and public administration.

The company magazine was published quarterly and benefited from increasing cooperation between employees in Italy and abroad. Between 1<sup>st</sup> January and 31<sup>st</sup> December 2017 the VerdeFeralpi page, which can be read online and downloaded, was viewed 1256 times, a 39.16% increase with respect to the previous year.

During the 2017 Made in Steel event, Feralpi distributed an article on the Group in Italian, German, English and French to illustrate the recent diversification and internationalisation of Feralpi in a structured manner.

The workplace climate survey, which is carried out every two years and reached its sixth edition, gathers the opinion of all Group employees in Italy and Germany on quality, safety and interpersonal relationships in the workplace, company services, the Group's environmental policies and social issues regarding the community. The results of the latest edition carried out at the beginning of 2017 were illustrated in the VerdeFeralpi magazine and summarised in the previous sustainability report.

During the reported financial year, Feralpi Stahl upheld its commitments to regularly inform the public on emissions in areas

near production sites, and communicated all measurements taken independently by the BUND Sachsen association.

As in all other years, the Feralpi Stahl Open Day took place on 7<sup>th</sup> September 2017, and provided an occasion for the public and families of employees to get together.

Feralpi Stahl commissions an opinion survey every two years aimed at the residents of the city of Riesa, with the aim of monitoring the progress of opinions expressed by the public on the company's economic and social role and the surrounding area, and opinions on choices relating to safeguarding the environment and supporting employment and local wellbeing. The latest addition at the beginning of 2017 was summarised in the previous sustainability report.

The customer satisfaction survey, carried out every three years, applies a quali-quantitative approach and aims to monitor the opinions of the most important customers.









External communication activities include numerous events organised directly by the Group, or the initiatives the Group attends through its subsidiaries.

Activity linked to sustainability issues has been particularly intense. It should be noted in particular that the Group attended the Sustainable Development Festival promoted by the technical CSR Confindustria group along with Unione Industriali Napoli, as part of the European week on the subject held in Naples on 31<sup>st</sup> of May 2017.

**The Feralpi Group** was invited to illustrate how present-day steel manufacturing is already an excellent example of sustainable production, with a contribution from the engineer Maurizio Fusato, who manages the Feralpi Siderurgica site, entitled *Responsibility* and Investment in the Production Process to Safeguard People and the Environment.

### 4. OBJECTIVES AND INITIATIVES INVOLVING STAKEHOLDERS

The objectives and initiatives to engage with stakeholders are proposed regularly by the Sustainability Committee, which is responsible for monitoring them and supporting the relevant departments in the Group's companies. During the business year Feralpi's commitment continued in the five areas identified for stakeholder engagement - the promotion of health in the workplace, the development of company welfare, technical training programmes, the involvement of the supply chain in environmental protection and communication with the public in discussion groups on the web.
#### Stakeholder engagement methods in 2017

STAKEHOLDER	ENGAGEMENT METHOD	OBJECTIVES
PERSONNEL	Work meetings, negotiations, sessions between parties	Renewal of the Feralpi Siderurgica supplementary company contract and setting up of WELFer, a platform for the flexible supply of goods and services for collaborators of Feralpi Siderurgica and Feralpi Holding. This will also be set up in 2019 for personnel at Acciaierie di Calvisano
SHAREHOLDERS	Shareholders' assembly	Presentation of the company accounts, financial report and sustainability report for 2015-2016
LOCAL COMMUNITIES	Organisation of the "Bella Gröba" family event	Strengthen links between the Feralpi Stahl Riesa premises and the surrounding community
	Opinion survey with the residents of Riesa carried out every two years	Monitoring the progress of opinions expressed by the public on the company's economic and social role in the surrounding area, and choices linked to safeguarding the environment, supporting employment and local wellbeing
	Participation in the geo-referenced site Q-Cumber in conjunction with Ramet, an association for the study and monitoring of the impact of production activities on the workplace and local area	Monitoring of opinions on the web and communication on environmental issues
SUPPLIERS	Self-administered questionnaire	Understand supplier opinion on significant aspects of Feralpi CSR activities
CUSTOMERS	Self-administered questionnaire	Understand customer opinion on significant aspects of Feralpi CSR activities
PUBLIC ADMINISTRATION	Meetings with local administration	Inform local administration about company development plans Foster reciprocal cooperation on engagement initiatives and the implementation of compliance activities
TRADE ASSOCIATIONS	Giuseppe Pasini, chairman of Feralpi Holding, is the chairman at AIB (Associazione Industriale Bresciana)	Contribute to the development of industry and employment in the area, encourage innovation and competitiveness, establish a work culture
	Giovanni Pasini, managing director of Feralpi Holding, is a member of the AIE Management Committee and the Federacciai Long Product Association and Vice Chairman of the AIB metallurgy sector	Contribute to defending the interests of the steel industry in the national and local business framework
	Frank Schaefer, manager of Feralpi Stahl, is vice chairman of the Dresden Chamber of Commerce and Industry	Contribute to defending industry interests in Saxony
ALL STAKEHOLDERS	Survey with questionnaires sent to a representative panel of 75 stakeholders	Understand the assessments of different stakeholder categories on issues to be reported in the sustainability report

The event entitled "*I paesaggi. Salvaguardia e promozione di un patrimonio italiano*" (The Landscape. Safeguarding and Promoting Italian Heritage) was as held at the San Barnaba Auditorium in Brescia in the 19<sup>th</sup> and 20<sup>th</sup> of January 2018, and was promoted by the Brescia University and Fondazione ASM, with the support of the local council, the Lombardy Regional Government, Fondazione Cariplo and Feralpi. The initiative was dedicated to the interaction between art and history to benefit the community, and included testimony from the engineer Mr Fusato, manager of the Feralpi Siderurgica premises.

### 4.1. Initiatives to promote health in the workplace and company welfare

2017 saw the renewed collaboration of Feralpi with the Lombardy Regional Government for the European **Workplace Health Promotion** (WHP), project, which promotes cooperation between public and private organisations. The company was a forerunner in the province of Brescia, and at the beginning of 2017 the 46 local companies that signed up to the WHP project involved more than 15,000 employees in a set of initiatives aimed at promoting health in the workplace. During the financial year the WHP projects were extended to the Nave premises.



"Statistics and administrative figures aside, after three years we can conclude that the WHP project has given companies a new method of consultation and communication between employees, managers and employers. The project has proven to be fundamental for the welfare of our companies and the people who work there.".

(Giuseppe Pasini when the awards were given to Feralpi Holding, Feralpi Siderurgica and Acciaierie di Calvisano at the AIB premises in Brescia).

Health and safety in the workplace is also promoted at the Riesa premises where various initiatives partially in line with company policy were implemented.

In 2017 ESF set up a direct dialogue with BUND (Bund für Umwelt und Naturschutz Deutschland), the most important independent environmental organisation in Germany, with the aim of facilitating mutual understanding and identifying future shared actions.





### **THE WHP PROJECT**

The Workplace Health Promotion (WHP) Project as a European initiative to support companies that want to invest in the health and wellbeing of their employees in the workplace. In Italy the project has been implemented by many health agencies in collaboration with Confindustria. The Lombardy Regional Government has created a WHP manual through its own network, with suggestions for companies on good practice for the implementation of health promotion initiatives. The Feralpi Group has been involved in the WHP project since 2014, with long-term initiatives on promoting a healthy diet and giving up smoking (2014), taking enough exercise, personal and social wellbeing and a good work-life balance (2015), road safety and sustainable travel, and preventing addiction to alcohol and/or other substances (2016). During 2017 activities that started in the previous three years continued, and some new rules of good practice were added

When the supplementary contract concerning Feralpi Siderurgica was renewed, a company welfare project known as WELFer was set up, which provides employees with flexible services. The project is agreed with union organisations and is based on a web platform that enables employees to choose the services most suitable to their own needs and those of their family.



### 4.2. Developments in the Feralpi Bootcamp initiative and the commitment to advanced professional training

The Feralpi Bootcamp initiative started in 2014 with the aim of supporting professional training of younger age groups in the area with innovative activities. Three lines of activity were implemented during the financial year, one dedicated to career guidance, one on alternating education and work, and one on advanced training.

With regard to alternating education and work, the project has gradually developed over the years and during the financial year it saw the involvement of four higher technical colleges, three of the Groups sites and 23 participants. The students spent eight weeks at the company and 110 hours of classroom-based training. The technical training is provided by internal operators and external instructors. Training is also provided on team building techniques, interpersonal communication and problem solving.

The plan for the two-year 2018-2019 period was officially presented on 12<sup>th</sup> December at the Feralpi Siderurgica Lidia Camilla Savoldi Auditorium in the presence of teachers, company instructors, students and their families. The following educational establishments will be involved: IIS Cerebotani (Lonato del Garda), IIS Don Milani (Montichiari), IIS Beretta (Gardone Val Trompia) and IIS Pascal (Manerbio). Training at the company will take place at the Feralpi Group's three Brescia sites (Lonato, Calvisano and Nave) involving 24 students.

With regard to advanced training, the course for the Industriemeister Metall qualification (foreperson in the metal processing industry) has an especially important role at the Feralpi Stahl Riesa site. In addition to updating and developing specialist knowledge, the development of leadership and training abilities for internal company courses is also considered as important. The Feralpi Riesa objective is for all managers to successfully complete this specialist course or similar initiative, enabling them to meet the requirements of managerial positions.



Feralpi is active on technical-scientific committees (CTS) and local professional polytechnics (PTP) in Italy, and contributes to defining training profiles for higher technical education (IFTS) in the Brescia province.

#### 4.3. Initiatives to involve stakeholders in reporting activities

With regard to identifying and assessing items to be reported in the 2017 sustainability report, after adopting the GRI reporting standards and reviewing the materiality index, a survey was carried out involving a representative quali-quantitative panel of the most important stakeholders. They were sent a questionnaire where they could give their opinion on the most important aspects of Feralpi sustainability reporting. By doing this, the company was able to understand which aspects each stakeholder focuses on, and gear reporting around the areas they considered to be most relevant.

### 4.4. Initiatives aimed at the environmentally-sustainable participation of citizens and students through the Q-Cumber platform

The Calvisano 4.0 initiative involves collaboration between the local council, local schools, various companies in the area, including Acciaierie di Calvisano, and technological partners. Under the alternating work and education scheme, students





gather information and meet residents, encouraging the public to a proactive experience. Students and general public highlight areas or situations that are of greatest value or are critical on the Q-Cumber platform (www.g-cumber. org). The platform assesses the level of importance and criticality of anything highlighted, adopting standards and criteria scientifically recognised for assessing sustainability. The Calvisano district council and Consorzio Bassa Bresciana Orientale (CBBO, a Brescia organisation

operating in the local public health sector) check anything reported and intervene to safeguard the environment. Students and the public are awarded sustainability points that entitle them to services, promotions and discounts on purchases

offered by local companies.



















### PART 3 ECONOMIC RESPONSIBILITY



# **1. COMPANY STRATEGIES**

Even though striving for social and environmental sustainability entails company costs that must be planned and in the short term may deprive a company of immediate income, Feralpi still believes that in the long term it contributes to making a company more competitive, even in terms of economic performance. Basically, there is no trade-off between financial, social and sustainable investment in the long term. This is because responsible financial investment should always consider environmental and social impact on the basis of the precautionary principle adopted by the Group and financial sustainability represents the condition for pursuing the other two areas of responsibility. In reality, without resources the possibility of investing in all of the areas is obstructed.

Feralpi decided to allocate profit mainly to investment in the pursuit of this line of action. By doing so shareholders had to give up shortterm gains, but they benefited from owning a suitably capitalised company resistant to unfavourable situations and equipped with its own means designed to support strategic choices to tackle external pressure through verticalisation, downstream integration and diversification in the relevant markets. This strategy also benefited stakeholders directly and indirectly involved in the distribution of value added.

The short-medium term financial objectives meet the need to cope with the trends of a market, which is increasingly larger geographically and converge towards a gradual transformation of the production of commodities into a diverse and customised product offering, based on customer requirements.

These policies and the corresponding short-term results are also monitored and assessed thanks to the introduction of SAP, which combines Group operations into one system to control and plan production on the basis of order trends.



## 2. TARGET MARKETS

In an economic situation where the building trade and infrastructure in Italy have not yet seen signs of recovery (ANCE watchdog, February 2018), the ability of Feralpi to compete effectively during 2017 was mainly based on the results achieved thanks to product diversification and value added downstream in the chain.



These strategies obtained the success hoped for and contributed to an increase in turnover of 46.1% on the domestic market.

On foreign markets, characterised by typical Group products, sales also increased by 27.3% in Germany and 59.1% in other EU countries. The non-EU market decreased by 9.2% due to fewer sales in Algeria, which were affected by import legislation.

### Feralpi exported abroad 64% of its revenues.

#### Sales revenues by area of destination

€/000 ITALY	<sup>2016</sup> 2017 295,124 431,323
GERMANY	327,134 416,475
<b>REST OF EU</b>	102,403 162,907
REST OF THE WORLD	207,341 188,265
TOTAL	932,002 1,198,970

### **3. CREATION OF CONSOLIDATED VALUE ADDED**

During the financial year the considerable increase in turnover also involved an increase in all main cost items.

4.1%

The balance represented by characteristic gross value added is still better than that previous year however and the positive trend for financial Revenues, corrections, accessory management and special components enabled an increase in overall net value added, despite the presence of increasing depreciation.

It is important to note that in the last five years the wealth Feralpi produced for stakeholders has continuously increased annually, with a total increase of 208.7% compared with 2013.

#### Creation of consolidated value added

FIGURES EXPRESSED IN THOUSANDS OF EUROS (€/000)	2016	2017
Revenues from sales and services	932,002	1,198,970
Changes in inventory of work in progress	5,488	27,601
Increase in fixed assets for in-house work	2,281	2,616
Other Revenues and income	4,550	15,647
A) VALUE OF PRODUCTION	944,321	1,244,834
Consumption of raw materials (scrap)	467,213	637,217
Energy	77,856	91,630
Consumable materials and supplies	110,817	149,924
Cost of services	103,650	141,410
Hire, purchase and leasing charges	2,896	3,411
Provisions for risks	150	29,451
Other provisions and write-downs	1,349	1,749
Other operating expenses	1,693	5,304
B) COSTS OF PRODUCTION	765,624	1,060,096
GROSS CHARACTERISTIC VALUE ADDED	178,696	184,738
Financial income	256	491
Adjustments to financial assets	(2,232)	990
Accessory items	(1,976)	1,481
Extraordinary items	0	0
GROSS OVERALL VALUE ADDED	176,720	186,219
Amortisation and depreciation	38,606	42,390
NET OVERALL VALUE ADDED	138,114	143,829

143.83

million in overall

net value added

produced in 2017, up

compared with 2016

### 4. THE DISTRIBUTION OF CONSOLIDATED VALUE ADDED

The growth in overall net value added benefited most of the stakeholders. The most significant share for personnel grew by 10.5%, due to employment increases and better contractual conditions. The share of value added for government organisations in the form of corporate taxes and contributions reached 38 million, up by 18.7%. Remuneration for lenders saw a decrease in financial costs of 12.0% however. After additional allocations, profit was fully directed at strengthening assets. The financial support for reference areas exceeds 3.8 million, up significantly on the previous financial year (+54.5%).

#### Distribution of consolidated value added

FIGURES EXPRESSED IN THOUSANDS OF EUROS (€/000)	2016*	2017
Wages and salaries	56,726	61,684
Employee severance indemnity	1,914	2,257
Other costs	1,374	2,396
A – EMPLOYEES	60,014	66,301
Taxes	16,715	21,182
Social security contributions	15,296	16,817
B – PUBLIC ADMINISTRATION	32,011	37,999
Provisions	1,470	1,022
Non-distributed profit/loss	32,484	30,576
C – RISK CAPITAL	33,954	31,598
Distributed profit	5,000	0
Financial expenses	4,651	4,092
D – LENDERS	9,651	4,092
Charity	178	89
Sponsoring of sports/recreational activities	2,307	3,751
E – COMMUNITY	2,485	3,840
GROSS OVERALL VALUE ADDED	138,114	143,829

\*After distributing dividends some figures relating to 2016 differ from the information provided in the previous report.







2017

66.301 70,000 60,014 60,000 50,000 37,999 33,954 40,000 31,598 32,011 30,000 20,000 9,651 4,092 10,000 2,485 0 **EMPLOYEES** PUBLIC **RISK CAPITAL** LENDERS COMMUNITY **ADMINISTRATION** 

### 5. THE DEVELOPMENT OF INDUSTRY 4.0 AT FERALPI

Feralpi has made Industry 4.0 a strategic quideline, which is pursued through systematic long-term planning. This strategy is ongoing at Lonato premises through a series of projects designed to improve the consumption of various systems by optimising the operating parameters, including the analysis of rolling mill heating profiles at the Lonato premises (definition of optimal heating curves), the monitoring, analysis and study of feedback in optimising compressor operation, the optimisation of electrical furnace parameters with resulting energy savings and a reduction in the disturbances the casting processes generates in the external electricity network.

Feralpi participated in the Industry 4.0 seminar organised by Research and Innovation for Smart Enterprises (RISE) at the Brescia University Department of Industrial & Mechanical Engineering, with contributions from Mr Besacchi, the Feralpi Holding IT manager, and the engineer Mr Fusato, the Feralpi Siderurgica site manager.

The development of product traceability systems continued at the Lonato premises, with the installation of a continuous casting robot for labelling billets on cooling plates, the installation of a computerised optical system to recognise billet labels on the entrance of the furnace of the rolling mill n. 2 and the installation of another optical system downstream for counting bar bundles.

Similarly, at the Nave premises a computerised optical system was installed for billet traceability. For the purpose of digital process control in each phase, optical sensors were also introduced to determine the profile of wire rod being processed and alert thresholds differentiated by product type were inserted, in order to detect irregularities and non-compliance issues promptly.

#### Hyper depreciation provisions granted to Feralpi under the National Industry 4.0 Plan

In 2017 the Ministry of Industry granted hyper depreciation benefits for seven items of equipment made according to industry 4.0 logic at Feralpi Siderurgica and Acciaierie di Calvisano, as they comply with the National Industry 4.0 Plan (so-called Calenda Plan). A new system for tracing the tundish and charge mix was planned at Acciaierie di Calvisano, with expected operation at full rate by the end of 2018.

On 23<sup>rd</sup> April 2018 the Lombardy Regional Council approved the cofunding for the Steelpro 4.0 project, which sees the participation of Acciaierie di Calvisano as the lead partner, along with Visiorobotics Srl of Milan, the Brescia University research centres, the National Research Consortium for optoelectronic technologies in Milan (OPTEL INP) and Milan Polytechnic. The project involves the development of special steels through innovation based on the use of big data and post-processing systems in the implementation of the manufacturing process, characterisation of materials and the integrated management of the entire production chain.

Innovation concerns 3 macro areas: process innovation to increase efficiency in the use of materials with an increase in metal yield and energy efficiency in casting, improving product quality; product innovation, by introducing new special steels into production at Calvisano; reducing the time for tracing the cause of defects due to the manufacturing process and tracing all product processing parameters, from the scrap loading phase to the supply to the customer.

The new "Melt Expert" system developed at the Feralpi Stahl premises in Riesa was presented at the European Continuous Casting Conference (ECCC) in Vienna in June 2017.

### 6. THE MAIN INVESTMENTS BENEFITING THE ENVIRONMENT AND SAFETY

This section only includes significant investments for sustainability reporting; consult the financial reports for a general investment overview. The most significant investments split by site are outlined below.



#### 6.1. Feralpi Siderurgica

On the basis of experience gained at the Riesa site, investments for treating scrap in the Lonato and Calvisano plants were mainly aimed at improving charge quality, in order to increase steel yield. These activities also have direct environmental significance however, as they ensure improved selection and cleaning of scrap, with the separation of non-metal components and the recovery of nonferrous metals.

The automation plan designed to minimise human activities at workstations with a higher level of risk and/or ongoing discomfort (furnace temperature measuring plant, automatic warehouses) continued throughout the year, and additional actions were implemented to improve working conditions (e.g. nebulisers to eliminate dust, new self-powered electric loader, suction systems in workshops, area dedicated to processing white slag, removal of asbestos roofing, new heating system).

With regards to safety, during the financial year the long-term project on safety at height continued, which aims to improve the working conditions of employees on runways and other work positions at a height. The project relating to safety during continuous casting and in rolling mills continued, with the identification of segregation areas and automated safety actions.

A long-term project was initiated during the financial year to improve the sustainability

performance of the overall production process. The project is divided into 4 macro areas - air, noise, water and slag - and involves Brescia University and the Ramet consortium.

#### 6.2. Acciaierie di Calvisano

A new scrap treatment machine was purchased during the financial year, with features similar to the machine at the Riesa premises. The same objectives apply, i.e. optimise charge with positive results for energy consumption, less dust removal, estimated at 30 tonnes a week, and a further reduction in emissions.

Other systems to automate EBT corking in EAF (Electric Arc Furnace) have been implemented in order to reduce the presence of personnel in hazardous areas (similar to the arrangements in Lonato) and to improve lubrication in ingot moulds for the production of special steels.

#### 6.3. Feralpi Profilati Nave

Various actions were implemented at the Nave premises to improve safety during work operations and mitigate environmental impact, some of which are still in progress. Actions to improve the safety of production plants, work environments, and tooling machines in the mechanical workshop were implemented. Safety on bridge crane runways was also improved with the installation of lifelines and anchoring points on bridge cranes. Courses on safety and hygiene in the workplace were delivered, and new work instructions and management procedures established, which had already been set up in line with the creation of a safety management system compliant with standards ISO 14001 and OHSAS 18001 during the planning phase. With regard to environmental matters, the procedure for obtaining the relevant environmental authorisation was obtained, with the improvements planned for implementation being discussed (water cycles, impact of noise outside and soil protection).

#### 6.4. Feralpi Stahl

The project to connect the casting area with the rolling mill, sponsored by the Ministry for the Environment, was completed in 2017. A series of minor actions were implemented alongside this strategic investment, which are designed to increase plant efficiency - reduction in rolling mill downtime with the installation of sensors and personnel training, optimisation of energy consumption by containing furnace waste gas dispersion.



## **7. RESEARCH AND DEVELOPMENT**

In an open, established context where competitive advantage based on equipment and organisation is increasingly slim, companies must strive to build on an ability to anticipate innovation by focusing on research. The Feralpi Group carries out R&D through its "Research and Development and Process Technologies Department", and attached directly to the Group's Technical Management team. Other company departments may work together with this department, such as the Quality, Technology, Production, Technical, Purchasing, Administration, Personnel, and PR departments. High-level projects are developed internally and with external partners through funding from regional institutions (especially regional grants for competitiveness and innovation), national institutions (Ministry of Economic Development, tax credits) and European institutions (Research Fund for Coal and Steel (RFCS) grants, Horizon 2020, SILC, Life).

European grants have been accessed for a decade, and enable the Group to cooperate with partners with the best specific expertise at an international level, understand the main emerging trends and most promising lines of research, actively participate in the creation of new ideas and produce solutions applicable to production.

Through research activities the Feralpi Group has created an external network, which includes the main organisations, such as the Material Development Centre at Milan Polytechnic, Brescia University, the VDEh-Betriebsforschungsinstitut in Germany, the Centre de Research Metallurgique in Belgium, Swerea MEFOS in Sweden and the Material Processing Institute in the UK.

#### The projects in progress have the following aims:

- **Improve the monitoring**, control and optimisation of steel industry processes to increase efficiency and production flexibility in implementing Industry 4.0 systems;
- Improvement in product quality and the development of new steel characteristics to increase competitiveness and penetration of the market;
- Develop recovery and recycling systems for waste materials from the steel cycle and develop the concept of a circular economy;
- Improve the potential for energy recovery from heat waste in the steel cycle to further reduce environmental impact;
- Improve site safety.

Feralpi communicates the results of research funded through national, regional and European funding in industry conferences and technical magazines. The research activities that involved Feralpi Group companies in 2017 benefited from the relevant tax credit available under Italian legislation.

#### 7.1. Feralpi Siderurgica

New projects were set up in 2017 for the development of new special quality steels, the optimisation of the continuous casting process to improve billet quality, the implementation of a bar counter in the finished product department, the development of a new calibrator for the wire rod drawing mill (to extend the product range and improve dimensional tolerances), the installation of a new billet labelling machine for product traceability and the tracking of casting ladles to improve monitoring of cycles in the steel mill area. Feralpi has also applied for H2020 funding with the FURIC proposal and the FISSAC project, which are designed to recover steel mill slag and develop the concept of a circular economy.





In 2017 Feralpi's participation in the **FISSAC project** (Fostering Industrial Symbiosis for a Sustainable Resource Intensive Industry across the extended Construction Value Chain) continued. This concerns the management of the product lifecycle through industrial clustering logic, geo-referencing inter-organisational flows (raw materials, waste and co-products), and the cost/benefit assessment using a holistic and circular economy approach. The concrete result is a transformation of waste materials from processes into secondary raw materials that can be tracked and reused in different sectors, in accordance with a 'zero waste' approach.







During the financial year the long-term project **PerMonList**, which commenced in 2016, continued. This is co-funded by the EU with the RFCS Grant and includes the participation of another four industrial research partners for the development and application of systems to optimise and control production processes, with innovative methods in line with an Industry 4.0 approach. The project consists of constructing software systems to model steel industry processes, assess their performance using performance indicators, facilitate integration between production phases while considering interdependencies and optimise processes through self-adaptive systems.

With regard to research on the circular economy, the three-year project **Rimfoam** (Recycling of Industrial and Municipal Waste as Slag Foaming Agent in EAF) concluded at the end of the financial year. This project was partially funded by the EU (RFCS) and involved the assessment and use of waste materials containing metal oxides and hydrocarbons EAF foaming agents.

The task of Feralpi Siderurgica in this project was to study the use of car fluff in the EAF process. In this context the initial tests loading briquettes of this material into the furnace were carried out with the support of the regional and provincial government and the regional environmental agency (ARPA) giving positive results.

Feralpi's participation in the long-term project **FABEFIN** (Feralpi Siderurgica: an intelligent factory for efficiency and innovation) within the joint scope of Industry 4.0 and the circular economy ended in January 2018. This was co-funded by the Lombardy Regional Government and the company was involved in promoting the idea of an intelligent factory, improving process performance, reducing energy consumption, facilitating a four-strand rolling process and implementing an innovative scrap treatment system capable of reducing waste and process by-products and improving supplier management and reliability.

#### 7.2. Acciaierie di Calvisano

The project that started in 2014 with the EU Research Fund for Coal and Steel (RFCS) grant, known as **OptiScrapManage** - Optimization of Scrap Charge Management and Related Process Adaptation for EAF Performance Improvement and Cost Reduction - concluded at the end of 2017 at Acciaierie di Calvisano. This project led to the development of various systems - a system to monitor the EAF process through KPIs, a dynamic monitoring system for the EAF process that can provide management guidelines and an acoustic sensor to improve the management of EAF carbon injection to optimise electric arc coverage.

During the reporting year, the project **SteelPro4.0** commenced (on the development of special steels through innovation in implementing the manufacturing process, material characterisation and the integrated management of the production chain) with the aim of improving production processes through plant solutions along the entire process and software. The project is funded by the Lombardy Regional Government and involves Milan Polytechnic, Brescia University and private technological partners.

In 2017 the project **QualityIntegration** (Increase product quality and production flexibility of wire rod and section bar through technologies applied to the entire production chain) also commenced. This is funded by the Ministry for Economic Development and aims to reduce defects and extend product technologies in terms of the chemistry of steel. The project involves the two main customers of Acciaierie di Calvisano, Caleotto S.p.A. and Feralpi Profilati Nave, according to the Industry 4.0 approach.

During 2017, the four-year project **SupportCast** commenced too. This project is funded by the EU with the RFCS grant and aims to improve billet quality by placing an electromagnetic stirrer at the exit of the continuous casting machine. Milan Polytechnic is involved in this project too.

Feralpi also had the publication of the article entitled *Activities of plant and processes improvements and strategies "Industry 4.0" to increase the steel quality and produce new special steel grades in Acciaierie di Calvisano"* approved in 2017. This article will be presented by the Feralpi R&D department at the 7<sup>th</sup> International Congress on Science and Technology of Steelmaking (ICS2018) held in Venice in June 2018.

#### 7.3. Feralpi Profilati Nave

Feralpi Profilati Nave participates in the project **QualityIntegration** led by Acciaierie di Calvisano, through a series of actions designed to modify the rolling mill in order to:

- Use larger billets;
- Improve the quality of rolled products;
- Make new products;
- Ensure material traceability;
- Increase safety during work procedures;
- Adapt automation to industry 4.0 Logic.



#### 7.4. Feralpi Stahl

During the financial year ESF obtained funding for the project *"Schaumschlackenregelung auf der Basis der Auswertung akustischer Wellen am Elektrolichtbogenofen zur Verbesserung der Energieeffizienz der Stahlproduktion"*, which aims to improve energy efficiency in the melting furnace by controlling foam waste with the analysis of sound waste. The initial results of the study are expected in 2018.

With regard to safety in the workplace, a study was carried out at the Riesa steel mill in conjunction with Berufsgenossenschaft Holz Metall (trade association in the metal and timber industries) on the inhalation of harmful substances at workstations potentially more exposed. The research was carried out on the basis of compulsory insurance standards on accidents and new guidelines on harmful substances (TRGS 402). Along with the standard measurements required, the study also aimed to measure hexavalent chromium. Substances were measured in five work areas (electric furnace, casting ladle furnace, waste treatment, casting ladle preparation area and continuous casting area).

The study showed that the presence of hexavalent chromium is ten times lower than the new strictest regulatory limit.



















### - **PART 4** SOCIAL RESPONSIBILITY





## 1. PERSONNEL

### 1.1 The strategic importance of personnel

Human resource management is a strategic factor for Feralpi's success. This belief has been present since the company was set up and it's increasingly important in relation to market complexity and industry standards, the centrality of technological innovation and the increasingly pressing requirement coming from public opinion to reduce environmental impact. This requires skills which are more and more sophisticated, current and complex.



Feralpi believes that the management of human resources, in an increasingly competitive and open context, should also aim to encourage the predictive ability of those who make important decisions. Advanced training is not sufficient on its own to obtain this, a team approach is also required. A culture of teamwork underpins company success, commencing with the creation and coordination of alternating teams in departments, through to discussion groups and the sharing of ideas between departmental managers. Consequently, the management of human resources involves all Feralpi personnel and is therefore reported below in relation to the Group's established boundary, with the exception of the subsidiaries Presider and MPL, as they joined the Group halfway through the financial year.

#### 1.2. Company objectives

The Feralpi personnel policy develops along five main lines recruitment, training and the development of human resources, remuneration and performance assessment, industrial relations, and personnel welfare and health and safety in the workplace. Each of these aspects is managed on the basis of tools geared towards set objectives.

Recruitment procedures consider local job market conditions, which may differ significantly depending on the country where premises are located. Feralpi has a preference for permanent employment agreements and adopts personnel retention and loyalty policies that enable long-term investment in employees.

Their training and development of human resources are a fundamental part of the Group's investments, and managed in conjunction with local training organisations, which are systematically involved on the basis of long-term programmes. In Italy involvement is inspired by the dual German model too, with the transfer of skills based on complementary joint cooperation between experience developed at the company and the technical/ practical skills from local professional training.

The remuneration scheme recognises merit and ability on the basis of collective performance assessments (production bonuses), whereas a Management By Objectives scheme is used at a managerial level.

The industrial relations system adopted by Feralpi facilitates prompt and transparent information, dialogue, participation and mutual responsibility of parties and is considered to be a particularly innovative model by specialists<sup>2</sup>.

The subject of health and safety in the workplace represents an ongoing challenge which is a strategic priority for the company and sees the investment of a significant amount of resources. Plant safety is considered a priority for productivity and an overcompliance approach is adopted. In recent years Feralpi has extended the concept of health to the principle of wellbeing among colleagues and has also set up innovative welfare schemes that includes the families of employees too.

<sup>2</sup>Carlo Zandel, "Storie di azione e contrattazione collettiva - L'integrativo Feralpi Siderurgica: un accordo nel solco della Grande Trasformazione del lavoro", in the ADAPT publication no. 29, dated 11 September 2017.



#### 1.3. The assessment of company policies

Feralpi has developed a system of indicators in each dimension of the personnel policy, which enables the results obtained to be monitored and assessed with respect to set objectives. Recruitment procedures are assessed through turnover levels and most of the training courses are assessed by the participants at the end of the course or through regular workplace climate surveys. Remuneration is linked to productivity and quality of industrial relations is subject to assessment via regular meetings between company parties. Health and safety in the workplace is monitored using accident indicators, and personnel wellbeing is mainly monitored through workplace climate surveys and objective indicators such as rates of absenteeism.

#### 1.4. Group employment trends

2017 saw further expansion of overall Group employment, partially driven by takeover policy and partially driven by the recovery in production, albeit unequally in terms of products and areas. While in Italy Feralpi proceeded with operations that saved jobs in the companies taken over, in Germany the continuation of the positive economic situation raised the issue of finding manual workers again. In Italy, despite the start of economic recovery after a recession which lasted almost a decade, the main job market indicators are still a long way off of pre-recession levels. Alongside companies that have seen signs of recovery are others that haven't, and the overall industrial base has decreased. Feralpi's role in the job market in the province of Brescia has been positive, as it has contributed to saving jobs that would otherwise have been lost.

The job market in Saxony continues to be characterised by difficulties in finding staff for various roles in Feralpi Group operations, with a drop in the supply of workers due to unfavourable demographic trends and migration to western parts of the country. These local job market conditions are reflected in the high levels of personnel turnover, especially in younger age groups.

Despite a slight increase in turnover in 2017, which is mainly due to staff reaching retirement age, the personnel turnover rate remains very low, especially in Italy.



#### Presence of personnel in countries where Feralpi operates

Feralpi Stahl has adopted a set of measures designed to tackle the lack of local workers, with the continuation of initiatives to introduce young people to factory work as an opportunity no lesser than ones offered by other sectors of the economy in terms of job stability and prospects for career development. Particular focus is also given to categories of potential employees who have previously been outside of an industrial setting. As an example, a subsidiary EDF participates in a career guidance project for refugees in the city of Riesa.

Feralpi Stahl is also interested in increasing women's interest in what has been a traditionally male work domain and especially in making technical careers attractive to women.



In 2017 the most important operation to save jobs took place at the Nave premises, where a special wages guarantee fund (Cassa Integrazione Guadagni Straordinaria - CIGS) was required for 12 months for 90 work units starting from when the factory was taken over on  $1^{st}$  June 2016.

After production activity commenced halfway through 2017, the latest fund was replaced by reduced-hours contract involving 84 work units, with an average weekly reduction in the working week of 52%. While the reduced-hours contract was in force, which was expected until halfway through 2018, an intra-group voluntary layoff scheme was implemented at three work units.



#### Workforce and total Group turnover by gender

TOTAL WORKFORCE	2016	2017**
Men	1,313	1,348
Women	88	91
TOTAL	1,401	1,439
Personnel turnover rate*		
Men	8.5	10.2
Women	10.2	8.8
TOTAL	8.6	10.2

\*Turnover rate: leavers/total workforce\*100 \*\*Excludes Presider and MPL



#### **GROUP TOTAL WORKFORCE**



#### **OF WHICH**

1348 MEN **TTTT** 

91 WOMEN

65

#### **1.5.** Personnel remuneration

During 2017 gross remuneration increased by 8.7%, partly due to the increase in employment and partly due to an increase in salary levels, which on average increased by 3.9% in Italy and 3.7% in Germany.

The increase in gross remuneration was **8.7%** in 2017

In addition to being covered by industrial accident insurance, Feralpi personnel also benefit from a supplementary policy set up through insurance pooling schemes, offering additional protection in the event of accidents, disability or death.

#### Feralpi's participation in Local Conciliation Alliances

In 2010 Lombardy Regional Government set up the process to promote local policies for balancing work and home life, which includes care services for the elderly and disabled, services for young children and socio-educational, recreational, cultural and sports services. Feralpi joined the local alliance in the eastern, central and western Brescia districts, led by Montichiari Council, in November 2015 with Acciaierie di Calvisano and in June 2016 with Feralpi Siderurgica and Feralpi Holding. In April 2017 FER-PAR also joined the Brescia alliance which is led by Brescia Council.

Joining these alliances enables personnel from the Group's four companies to request vouchers that partially cover costs for family services. Since 2015, 40 families of employees have benefited from the vouchers and obtained reimbursements for the total amount of  $\in$  37,820.

#### **1.6. Organisation of work and quality of the work environment**

Feralpi has always believed in the advantages resulting from applying advanced technologies to the production process and has never stopped investing in this direction, even during the recession. During 2017 the introduction of dedicated robots for repetitive and monotonous tasks continued in the Lonato plant. The personnel involved were allocated to more interesting tasks with better ergonomics.

The company is studying the possibility of further automating operations using robots to do roles which are ergonomically uncomfortable or potentially harmful.

#### Personnel turnover rates\* by geographical area

TOTAL WORKFORCE	2016	2017
Group	8.6	10.2
Italy	4.8	8.1
Germany	11.4	11.5

\*Turnover rate: leavers/total workforce\*100

		2016	2017
	Men	6.0	7.0
GROUP	Women	2.7	3.1
	Total	5.8	6.8
	Men	5.8	6.6
ITALY	Women	1.3	2.2
	Total	5.5	6.4
	Men	6.6	7.4
GERMANY	Women	4.2	3.9
	Total	6.5	7.2

#### Personnel absenteeism rates\* by region and by gender

\* Rate of absenteeism = (number of absent days /number of planned days) x 100.

With regard to number of absent days, all types of absence were considered, except authorised leave for holidays, maternity/paternity leave, leave for weddings, study or family reasons and union activities, other cases of authorised paid leave and suspensions, starting from the first day of absence.

The figures for 2016 differ from the information in the previous report as they were updated in accordance with new calculation methods.



ON 31<sup>st</sup> DECEMBER 2017 94.5% OF FERALPI PERSONNEL HAD A PERMANENT CONTRACT OF EMPLOYMENT

#### 1.7. Employee health and safety

Feralpi has always allocated significant resources to safeguarding employee health and safety, in the knowledge that there are considerable risks in the industry which can be contained through prevention. To this effect the company takes a twofold approach. The first concerns using the best technologies available, which are continuously updated with the testing of innovative solutions. The second concerns establishing a culture of prevention, by providing ongoing training and raising awareness among all collaborators. The aim is to internalise safety as a priority at an individual level to create permanent behaviour that is present in actions carried out by everyone.

All of the Group's branches comply with health and safety in the workplace legislation in force in the countries where they operate. In the Group's production premises in Italy, one or more internal workers' safety representatives are appointed by employees in a framework of company union representation. Overall, workers' safety representatives cover the entire workforce, whereas 93% of personnel elect their representatives directly.

Similar systems have been set up at Feralpi Stahl, where the committee is made up of representatives from the HR Department, the Work Safety Department and a Works Council. The committee also facilitates the return to work of personnel who have been absent for long periods due to health reasons.

In 2017 Group injury frequency rates remained at the contained levels of the previous financial year, due to a slight decrease in the number of sites in Germany and a slight increase in Italian sites. There was however an increase in the indexes of seriousness, which are constantly monitored and motivate the organisation to intensify prevention schemes.

With regard to the sites of Lonato and Calvisano, as in previous financial years, work areas have been monitored with the ongoing cooperation of the Industrial Hygiene and Occupational Health Department at Brescia University, with the aim of implementing all specialist environmental investigations based on legislative decree no. 81/08 (noise, vibrations, electromagnetic fields, artificial optical radiation, etc.). The company approved the long-term plan to manage work areas until 2020. Important partnerships have been in place for years with the clinical institutes at the Brescia University of Medicine to monitor employee health, including the Institute of Legal Medicine for toxicological screening, the Ophthalmology Clinic for first and second level sight tests and the ORL Institute and Audiology Service to test hearing.

With the awareness that the subject of safe working conditions cannot only be tackled in terms of systems, but also requires spreading a culture of safety, Feralpi allocates significant resources to specific training and providing information on appropriate conduct. These practices are the subject of a collective agreement with union representatives, and involve safety instructors and the employees themselves in regular meetings to ensure ongoing improvement. At Feralpi Siderurgica there were 49 improvement actions during 2017, 7 of which came from safety instructors and 10 from department personnel.





There has always been a support service at the Lonato and Calvisano sites, and also at Nave since 2017, to assess and manage work-related stress. This service has a company doctor who meets with individuals and decides on a course of action, involving the HR and Safety & Prevention Departments, if necessary. This has been made possible thanks to the continuity of the medical/nursing service at the main Feralpi Siderurigica premises in Lonato (6 days a week) which, in addition to the aforementioned support service, can provide employees with first-level medical advice and treatment on a daily basis.

The "Verso Zero Infortuni" project (zero accident) at Acciaierie di Calvisano was resumed in December 2016 in order to raise awareness among employees on health and safety in the workplace. The initiative was resumed following experience abroad directed mainly at middle managers known as "7-Minute Safety Training". This consists of regular monthly meetings where shift supervisors gather employees together to illustrate various risks in the workplace and the necessary safety measures. As the name suggests, this illustration lasts a few minutes and ends with an employee question and relative answer session, with the whole event lasting twenty minutes at the most.

When the plants were restarted at the Nave premises following the takeover by the Group, an accident prevention training course was set up mainly on the safe use of tools and equipment, the relative specialist themes and on the upgrade of the technology.

In accordance with new legislation introduced in Germany in 2013 on health and safety in the workplace (ArbSchG), employers must carry out a specific assessment of risks caused by stress. In the context of objectives on health and safety in the workplace, Feralpi Stahl carried out a structured survey of its personnel in conjunction with an external consultancy firm and the research group at Dresden University, which supported the company doctor and works council. The overall results of the survey, consisting of a list of measures, were outlined in a brief manual and a company presentation. The study showed that key factors are career development opportunities, the completeness of information, participation in discussions and the ergonomic conditions of work areas. With regard to conditions that could lead to stress, 54% of personnel had a low probability of developing this condition, whereas 28% were more exposed to the probability of developing this condition.



#### Injury frequency rate\* by region and by gender

ACCIDENT RATE		2016	2017
GROUP	Men	15.63	18.51
	Women	0.00	0.00
	Total	14.68	17.37
ITALY	Men	17.14	18.37
	Women	0.00	0.00
	Total	16.35	17.49
GERMANY	Men	13.75	13.55
	Women	0.00	0.00
	Total	12.83	12.66

\* Rate = (number of accidents/hours worked) x1,000,000.

Accidents leading to more than 3 days of absence were considered. Commuting accidents have been excluded.

The 2016 figures differ from the information in the previous sustainability report following changes to calculation methods.





In December 2017 within the framework of the WHP project (Workplace Health Promotion), the Feralpi Group companies that took part in the project aimed at promoting health and safety in the workplace were awarded WHP certificates by the relevant health agencies. These are Feralpi Siderurgica, Feralpi Holding, Acciaierie di Calvisano, Fer-Par and Nuova Defim.

The 2017 edition of the proactive health prevention initiatives at the Riesa Feralpi Stahl premises took place on 26<sup>th</sup> October and 6 November. These dealt with a healthy diet for shift workers and optimisation of choices in company canteens to meet specific requirements. The recommendations come out from the initiative subsequently were adopted in menus for personnel in company canteens. Also available were anti-flu vaccinations, hearing and heart tests and back examinations relating to the use of computerised workstations. These initiatives were attended by representatives from the metal and timber trade association Berufsgenossenschaft Holz und Metall and suppliers of glasses and hearing aids.

On 9<sup>th</sup> September 2017 joint drills were carried out at the Riesa Feralpi Stahl premises by the company safety team and the Riesa-Gröba fire service, who cooperated in simulating an emergency situation within the area of the steel mill. The drill enabled the company's level of organisational efficiency to be tested and gave the fire service opportunity to gain practical experience in an environment with the risk of a fire of chemical origin.

After the closure of the financial year, a serious work incident took place on 15<sup>th</sup> January 2018 involving the chief engineer in the casting area at Acciaierie di Calvisano during the tundish heating phase. Despite the action of prompt first-aid procedures, the injured party suffered serious burns, was admitted to intensive care, and subsequently moved to the burns unit at the Niguarda Hospital in Milan. At the time of completing this report, the injured party has been reported as out of danger, but investigations to establish the cause of the accident are ongoing.

#### 1.8. Personnel training

The company considers professional development and the growth of personnel skills to be strategic in ensuring the Group's competitiveness in the long term. The focus on human capital is pursued with systematic training courses at all levels as part of the personnel management and development.

The content of training courses considers the standard opportunities in the various countries where the Group operates. With regard to standard skills, training in Italy is mainly geared at new hires, whereas in Germany the dual system involves the company and local institutions into the apprentice schemes. Feralpi has also implemented initiatives directly inspired by the experience of the dual German system in Italy. Considered to be particularly innovative, these initiatives required specific institutional agreements and the strong financial commitment from the company.

# The number of training hours in 2017 increased by 5.9%

#### 50 2016 2017 45 45 40 38 36 35 31 30 27 27 25 <sup>23</sup>22 21 20 19 18 15 13 13 11 11 11 10 10 10 8 7 5 3 2 2 2 0 Workers Workers White collar staff and White collar staff and middle management Executives White collar staff and Executives **Norkers** Workers White collar staff and middle management middle management middle management Executives Executives ITALY GERMANY **CZECH REPUBLIC** GROUP

#### Hours of training per capita by geographical area

(countries where the presence of Feralpi amounts to less than 20 employees are not included)
Standard training in Italy includes modules on safety in the workplace and specialist training for specific roles or areas, depending on the requirements driven by technical, organisational and legislative changes. As in previous years, this type of training was organised into four main areas during the financial year:

- manual trades and technical-specialist area;
- management expertise and studying foreign languages;
- health and safety in the workplace;
- the environment, environmental management and energy.

In 2017 the dual training scheme in Riesa involved 17 young people in processing engineering training for the metallurgy sector and semifinished products, with courses in ferrous metallurgy, metalworking and steel processing.

During the financial year investment in advanced training for managers continued, with attendance at Master's degree courses in metallurgy, management and business innovation. On 4<sup>th</sup> May 2017 the apprentices from Feralpi Stahl took part in a trip to Linz, which enabled them to visit the Voestalpine steel mill, the Zeitgeschichte Museum on steel mill story and the Stahlwelt exhibition on steel production and day-to-day uses of steel. On 7<sup>th</sup> May the apprentices attended the commemoration of the liberation of the nearby Mauthausen concentration camp.



# 1.9. Company welfare

During the renewal of the Feralpi Siderurgica S.p.A. company contract, the introduction of a new flexible innovative welfare system known as WELFer was agreed. This accompanies performance bonuses and enables not only a financial reward, but also the option of a package of benefits identified on the basis of employee requests that emerge from the latest addition of the workplace climate survey.

The WELfer package enables employees to choose various services as payment in kind on the basis of personal requirements, as an extra bonus of 10% above the value of the performance bonus.

WELFer operates through a web platform (technically a market place), but can be accessed from the HR Infinity Feralpi portal, where employees can create their own package of goods and services and obtain vouchers or reimbursements on the basis of a set budget.

# 1.10. Gender equality

The presence of female personnel in the steel industry has traditionally been low and mainly concentrated in activities which are not directly production activities. In all countries where the company operates, many young women believe that the industry offers typically male roles, even though slow cultural change has led women to access professional training in metallurgy processing, especially in areas where the lack of male workers is felt more keenly.

In an industry which is mainly male orientated, the Feralpi Group is committed to making the work environment welcoming for female personnel, not only by applying legislation that prohibits any type of gender discrimination in contractual conditions, but also by identifying and limiting factors that could generate differences in relation to remuneration, career development and accessing traditionally male roles. The welfare services recently offered within the renewal of the Feralpi Siderurgica and Acciaierie di Calvisano company contract moves in this direction. In Riesa, Feralpi Stahl encourages the access of young women to technical departmental training.

The company's equal opportunity initiatives are monitored by measuring the distribution of female personnel on tasks and in departments, the calculation of remuneration differences, which never depend on treatment based on gender, and the results of the company welfare policies introduced with the Feralpi Siderurgica S.p.A. company contact.



% amount of female personnel in the Group

Use of parental leaves and return to work by gender

	2016		2017	
	Men	Woman	Men	Woman
Entitled to parental leave	100%	100%	100%	100%
Used parental leave	23	6	21	6
Returned to work after parental leave	23	4	19	3
Are still working 12 months after the return from parental leave	21	3	21	4

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# 1.11. Immigrant inclusion policies in Riesa

Feralpi Stahl is seriously committed to the integration of young immigrants in the German training scheme and within the company. The company believes that successful integration can meet the increasing need for apprentices in Germany, while also contributing to the more general social commitment of giving immigrants the opportunity to integrate and achieve financial independence through skilled work.

Given that professional training can only be delivered effectively to people who understand German sufficiently, the courses also includes language improvement which qualifies for special grants provided by the state.

In 2017 this type of initiative supported an apprentice from Nigeria, who is working towards a role as a processing mechanic in the rolling mill, and two Afghans who are training to be equipment operators.

# 1.12. Safeguarding protected categories

The specific nature of the industry and the high safety requirements offer limited possibilities in the steel industry for personnel belonging to protected categories. However, Feralpi has set up initiatives in conjunction with job centres that aim to insert employees belonging to these categories in new areas, through a feasibility study of individual workstations. At the end of 2017, there were 53 employees belonging to protected categories working in Feralpi sites, 31 in Italy and 22 in Germany.

# 1.13. Safeguarding workers' rights and union relationships

The Feralpi Group's focus on freedom of association and collective bargaining forms is part of the Group's founding values, as stated by the founder. The company mainly operates within the European Union where these rights are protected by extensive legislation. Applying the principles of freedom of association and collective bargaining is also required of suppliers, through compliance with a code of ethics. Feralpi systematically checks that all external companies operating on its premises comply with legislation, also in relation to collective contracts.

It is the company's aim not only to recognise workers' freedom of association, but also to facilitate socialising through initiatives that are mainly encouraged in the field of sport and include the involvement of employees' relatives.

The assessment of company policy on the subject of association and quality of industrial relationships is also based on the results of the regular workplace climate survey.

During the financial year Feralpi continuously operated in accordance with the rights of personnel to free representation and encouraged union relationships based on timely and transparent information and modelled on continuous constructive dialogue with employee organisations. All personnel working in premises located in Italy and Germany are covered by a collective bargaining agreement.

The renewal of the Feralpi Siderurgica supplementary contract was signed on 31<sup>st</sup> July 2017 and is considered to be especially innovative by literature on labour law and quoted in various publications.

# 1.14. Personnel opinions in the workplace climate survey

In February 2017 the sixth expedition of the biennial workplace climate survey aimed at all personnel was carried out at the Group's premises in Italy and Germany. The results of the survey were gathered in a report and presented to the Sustainability Committee and union representatives and distributed in workplace notices and commented on a dedicated section of the VerdeFeralpi magazine.

Overall the results show an ongoing high level of satisfaction in relation to work and relationships with superiors and colleagues, as anticipated in the 2015-2016 Sustainability Report.



# 2. Shareholders

Historically, the Feralpi Group has been controlled by a stable core of shareholders, who are descendants of the founding families and are based in the province of Brescia. Some shareholders have managerial roles, even though company development has led to the gradual involvement of external managers, both in Italy and abroad.



An ongoing characteristic of a shareholding plan is agreeing a long-term perspective aimed at the continual consolidation of company assets, the application of the most advanced technologies available on the market, the promotion of innovation, even with external partnerships, and an open international approach, not only in relation to markets, but also to Group organisation.

Since the beginning of this century, the shareholding plan has accompanied the company not only in applying innovation to safeguarding the environment, but also to social innovation, of which projects on health, safety and company welfare represent the most important aspect of this.

Stable and focused ownership, which identifies with the company and is willing to continually reinvest profit, has always guaranteed continuity in an industry characterised by a strong cyclic nature and therefore destined to withstand prolonged periods of unfavourable economic situations. The shareholders agreed company strategies aimed at gradually diversifying products and markets on an anti-cyclical basis.



On 31<sup>st</sup> December 2017 the company capital approved by the parent company Feralpi Holding S.p.A. was 55 million euro, 50 of which fully paid-up and split into 5 million shares with a nominal value of 10 euro and 5 consisting of convertible bonds held entirely by the shareholders.

The shareholder base is represented by 15 parties, natural persons and legal entities. Members of the holding's Board of Directors belong to the founding families, and include two female members. The Board has an independent director who has had no financial relationships with Group companies in the last two years, holds no significant shares and has no family connections with anyone in the aforementioned categories, in accordance with the Code of Ethics.

Shareholders are the reference stakeholders for determining remuneration policies for managers and directors and are continually involved directly through executive roles on the Feralpi Holding's Board of Directors.



# 3. CUSTOMERS

# 3.1 Business policy

In the UNI EN ISO 9001:2015 quality management system the Feralpi Group recognises the means for safeguarding and developing leadership in the production of reinforcing steel in bar and billets in special quality steel, carbon and alloy steels, produced in accordance with legislation, national and international voluntary standards, and specific customer requirements. The management system is also applied to all activities that affect the quality of the products and services provided, commencing with the definition of explicit and implicit customer requirements through to product delivery. The aim of meeting customer requirements in full at minimum cost is pursued in line with sustainable development logic, with the involvement of personnel, suppliers, shareholders and the community.

# 3.2. Company objectives

The objectives set out in the business policy are pursued with an opportunity-risk approach and commit the company to:

- involving personnel at all levels in the ongoing improvement of products and services;
- provide personnel with suitable information and training tools;
- optimise management and production processes;
- measure customer satisfaction relating to expectations;
- check product compliance to minimise complaints;
- make the necessary investments set out in the annual quality plan.

# 3.3. The assessment of company policies

The assessment of company policies in terms of quality involves customers, whose feedback, complaints and levels of satisfaction are systematically measured. Feralpi Siderurgica and Feralpi Stahl produce annual quality improvement plans that are approved in January and updated throughout the year. These plans include actions resulting from reviews and anything that transpires from quality meetings and external audits.

# 3.4. Products and customers

Steel production is historically linked to modernity. It is in this industry, whose origins date back to prehistoric times, that modern industrialisation took off, starting in European countries and now extended to all continents characterised by significant economic development. Despite the invention of alternative materials, that are stronger and lighter but much more expensive and not easy to recycle, such as carbon or glass fibre reinforced polymer (GFRP), steel continues to have a central role in the industrial development of most countries and personal wellbeing, ensuring its presence in all sectors, such as the building trade and the various transport sectors.

Due to its qualities of strength, ductility, toughness and elasticity, steel enables a vast range of cost-effective applications depending on its grade, which measures its malleability or yield strength. The increasing awareness of consumers and more stringent legislation to safeguard the environment make steel a sought-after material as it can be fully recycled and has a reduced impact on the environment along the product's entire lifetime (source: World Steel Association).

Following the recession in recent years, there has been a significant change in the markets, which now must be quicker and more flexible in meeting the requirements of customers, who request more diverse and smaller batches.

In this context, the Feralpi Group's production mission is to provide quality steel, special steels and items produced from downstream casting and rolling operations, with opportunities in the building trade and engineering industry.



The Feralpi Group offers a wide range of products and extended its range in 2017, with a policy of further diversification based on technological modernisation and increasing the skills of Group personnel.



The diversification strategy implemented by Feralpi is enabling the optimisation of upstream production phases and providing customers with an increasingly full and complete catalogue of products to meet the most challenging need of final users.

Production includes:

## • Billet:

Billet is a semi-finished product Feralpi turns into round ribbed bar, ribbed coil, wire rod or drawn bar. Quality steel billets are used for rolling and forging various types of semi-finished products, or special pre-finished parts destined for numerous industries, such as the engineering sector, oil & gas industry, electronics and electricity, vehicles and transport, domestic appliances, furniture, energy and safety systems.

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\* 55

Billets produced by the Feralpi Group by steel type:

- steels for reinforced concrete
- non-alloy steels for structural use (carbon steels)
- quenched and tempered steels
- spring steels
- steels for nuts and bolts
- forging steels
- case-hardening steels
- surface-hardening steels
- low-alloy creep-resistant steels
- micro-alloyed steels

# • Reinforcing steel in bar and coils:

Finished product for reinforcing concrete (diameters from 6 to 40 mm, lengths from 6 to 24 m), High-ductility features make it especially suited to construction in earthquake areas. This product is sold to distributors and processing centres that provide services to construction companies.

# • Stretched coils:

Product obtained from cold working hot-rolled coils (diameters from 6 to 25 mm, weight from 2.5 to 8 t). This produce meets higher requirements in terms of weight, expansion length and workability and, alongside hot-rolled coils and bars, it is supplied to processing centres, where it is used to speed up operations.

## • Wire rod:

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Semi-finished product which is turned into ribbed wire mainly for use in the building trade, and smooth, drawn wire for use in farming and engineering. (diameter from 5.5 to 25 mm, weight from 1.8 to 2.5 t).

# • Wire rod in special and quality steels:

Semi-finished product with a low, medium and high content of carbon and other alloy elements, used after drawing processes in sectors requiring steel for highly-specialist applications, such as the manufacture of screws, nuts and bolts, cold forged mechanical parts, springs, chains, special nails, strands, ropes and special cables.



### • Cold-drawn wire:

Product used directly in stirrup bending and straightening machines or in the production of welded wire mesh and lattice girders (diameters from 4 to 12 mm, weight from 0.5 to 5 t).

### • Standard and made-to measure electro-welded mesh:

Finished product used for paving or prefabricated structures.

### • Lattice girders and spacers:

Finished product for small and medium-sized steel structures constituting the metal component of brick floor slabs, or which create space between different frameworks.

### • Mechanical joints:

Mechanical joints made with cold expansion of bars and subsequent threading operations are used in place of welds or overlapping bars.

# • Assemblies:

Prefabricated steel structures used to make shells for covering tunnels, cages for diaphragms, cages for piles and micropiles, cages for large structures.

### • Pre-treated beams:

Beams that undergo numerous operations destined for structural building, such ash cutting, cambering, welding, drilling, notching, dowelling, galvanising, abrasive blasting and painting operations.

# • Special section bars and rolled products:

Steel section bars produced by rolling billets, used in engineering and structural steelwork; T-bars used for lift construction.

### • Pre-shaped bar:

Steel bar operations including cutting, welding, bending and calendering to make customised steel structures mainly for infrastructure.

### • Non-structural electro-welded mesh:

Standard or made-to-measure mesh made using different types of smooth wire (as cast, galvanised, stainless steel) and used as a semi-finished product in industry and in the building trade.









# • Industrial and residential fencing:

Fencing made with modular and wire grid that combines design and convenience. Used in various sectors including high security and sport. This range of products can have electronics incorporated with a special alarm system that locates intrusion points.

# • Wall Cladding:

A product line designed to cover new buildings or modernise existing constructions. Also available with the COR-TEN solution with the TaliAlive brand.

## • Steel grids:

For use in industry and the building trade as walkways and flooring. Can also be made to measure in edged and notched panels to suit various projects and meet capacity requirements.

# • Trade and logistics:

The trade, handling and transport of steel products.

# • Disposal services:

Disposal of hazardous solid waste produced from clearing materials containing asbestos. This service is carried out by the subsidiary Ecoeternit S.p.A. and meets disposal requirements safely and securely in compliance with most stringent legislation.

The customer base is split into the categories listed below:

- companies that roll billets for industrial purposes;
- building and pre-fabrication firms using products destined for constructions and infrastructure directly;
- processing and shaping centres working with bars or coils for site supplies;
- small, medium and large structural steelwork businesses using beams and rolled products pre-treated by the service centre;
- builders' merchants mainly purchasing bars, welded wire mesh and section bars to sell to small and medium-sized users;
- retailers of steel products mainly purchasing merchant steel (flat, angular, square and round) used mainly in structural steelwork;
- OEMs (Original Equipment Manufacturers) using made-tomeasure electro-welded mesh as a semi-finished product for producing their own products.

# 3.5. Quality objectives

The company produces an annual quality report in relation to operations carried out in Italy.

With regard to Italian production, during the 2017 financial year actions were implemented to comply with UNI EN ISO 9001:2015 certification, which was obtained in March 2018. Preparations for this entailed a review of the quality policy, the introduction of a context analysis and an analysis of opportunity/cost probabilities.

In 2017 the results of inspections by external organisations confirmed the compliance of the quality system and products with the standards adopted.

Feralpi Siderurgica has obtained the **SustSteel** European mark, attesting to the efforts made to apply the principles of sustainable development, in addition to **EPD** (Environmental Product Declaration), which now also includes cold processing, **ICMQ - Eco Gold**, a certification scheme that defines product sustainability level, and to **Attestazione del Contenuto Minimo Riciclato** (97%), indicating the amount of product recovered from the casting process.

These awards sit alongside certification for the Environmental Management System (ISO 14001), the Occupational Health and Safety Management System (OHSAS 18001) and the Quality System for compliance with EU 333/2011 regulations, which were designed to create transparency in the management of scrap metal by ensuring process traceability and scrap quality.

Obtaining the EPD is linked to the certification of objective, reliable, and comparable information relating to the environmental performance of products in accordance with ISO 14025.

At Feralpi these standards are applied to bars, coils and coldrolled products and are based on assessing product lifecycle itself.



# 4. SUPPLIERS

# 4.1 The supply chain and the Feralpi supply chain policy

Feralpi operates along the steel product supply chain, and is positioned upstream of a series of operations aimed at providing semi-finished products for a wide range of uses in two main industries - the building trade and the engineering sector. Feralpi's commitment, which originally consisted of casting steel for the building trade and the production of special steels, sits within a dual supply chain, which is summarised below for large lines.

# SIMPLIFIED SCHEME OF THE FERALPI SUPPLY CHAIN



process are at the heart of the business, which evolved during the Group's development into later phases involving diverse hot and cold processing operations, including more recently, operations for preparing structural steelwork. In general, the strategic importance of special steels and the evolution of traditional long products has gradually transformed Feralpi from being a supplier of commodities to a supplier of quality products made to order. This transformation has a significant impact on supplies of scrap, subsidiary materials for casting and rolling and in relation to the energy mix.

There are three main supply lines upstream of Feralpi's activities - the supply of raw materials, the supply of energy (energy production and gas extraction) and the supply of subsidiary materials required for casting. The third supply line is fairly disparate and includes various materials.

# Percentage of turnover invoiced by local suppliers at the main production sites out of total supplies

Territorial area	2016	2017
Province of Brescia	27.0	31.4
Province of Como	6.9	4.3
District of Meißen	6.8*	6.7

\*The figure for 2016 differs from the information in the previous report after updating the calculation method.

# 4.2. Company objectives

The high quality objectives set by the company require the adoption of a strategy that focuses on the quality of materials for the production process, which in turn depends on the reliability of suppliers, who must also ensure high levels of legislative and environmental compliance.

Suppliers are selected on the basis of their reliability, with long-established suppliers having priority, and their ability to ensure quality, compliance with delivery times and continued supplies in the long term. This applies to strategic suppliers who are required to keep equipment operating efficiently. Strategic suppliers are managed on the basis of trust established over time. Non-strategic suppliers (i.e. of consumables, goods and services not directly linked to the production process) are easier to replace and are reviewed regularly on the basis of comparison with competitors.

The supplier selection and verification process adopted by Feralpi not only concerns technical/professional requirements, but also compliance with regard to contributions, legislation on the environment and the health and safety of supplier personnel. All suppliers are required to be familiar with the Feralpi Code of Ethics, which is attached to each order placed.



# 4.3. Supplier evaluation

The supplier selection procedure is based on verification of standard quality parameters by the quality management department, which carried out 1,939 laboratory tests directly or indirectly during the financial year. The company does not currently adopt systematic supplier evaluations in relation to social and environmental parameters. However, a study is in progress to develop a platform for selecting suppliers on the basis of these parameters. The company currently measures supplier CSR activities by consulting the relevant documentation, the results of which are outlined below.

# Corporate Social Responsibility of some of Feralpi's main suppliers

Company	Type of supply	Code of conduct	Sustainability reporting
ENI	Natural Gas	YES	YES
AIR Liquide	Industrial gases	YES	YES
Bergmann Kalk	Lime	YES	
Danieli	Plants	YES	
Terna	Electricity	YES	YES
ABB	Technologies	YES	YES
Media Steel	Scrap	YES	
Graftech	Electrodes	YES	
SGL	Electrodes	YES	YES
Unicalce	Lime	YES	
SGL	Coal	YES	YES
TSR Recycling	Scrap		ISO 50001, OHSAS 18001
Wünscherdorfer	Dolomite	YES	
Micon	Alloys	YES	

# 4.4. Scrap suppliers

The procurement of scrap iron, the raw material which is secondary to Feralpi processes, is crucial because it determines the quality, ongoing supply and cost effectiveness of production. Unlike the supply market in Germany, which is characterised by very structured, large operators, the supply market in Italy is less structured and still partially characterised by considerable fragmentation. As a result, Feralpi contributed to establishing organised operators that can guarantee an ongoing supply of large volumes of scrap.

The Group's main scrap suppliers are Media Steel Srl in Italy and TSR Recycling in Germany, which both ensure adequate volumes of quality supplies on an ongoing basis.

Media Steel, which is a Feralpi Group subsidiary, is able to guarantee the use of strict supply criteria regarding scrap quality and suppliers themselves, who must ensure strict compliance with legislation to be endorsed, in addition to the correct technological operations, suitable equipment and warehouse dimensions, the necessary scrap treatment procedures and compliance with environmental legislation on waste. For these reasons Feralpi did not include social and environmental criteria among scrap suppliers selection criteria during the financial year. Scrap entering the Group's steel plants is systematically checked via incoming procedures that identify any irregularities regarding radioactivity. The presence of radioactive material can cause serious hazards along the entire value chain. Scrap metal is checked on arrival using X-ray equipment, which quickly identifies the chemical composition of the material. Scrap identified as non-compliant in the sampling phase is separated and handed over to authorised disposal organisations.



# 4.5. Energy suppliers

Energy consumption (electricity, methane gas, oxygen) is an important production cost item for Feralpi.

As a result, the Group has supply contracts for these commodities from the main national and international providers, guaranteeing safe, ongoing supplies, providing support and monitoring market conditions for the best price opportunities.



# 4.6. Contractor companies working on the premises

Feralpi takes considerable care when selecting and checking third-party companies working on the Group's premises, in the knowledge that external personnel must be ensured safe working conditions similar to those guaranteed for Group personnel.

During the financial year the Feralpi Group premises at Lonato, Calvisano and Nave had 167 external companies working on site with a total of 1,572 employees, in addition to other 600 sub-contractor employees from external companies for repairing their equipment and vehicles. At the Riesa premises there were 941 employees from external companies in 2017.

Feralpi checks that all contractors comply with the legislation on the rights of workers and union representation and have the necessary technical/professional requisites to complete the work, comply with company requirements, meet their contribution and tax obligations and comply with health and safety in the workplace legislation. During the financial year, Feralpi extended technical/ professional suitability checks carried out on contractor companies by obtaining documentation on the following:

- Fulfilling requirements to adopt safety and prevention measures in the workplace;
- The absence of suspensions or injunctions as per article 14 of legislative decree 81/2008 in relation to safety in the workplace and reports from employees made to the National Social Security Institute (INPS), the National Insurance Institute for Industrial Accidents (INAIL) and to Casse Edili (special construction workers' welfare fund);
- Verification that the national collective employment agreement is applied;
- Average annual workforce and corresponding roles;
- Valid certificate of social security compliance demonstrating compliance with requirements of the National Social Security Institute (INPS) and the National Insurance Institute for Industrial Accidents (INAIL);
- Public and professional liability insurance and the relevant receipts of payment;
- Medical supervision plan drawn up by the company doctor;
- Records of compulsory courses on safety and the use of equipment as applicable;
- Extract of risk assessment document relating to working in confined spaces, corresponding emergency plan and proof of training, as required depending on type of work to be implemented.



Companies must also provide the Customer with the names of personnel employed, their role and social security/insurance status, the recruitment communication sent to the job centre, employee ID badge and an assessment of suitability for the task.

If contractor companies need to set up a building site, Feralpi also requires declarations regarding compliance with additional employee health and safety measures and the risk assessment document as per article 17 of legislative decree 81/2008.

Contractors must provide similar comprehensive documentation for sub-contractors. Authorisation to subcontract is issued in writing by the Customer when checks have been completed successfully.

Feralpi systematically and continuously checks for compliance with safety legislation through its safety department and planning/implementation safety coordinators appointed at each site. During 2017 there were five complaints at the Lonato site which led to the temporary suspension of access for the person involved and, in some cases, the relevant company was fined. At the Nave site two people were subject to penalties with the temporary suspension of access to the site.

Supplier compliance with regard to contributions is also checked by cross checking details on employee site presence with the information reported by companies to the relevant organisations. No irregularities were recorded during 2017.

2016		2017				
Site	Male	Female	Total	Male	Female	Total
Lonato	1,272	9	1,281	940	15	955
Calvisano	542	4	546	439	11	450
Nave	95	3	98	162	5	167
Riesa	798	3	801	938	3	941
Total	2,707	19	2,726	2,479	34	2,513

### The presence of external personnel on Feralpi sites

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# 5.1. Feralpi's multi-level policy in dealings with public administration

Feralpi has complex relationships with public administration at various levels locally, nationally and internationally. These relationships are modelled on the principles outlined in the Code of Ethics, which is the main tool for promoting, publishing and managing professional ethics when carrying out company business. This code supports a control system designed to prevent the offences set out in legislative decree 231/2001, including corruption resulting from collaborator and employee conduct. Relationships with public administration place the Feralpi Group in a multi-level system that involves the European Union, public administration in the six countries where the Group has premises, in particular Italy and Germany, local councils, regional and provincial departments, and public watchdog organisations operating at a local level which Feralpi is accountable to in accordance with legislation.

At a European level, EU decisions affect the European steel industry and, therefore, Feralpi operations through direct and indirect regulations. Through industry associations (Federacciai in Italy and WV Stahl in Germany), Feralpi is involved in protecting EU market operation via the introduction of rules designed to tackle dumping policies. Feralpi is also involved in the introduction of energy saving incentives and in the change from traditional to renewable energy sources.

During the financial year, the **European Court of Justice** annulled the penalties imposed by the European Commission in 2009 for an alleged business agreement between various Italian producers of rebar, including Feralpi.

Given that most of the Group's business is concentrated in Italy and Germany, the respective countries are important stakeholders, where the main regulations affecting corporate governance and the relevant tax contributions originate. Outside the European Union, countries mainly affect Feralpi business through trade legislation, imposing or removing duties and import quotas.

Company competitiveness is also affected considerably by investment in infrastructures, and research incentives promoted by the relevant ministries in the various countries, especially in Italy and Germany where Group research activities are concentrated.

At a local level, the areas where the main sites are located constitute a significant stakeholder to the extent that public administration affect strategic areas for the company. These include professional training, the alternating education-work scheme in Italy and the dual training system in Germany, infrastructure (from regional road networks to local trade fair facilities), environmental and energy policies, and support for research and innovation.

Local councils are an important point of contact because they grant permits (for sites, land management) and solutions are negotiated with them on the basis of mutual synergies.

# **5.2.** Short and medium to long-term objectives and company assessment of results

Feralpi complies with all legislation in force in the countries where it operates, and exercises its rights as a member of the community, by participating in the organisation of industry interests in the countries where company business is mainly concentrated - Italy and Germany.

Senior Group representatives have responsibilities in business organisations. The chairman of Feralpi Holding, Giuseppe Pasini, is currently chairman of Associazione Industriale Bresciana (Brescia Industrialists' Association) and the manager of Feralpi Stahl, Frank Jurgen Schaefer, is vice-chairman of the Dresden Chamber of Commerce & Industry. In 2017 Feralpi allocated 26.4% of overall consolidated value added, equivalent to 37.99 million euro, for the benefit of the countries where the Group's companies operate. In the previous financial year this figure was 23.2%.

In the reporting year the Group's companies received contributions and incentives allocated to research and innovation amounting to 12,486,503 euro. In Italy contributions and incentives were mainly received for R&D projects, whereas in Germany there were reimbursements relating to taxes on electricity and discounts for containing  $CO_2$ .

The Group's most important sites have developed ongoing relationships with local public administration. Ongoing communication with the councils of Lonato, Riesa and Calvisano is part of company history, which is based on mutual commitment and dialogue deemed positive by both parties, as demonstrated by the positive statements made by public administration. In 2017 the foundations of the agreement with Lonato Council were established for the development of the district heating network, illustrated in the chapter on the environment.

The continued participation of the Group's Italian companies in the WHP project promoted by Lombardy Regional Authority is another example of positive cooperation between the company and local authorities in pursuing aims of social significance. This long-term project illustrates the excellent cooperation between the Feralpi Siderurgica factory medical facility and the Brescia and Como health agencies.



The Feralpi Group is committed to extending the model of communication and cooperation to the governmental points of contact in the local reality of the recently acquired production sites.

Feralpi places particular focus on relationships with local environmental organisations. The results achieved in relation to safeguarding the environment have strengthened relationships with the Dresden regional environmental management team, which has Feralpi Stahl as its point of contact, and the Lombardy Regional Authority and the Brescia ARPA (environmental protection agency) department, which carry out inspections relating to installations situated in this province. These inspection agencies recognise and appreciate the Company's commitment, expertise, research into environmental issues, and the involvement in innovative projects supported by Feralpi.

# 6. THE LOCAL COMMUNITIES

# 6.1 Knowing the area

Any production facility always has a triple impact on the surrounding community, in economic, environmental and social terms. In principle all these three aspects can generate positive or negative external consequences. In view of this, the Feralpi management is aware of how the effect the company has on the community goes beyond direct economic impact on local income through employee remuneration and buying from local suppliers.





Conversely, Feralpi's international competitiveness can benefit from being embedded in the communities where the Group operates, capitalising on local skills and the industrial culture of the area.

Feralpi also contributes to local wellbeing by participating in cultural, social and sporting initiatives in the local community, and is open to the opportunities that transpire from these.

Relationships with local communities not only involve the Company's historic settings, but also the new environments where there have been recent takeovers. In all cases, the quality of the relationship with local communities is a founding aspect of company's identity.

In this context, Feralpi's scope of action is directed at engaging with the residents who live in the areas where the Group's companies are located. The surrounding social setting mainly consists of the families of employees, associations operating locally, and the cultural, social and sporting services the main departments provide, with particular focus on younger generations.

Areas where other productions sites are located have a level of intensity which is proportionate to the scale of both the economic impact and local employment, as well as the amount of time the site has been operated.

# **6.2.** Feralpi objectives in relationships with local communities

The involvement of local communities concerns specialist professional training and the promotion of industrial culture, mainly targeted at young people, and long-term projects to develop the various initiatives.

Feralpi also supports social initiatives through the Carlo and Camilla Pasini fund, and prioritises a partnership approach through joint planning and cooperation. In the sporting arena, the Feralpi Group supports activities aimed at young people, and the promotion of values linked to team sports and the inclusion of disadvantaged groups.

The Carlo and Camilla Pasini Fund was set up in 2012 under the "Fondazione della Comunità Bresciana" on the wishes of the Pasini family and the Feralpi Group's companies. It's designed to support various requirements in the province of Brescia, with particular focus on education and training for young people and on social, cultural, artistic and scientific development.

# 6.3. Assessing relationships with local communities

Feralpi uses a twofold approach to assessing relationships between the company and local communities, i.e. direct communication and opinion surveys among residents.

Over the years the company has gradually developed various communication channels with stakeholders, to monitor the quality of local relationships with the main representatives, and the impression the public has of Feralpi through opinion surveys.

These tools have recently provided satisfying and stable results, which show a gradual improvement. In addition they enabled responses obtained in various local areas to be compared, permitting the analysis of differences in opinion.

In February 2017 the company INWT Statistics GmbH in Berlin carried out the fifth edition of the survey with the citizens of Riesa. This was implemented via telephone interviews with a representative sample of residents in the districts of Riesa, Glaubitz and Zeithain, and considering the distance of residents from the premises. The survey covers the level of knowledge and assessments citizens make on economic impact (jobs, tax matters, sponsorships), social impact (attendance at open day initiatives, website visits, sponsoring social and cultural activities, supporting sporting initiatives) and environmental impact (atmospheric emissions, traffic congestion and noise levels)





With regard to individual initiatives, the results of these are assessed in relation to results obtained in terms of participation and interest aroused by local media.

Communication between project partners enables future operations improvements to be planned.

# In 2017 Feralpi allocated **3.84** million euro to benefit local communities.

# Total contributions to benefit local communities

(€ /000)	2016	2017
Sports sponsorsing	2,307	3,751
Charities	178	89
Total provided	2,485	3,840

# HEALTH AND COMMUNITY IN RIESA

The Lander Oncology Register (Gemeinsames Krebsregister der Länder Berlin, Brandenburg, Mecklenburg-Vorpommern, Sachsen-Anhalt und der Freistaten Sachsen und Thüringen, GKR), confirms that since Feralpi Stahl started operating in the 1990s the standard illness incidence rate, i.e. the ratio between the actual number of cases diagnosed and the potential number of cases relating to age, is decreasing for the city of Riesa. Furthermore, the city has the lowest levels in the region, below those of other industrial areas.

# **6.4. Supporting training initiatives in local communities**

As planned, training, culture and sports initiatives were implemented locally during 2017.

Feralpi regularly participates in plans between schools, local organisations and companies in the city of Lonato, with the aim of supporting new training initiatives at the Cerebotani Institute in Lonato, which Feralpi has systematically collaborated with for some time. On 20<sup>th</sup> May 2017 an open information day was held to present the new Lombardy technical college for new mechatronic technologies, which set up a two-year further education course starting in the 2017/2018 academic year.

# **Bootcamp - the work-education project**

As outlined in more detail in the second chapter, section 4.2, on 17<sup>th</sup> January 2017 the new edition of the alternating, education and work project involving four educational establishments in the province of Brescia was presented. Participating students were welcomed at the Feralpi Siderurgica premises in Lonato, the Acciaierie di Calvisano plant, and the Feralpi Profilati Nave site.

The alternating work-education project involved fifth-year students in the engineering course at the Cerebotani Institute in Lonato. The students completed an 8-week work placement



at the Group's premises in the Brescia area over 3 separate periods, and 110 hours of classroom-based training on technical-scientific subjects and the development of soft skills.

*The Siamo Sicuri?* project organised by Feralpi Siderurgica for the children of employees was held at the Lonato premises on 15<sup>th</sup> June 2017 as part of the bootcamp initiative. 25 youngsters between the ages of 11 and 14 attended, coming from Calvisano (Acciaierie di Calvisano) and Nave (Feralpi Profilati Nave) too.





# Erasmus+ for the history of the iron and steel industry

The Feralpi Group has already been involved internationally with the Erasmus + exchange scheme. In 2017 the exchange was aimed at collaboration between the establishments BeruflichesSchulzentrum fur Technikund Wirtschaft in Riesa (Saxony) and the Cerebotani Institute in Lonato del Garda (BS). This enabled around 50 students to reconstruct the history of iron and steel production according to the tradition of the respective regions. The result of this initiative was made public with the opening of the exhibition *"In principio era il ferro"* held in Riesa from 22<sup>nd</sup> September to 12<sup>th</sup> November 2017, which included a display of 30 banners created for a touring exhibition. Plaques and leaflet information were provided in German and Italian.

# Participation in the Confindustria PMI Day

Within the framework of the 8<sup>th</sup> national edition of the event promoted by Confindustria and supported by Associazione Industriale Bresciana, Feralpi participated in the interactive workshop entitled Sviluppiamo le competenze (Developing skills), held on 17<sup>th</sup> November at the Palazzo della Loggia in Brescia, and invited the students to visit the company in February 2018, to demonstrate the work environment and organisation of a steel business.



# The Higher Technical Institute of Mechatronics

Feralpi supports and collaborates in the new two-year further education course in mechatronics presented on 2<sup>nd</sup> November 2017 at the Cerebotani Institute in Lonato. The course aims to provide training for students in a wide range of skills who can combine engineering, electronic and IT to develop automation and the modelling of control systems.

Feralpi Stahl continued supporting two local private nurseries (one Lutheran and one Catholic), and working with two primary schools and three secondary schools in Riesa and the district of Meißen to create educational projects to be added to the standard curricula.



# Feralpi took part in ArtiDesignImpresa,

the second edition of an event organised by Soncino local council in the province of Cremona, in conjunction with the Accademia di Belle Arti di Brera. The project aims to create a connection between the worlds of art and production to strengthen synergies between these environments. The idea is also to promote areas and enhance them through actions designed to regenerate districts, and by doing so view them as an alternative to large cities. Alongside the creativity of artists, the business mindset and reasoning of companies can make experimentation possible and provide solutions to society's changing needs.







# 6.5. Initiatives supporting the community

During the third edition of the charity event "Sogno di Natale" organised by La Zebra non-profit organisation, Feralpi supported the initiative to collect funds to purchase magnetic resonance equipment for a children's hospital in Brescia through the Carlo and Camilla Pasini Fund.

MPL, which was recently taken over by the Feralpi Group, provided its expertise and beam processing technologies to implement an Emergency project in Uganda concerning a children's hospital providing free care in the region. Metal structures will be necessary for creating roofing and flooring and will be sent from Italy and installed in the initial months of 2018.

Following the success of the previous year, the **"Bella Gröba** - **Familienfest"**, day for local residents and the families was repeated on 12<sup>th</sup> of August 2017 in the district north of Riesa premises, and was attended by over 1,000 people. The success of this initiative has motivated the company to organise another edition in 2018.

In a social context Feralpi Stahl supports the Sprungbrett initiative, which helps disadvantaged children in the Gröba district.

In a cultural context, support was provided for the Riesa flute orchestra, two concerts by the Elbland Philarmonie orchestra and band of Riesa. Since 2013, Feralpi has contributed to supporting the Festival Internationale Schostakowitsch Tage Gohrisch, which promotes the music of the most important Russian musician of the last century. In addition, Feralpi also sponsored the Bücherfreunde Riesa e.V., a reading club for young people, the Kulturförderverein Riesa e.V., an arts and craft market, and the Italian course for students organised by Italienisches Kulturinstitut, in conjunction with the Italian Embassy in Berlin and Dresden Technical University.



# 6.6. Supporting local sport

An affinity between company values and sporting values, especially in an amateur and team setting for young people, underpins Feralpi's commitment to numerous sporting disciplines. Cycling, football, rugby and canoeing are activities which have been supported for some time, along with more specific initiatives designed to include young children through sport. Feralpi regularly supports activities of local youth associations.

The Group sponsors the football association Feralpisalò, which plays in the B round of league C. Among the activities supported by the company through the football association, there is a school project, which reached its third edition during the 2016-17 sporting season and will be repeated in the subsequent year. Approximately 1,200 primary and secondary school children took part in the project, which aims to encourage exercise and a healthy diet, raise awareness on issues such as cyber bullying and, completely new in this edition, education and managing money.

During the financial year, Feralpi supported the tenth edition of the Rally Kart Show held in Barghe, in Valsabbia in the province of Brescia.

Feralpi Stahl supports Sport Club Riesa e. V., which encourages young people in sports, the aerobics association, the Cheerleader group, the Dragon Boat club, the local youth football team, and canoeing, rugby, swimming and volleyball associations. Feralpi has been a major sponsor of Fussballakademie since 2011, which is a youth football training centre. During the 2017 financial year, the BSG Stahl Riesa stadium, which has hosted all the activities of teams from the local Academy since 2014, was renamed Feralpi Arena in recognition of the important role played by Feralpi Stahl in supporting youth football activities. In 2017 Feralpi Stahl also supported the "Eisbahn in Riesa" project for the third time in conjunction with Stadtwerke Riesa, a major user of the steam produced by exploiting the heat of steel plant fumes. This made it possible to provide the citizens of Riesa with an ice rink measuring 200m<sup>2</sup> a week before the start of the Riesaer Klosterweihnacht Christmas market.

With regard to promoting sport in the area, Feralpi Profilati Nave has been sponsoring A.S.D. Navecortine Calcio since 2017, involving 200 members and 90 coaches and collaborators.

Nuova Defim Orsogril has renewed its commitment to the area by supporting initiatives promoted by the organisation Amici di Como, including the long-running event *"Città dei Balocchi"* held every year in Como during the Christmas period, which is a great success with the public. The company provided temporary security fencing for this event free of charge.

The Feralpi cycling club was set up in Lonato in 1974 by Carlo Pasini, the founder of the Feralpi Group. The spirit of the cycling club is the desire to invest in young people, by teaching them the foundations, rules and lifestyle required to participate in a difficult but wonderful sport such as cycling, so they understand how sport in general, and cycling in particular, provides first and foremost a life education. The team of athletes includes 76 members of FCI, 37 of them very young, 8 beginners, 14 intermediates, 9 juniors and 8 coaches alongside 51 amateurs and 83 triathlon athletes. 2017 season produced fantastic results among the very young members, who won 27 trophies out of the 29 at stake.



The Feralpi Group takes part in the Feralpisalò initiatives directly. This football organisation, which has been professional since 2009, has agreed a project that doesn't just concern sports development. The organisation also focuses on developing projects linked to human and social factors, in order to spread an enriched value system among young people, even if they are not members.

Schools and institutions have also been involved in training initiatives in the 2017-18 season. For the fourth consecutive year the club confirmed the schools project regarding the Garda and Brescia areas, with the aim of promoting sport at school age and its intrinsic values, such as fair play (in partnership with Panathlon Club Brescia), good conduct as supporters and healthy diet. The latest edition of the project also included other aspects such as road safety education, which has become increasingly important with the advent of hover boards, and the theme of managing money. The project involved 1,200 pupils and their families through the free distribution of the 80 pages book entitled "*Gioco+Salute* +*Divertimento=Sport*" (Games+ Health+ Fun= Sport), a winning formula for the future of young people in the area.

These remain to be the main actors in club initiatives. The project "Senza di me che gioco è?" took place for the second year, involving football training for disabled athletes, and saw the Garda organisation the first to set up a range of internal activities in a professional setting for these special athletes.

This model was created to make disabled members feel an active part of the team, and raise awareness among young able-bodied people at a human and sporting level. The Feralpisalò organisation has always encouraged compliance with legislation, respect and rules of fair play with targeted educational projects for more than 6,000 children in the Brescia area (including members, affiliated organisations, projects and initiatives with schools). By setting up a recreational area with suitably trained personnel, an appropriate environment for playing sport was created with the aim of enabling disabled children and young people to experience the thrills, sensations and joys of football and teamwork. Basically, this offers the advantage of teaching happiness and contributing to the emotional development of young people.





Francesca Rubes

ORGANIZZAZIONE E SVILUPPO DEL PERSONALE

The group has 19 members with ages ranging from 8 to 31 years old, and benefits from the input of the Feralpisalò coaches and support staff from the cooperative *"II Gabbiano"*, an important organisation in the Brescia area which had the task of training the support staff. The growth of the project and the national awareness campaign led by Feralpisalò resulted in the 4<sup>th</sup> category championship which saw a new tournament split by level of disability set up, first in the professional league and then with the participation of the top Italian league clubs (4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> categories). Feralpisalò members participated to

The "Senza di me che gioco è?" project is just one part of Feralpi's youth area, which has more than 550 members and a staff of 80 people, including coaches, trainers and collaborators who look after the male and female categories on a weekly basis. Feralpisalò wanted to expand in the 2017-18 season with the addition of three female teams. The club added 60 new members from the first squad to the youth sector by starting a new initiative in accordance with human development and sporting values, which are a common denominator in all activities and categories. These intentions are also shared by the 8 club affiliates, leading to more than 1,300 football players spread throughout the Brescia area.

this tournament too.

The commitment of Feralpisalò is an extension of the lines the Feralpi Group promotes within the company environment. There are shared values which have the same impact even if they evolve differently. The visibility of Feralpisalò in the national football network enhances the profile of the organisation that has formed the basis for everything.























# PART 5 ENVIRONMENTAL RESPONSIBILITY



# **1. FERALPI'S ENVIRONMENTAL IMPACT AS A STRATEGIC OPPORTUNITY FOR INNOVATION AND IMPROVEMENT**

This steel production process has a significant impact on the environment. Thanks to technological developments and continuous innovation, Feralpi is able to mitigate this impact and pursue medium and long-term objectives of ongoing improvement.





The company carried out an impact assessment of its business activities, products and services to manage and prevent environmental impact, promoting the use of the best technologies available in all countries where it operates. Feralpi believes that striving for the efficient use of energy resources contains environmental impact, limits climate change and reduces costs. The company has been making significant successful efforts to reduce its emissions into the atmosphere, water and soil for some time. In accordance with the principles of a circular economy, Feralpi strives to minimise the production of waste, and adopt recycling rather than disposal methods.

The Group also promotes safeguarding the environment in its production chain management, involving suppliers, customers and organisations in the company's sustainability policy. In practice, part of the stakeholder involvement concerns initiatives to raise awareness and provide information and training on these issues.





# Assessment of direct/indirect environmental aspects of steel mills and rolling mills

ENVIRONMENTAL FEATURE	DIRECT ENVIRONMENTAL ASPECTS	SIGNIFICANCE
Atmospheric emissions	Steel mill emissions	Average significance
	Rolling mill emissions	Average significance
	Direct $CO_2$ emissions	Significant
	Emissions spread	Significant
	Emissions spread in emergency	Very significant
Waste water	Process water	Very significant
	Rain water	Average significance
	Domestic water	Average significance
	Final discharge into surface water	Very significant
Scrap recovery	Recovery non-compliant scrap batches	Significant
Waste production	Fume abatement dust	Significant
	Fluff	Significant
	Slag	Average significance
	Waste from sorting scrap	Average significance
	Mill scale	Average significance
	Other	Average significance
Use of resources	Raw materials consumption	Significant
Use of resources	Water consumption	Average significance
	· · · · · · · · · · · · · · · · · · ·	
	Natural gas consumption	Very significant
Emissione due te incidente	Energy consumption	Very significant
Emissions due to incidents	Fire risk	Significant
	Explosion risk	Average significance
	Risks from significant incidents	Average significance
Soil contamination	Spillage of hazardous substances into soil	Average significance
Radiation	Accidental orphan source fusion	Very significant
	Radioactivity in the process	Very significant
Other aspects	External noise	Average significance
	Asbestos	Average significance
	Visual impact	Average significance
ACTIVITY	INDIRECT ENVIRONMENTAL ASPECTS	SIGNIFICANCE
Purchase of electricity	Indirect CO <sub>2</sub> emissions	Average significance
Transport of scrap and finished products	Traffic	Average significance
	Waste management	Average significance
	Emissions	Significant
Supplies of material	Traffic	Average significance
	Spillages	Significant
	Transport of hazardous substances	Significant
	Storage	Average significance
Internal contracted operations	Use of substances	Average significance
(painting, carpentry, maintenance,	Emissions	Significant
handling and cleaning)	Dust	Significant
	Waste production	Significant
	Spillages	Average significance
	Noise	Significant
Outsourced cold processing operations	Waste production	Significant
	Emissions	Significant
	Use of hazardous substances	Significant
	Fire risk	Significant
Waste management	Handling	Average significance
	Transport	Average significance
	D. II	Aueropa cignificance
	Delivery	Average significance

Source: Update to the Feralpi Siderurgica S.p.A. EMAS 2017 environmental declaration



# **2. FERALPI'S ENVIRONMENTAL POLICY**

Aware of the efforts already made to contain emissions, assisted by the adoption of innovative technologies, the Feralpi Group places considerable focus on energy efficiency and use of resources in general, in line with the principles of a circular economy.
After obtaining ISO 14001:2015 certification, the Feralpi Siderurgica "Safety and Environmental Policy" was reviewed and issued on 30.01.2018. The new policy puts more emphasis on aspects relating to analysing the context, involving suppliers, and operating in line with the principles of the circular economy, with an emphasis on objectives to optimise resources and continually improve performance.

In accordance with the requirements of articles 13, 14, 15 of legislative decree 105/15 (upper-tier establishment) on the production and storage of fume abatement dust, Feralpi has drawn up a policy to prevent the risk of major incidents (http://www.feralpigroup.com/wp-content/uploads/2016/10/ politica-prevenzione-incidenti-rilevanti.pdf).

In line with the aforementioned strategy, Feralpi has signed up to the **Confindustria Sustainability Principles** and recently adopted the principles set out by the World Steel Association (WSA) in the document **Sustainable Steel Policy and Indicators 2016**, which are based on the 17 sustainable development objectives set out by the United Nations, recognising them as an integral part of the company's short and long-term objectives.

Since 2010 the Feralpi Group has been applying the precautionary principle set out in article 15 of the Rio Declaration on Environment and Development (UN conference in Rio de Janeiro on 3-14 June 1992), stating that "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

The steel mills in the Feralpi Group have obtained the environmental certification **UNI EN ISO 14001. EMAS registration** was recently renewed by Feralpi Siderurgica for the Lonato site and Feralpi Stahl for the Riesa site.





In May 2017 Feralpi Siderurgica updated the EPD declaration for hot-worked products (reinforcing steel in bar and coils) by extending it to cold-drawn products (stretched coils, electro-welded mesh) too. The EPD is a verified registered document that communicates transparent and comparable information about the lifecycle and environmental impact of products.

### **3. EVALUATING ENVIRONMENTAL POLICIES**

When evaluating the effectiveness of decisions regarding environmental risks, the Board of Directors consults expertise in subsidiary companies, in particular at Feralpi Siderurgica.

Feralpi regularly evaluate the results of environmental policies adopted, by comparing them against targets established in annual and medium-term plans.

The method used is to compare the indicators stipulated in the EMS declaration annually, integrated with the results from the biennial workplace climate surveys, which gather the opinions of Group personnel on environmental issues.

The opinion survey carried out regularly on a representative sample of the population of Riesa also contributes to monitoring the perception of Feralpi Stahl environmental policies.

Feralpi Stahl recently joined Klimaschutz-Unternehmen, a climate protection association whose members are companies selected due to innovative results achieved in relation to energy efficiency and safeguarding the environment. Klimaschtz-Unternehmen, was set up as a committee promoted by the ministries for the economy and environment and it is currently an association open to the contribution of a restricted number of companies that stand out in this field.



### **4. THE PRODUCTION PROCESS AND THE INITIATIVES DEVELOPED DURING 2017**

The steel mills at Lonato (Brescia), Calvisano (Brescia) and Riesa (Saxony) produce most direct and indirect environmental impact and this section of the report relates to them. Additional information on the subject can be obtained from plant EMAS declarations. All other plants producing less environmental impact are briefly outlined in the Supplementary Notes.



The environmental compatibility of Feralpi products is ensured by the typical characteristics of steel which, once it has completed its function, becomes scrap and supplies the production cycle.

The Group's three steel mills are supplied with ferrous iron delivered by road and rail, and have advanced equipment for shearing and milling scrap, and equipment that selects the scrap before loading into furnaces, maximising charge yield and enabling material not destined for furnaces to be recovered.

The technology used enables scrap to be melted down using an electric arc furnace, the melted steel to be treated in casting ladles and then undergo the continuous casting process to produce steel billets to feed rolling mill plants.

While the billets produced in Calvisano are mainly destined for downstream processes, the proximity of the continuous casting and rolling plants in Lonato and Riesa is a significant advantage in terms of energy savings, with a reduction in direct and indirect emissions.

#### The circular economy strategy adopted at Feralpi





#### 4.1. The Lonato del Garda district heating network

Based on the experience acquired by Feralpi Stahl in Riesa, where an energy recovery plant with steam generation commenced operation in 2014, Feralpi Siderurgica implemented a heat recovery plant at the steel mill in Lonato. The plant was implemented in partnership with specialist Group subsidiaries, and it interfaces directly with the cooling system for fumes in the melting furnace, which reach an approximate temperature of 1,000°C, making it possible to heat the hydraulic distribution circuit, which is roughly a kilometre long and can provide 4 MWt at an operating temperature of 90°C. Public buildings such as schools, sports facilities, libraries and administrative offices will be provided with heating and air conditioning thanks to the partnership with a company specialising in the design, implementation and management of district heating systems, and to the involvement of Lonato del Garda Council, which will be the future beneficiary of the network. In 2017 the recovery of thermal energy from steel mill fumes amounted to 1,268 MWh.



#### 4.2. The Green Stone Wall project

This is a project in line with the principles of a circular economy, and aims to produce concrete items by replacing gravel with slag produced from steel mills. The environmental advantage is twofold - reusing material produced from processing operations which would otherwise go to landfill, and reducing the removal of natural material from quarries in the area.

Green stone walls are prefabricated concrete walls in various sizes or Jersey barriers generally used for traffic. These are produced following three phases of the circular economy slag is sent to the recovery plant, pellets of varying diameter are produced using a crushing mill, and reinforced concrete products are purchased by building companies.

#### 4.3. The Dirty Box project

This project involves the collection of garments and cloths stained with oil and grease, which are sent for treatment in accordance with established environmental standards to ensure full and efficient compliance with waste treatment legislation.

The initiative concerned the Lonato site workshops, where six special containers with suitable notices were placed. This initiative is scheduled to be extended to the Nave premises in 2018.



### **5. ENVIRONMENTAL PERFORMANCE INDICATORS**

The Group's environmental impact analysis is focused on hot working operations. The three steel mills at Lonato, Riesa and Calvisano and the rolling mills at Lonato, Riesa and Nave have a significant direct and indirect impact, therefore they are subject to continuous monitoring and to the systematic protection of the work environment and plant areas. Illustrated below are the results achieved in relation to materials processed, consumption and energy savings, waste treated, the use of water and the treatment of liquid emissions, and the control of atmospheric emissions and sound emissions.

#### 5.1. Site input materials

Electricity

Efforts continued during the reporting period to improve charge efficiency through more accurate mechanical and magnetic scrap sorting processes, to enable better performance, reduction in consumption, and the recovery of non-ferrous elements that can be reused on the market.

#### 5.2. Consumption and energy savings

The Feralpi steel and metallurgy process is defined as energy intensive, as it requires a high consumption of energy from different sources, only some of which are renewable. Electricity is the main energy source at the steel mill, whereas natural gas is the main source for billet heating furnaces in rolling mills.

Given that the cost of energy represents the second highest cost item in the Feralpi production process, the company gives significant importance to energy policies, which are considered with a dual approach - contractual in terms of obtaining the best prices on the market, and technological in terms of optimising consumption per product unit.

In a heavily regulated energy market which is subject to frequent changes in legislation, the Feralpi strategy operates in three directions - the optimisation of tariffs reserved for energy intensive users, the signing of interruptibility agreements, and the participation of the Metal Interconnector Consortium.

Given that the electric arc furnace at the steel mill and the gas heating furnace at the rolling mill are technologies that have been used for some time, the company has developed an energy strategy that works on various fronts:

- the continual monitoring of the main energy intensive processes, to promptly identify and correct any deviations from efficiency in the production process;
- a gradual improvement in process efficiency, achieved with investments in hardware (replacing traditional burners with recuperative burners, the installation of inverter-controlled motors, the replacement of traditional lighting with LED lighting, the recovery of waste heat) and software (real-time management and control systems for rolling mill heating furnaces);
- ongoing communication and cooperation with suppliers, to evaluate investment in the most innovative technological solutions available on the market:
- the use of energy efficiency certification schemes (white certification).

Feralpi not only assesses energy-saving results in absolute terms, which relate to production volumes, but also in terms of specific indicators.

In 2017 a considerable increase in production led to an increase in energy consumption. However, Feralpi managed overall to further reduce specific energy consumption per product tonne.

During the financial year the plans to increase energy efficiency and update ISO 50001 certification continued in all companies based in Riesa, as part of the wider project aimed at obtaining integrated quality, environmental and energy certification. The ISO 50001 certification specifies the requirements for designing, starting, maintaining and improving an energy management system. The aim of this system is to enable organisations to pursue the continuous improvement of their energy performance using a systematic approach.



#### Total Group energy consumption by energy source (GJ)

Given that specific energy input remains absolutely negligible, Feralpi has for some time been putting efforts into directly producing energy from renewable sources. The Lonato site has a modern 625.14 kWp photovoltaic system and a district heating network, which meets the requirements of buildings on the Lonato premises and it is scheduled to serve external users. At the Riesa site, the operation of the heat recovery plant has continued, with the generation of electricity and steam used by external customers.

ENERGY INTENSITY IN GJ PER TONNE OF FINISHED PRODUCT				
Unit GJ/Ton	2016	2017		
Billets				
Lonato	2.33	2.32		
Calvisano	2.23	2.55		
Riesa	2.08	2.06		
Ribbed bar				
Lonato	0.93	0.90		
Riesa	1.02	0.98		
Coils				
Lonato	1.68	1.64		
Wire rod				
Riesa	1.02	0.98		
Section bars				
Nave	-	2.29		

The figures referred to December in each year.

The calculation was based on the following: for Lonato the total consumption of methane, electricity, charge carbon and carbon for slag foaming; for Calvisano total consumption of methane and electricity; for Riesa the total consumption of methane and electricity. The consumption of electricity and natural gas were considered at Nave.

### **5.3. Production and treatment of waste and by-products**

The typical waste resulting from steel production is heavy residue coming from scrap sorting operations, slag, fume abatement dust and mill scale.

Thanks to the consistent application of the principles of a circular economy Feralpi recovers and reuses material produced by the various processing phases. In particular, the fraction of non-ferrous metal from sorting scrap is recovered, slag is treated and reused as a by-product known as **Green Stone**, mill scale is recovered for reuse externally, and fume abatement dust is mostly recovered thanks to the possibility of reusing its high content of zinc oxide. With regard to the non-metallic component (fluff) obtained by breaking up vehicle carcasses, research projects have been ongoing for some time in Italy to use the residue, the latest of which is the Rimfoam project.

During 2017 the total volume of waste increased as a result of no slag absorption (Green Stone by-product) in the market.

# In 2017 the volume of hazardous waste decreased by **3.7%**



SUSTAINABILITY REPORT 2017

Feralpi carries out thorough checks on the destination of waste allocated for disposal or treatment. Consequently, the most reliable and competent suppliers are selected, and waste is tracked until it reaches its final destination. The company requires all suppliers to confirm waste is delivered to its destination, through the return of the relevant document. With regard to treatment carried out, Feralpi obtains additional documentation from the main suppliers on the percentage recovered or recycled, and the purpose of reuse. Acciaierie di Calvisano has an investment in the company DI.MA., which deals with the recovery of inert, non-hazardous waste, and provides certified products as secondary raw materials with CE 2+ marking. These materials replace raw materials excavated, with obvious benefits for the environment. The DI.MA. plant in Calvisano crushes and screens slag mainly coming from the Feralpi Group, to produce certified pellets for the construction industry.



Group waste production (thousands of t)



#### 5.4. Use of water and liquid emissions

The need to cool plants for steel production requires large amounts of water. At the Lonato and Calvisano sites water is obtained directly from the underlying groundwater. At the Riesa site it is obtained from the local council water supply and wells, however a meter is not available for the latter, therefore the total amount used cannot be measured. Due to the use of closed circuits that continually recycle, the use of water has no significant environmental impact at any Feralpi premises.

Feralpi is committed to maximising the recycling of water, which is reused once cooled after having used the heat for other purposes. An alternative use can be found at Acciaierie di Calvisano, where the heat from cooling circuits is sent to the subsidiary Agroittica S.p.A. for fish farming operations. Despite an increase in production and the expansion of the Group's operations due to recent takeovers, in 2017 the total amount of water taken from various sources used decreased slightly overall, and discharges dropped by 33.5%.

Rain water is collected on all waterproofed surfaces, sent for treatment and then used for industrial purposes. Surplus water captured from the internal site sewage system is sent to the purification plant and released into the body of surface water in the case of Lonato and Calvisano, and into the urban sewage network in the case of Riesa.



#### Use of water for industrial purposes in m<sup>3</sup>

#### 5.5. Atmospheric emissions

Containing emissions in the steel industry requires significant investment and ongoing research into the best solutions. The control of emissions in European countries is especially stringent and subject to national legislation, which requires permits to operate that are subject to increasingly stringent checks.

Feralpi's ongoing commitment in this regard has led to the concentration levels of various pollutants much lower than authorised limits, due to:

- using the most advanced technologies available and continually adapting them;
- continually monitoring the concentration of dust and extraction efficiency;
- ensuring plant efficiency with frequent maintenance operations;
- prompt intervention in the event of anomalies flagged in real time by monitoring systems.

The technological innovation underlying the results obtained at Feralpi plants in Italy and Germany is illustrated in detail in the related EMAS environmental declarations.

#### 5.6. Emissions of greenhouse gases

During the financial year the considerable increase in volumes generated more greenhouse gas emissions.

The trend in Scope 1 emissions remained stable however, due to the company's ongoing commitment to containing the effect of the production process on the environment.

Feralpi is part of the Emission Trading System (ETS), an EU tool used to check greenhouse gas emissions through the monetary value of the emissions themselves and trading them with other operators.

### Total direct and indirect greenhouse gases emissions (tCO<sub>2</sub>)



Note: Scope 1, direct emissions; Scope 2, indirect energy emissions; Scope 3, other indirect emissions (the Scope 3 emissions included in the Feralpi calculation are those resulting from personnel commuting, the incoming transport of scrap and the outgoing transport of finished products).

#### CO<sub>2</sub> emissions (Scope 1) by tonne of product

Unit tCO <sub>2</sub> /t finished product	2016	2017
Lonato	0.09	0.09
Calvisano	0.05	0.05
Nave	-	0.09
Riesa	0.06	0.09



#### 5.7. Acoustic emissions

Significant vibrations transpired on starting up the machine installed in Calvisano to treat scrap and separate unwanted trace elements, requiring an extensive investigation.

The problem was presumed to be due to machine characteristics, i.e. the number and position of the vibrating sieve volumes, and the number of magnetic drum revolutions.

Two methods were used to tackle the problem. The first involved the machine manufacturer and the second, Brescia University's Department of Mechanical & Industrial Engineering - Applied Acoustics Laboratory. During these investigations, machine operation was suspended.

Changing the machine operating parameters and extending the walls of the scrap building alleviated the initial problem. Additional investigations are in progress to measure the input and emissions produced by operating the machine.

With regard to the Lonato site, the building covering the scrap sorting area was upgraded with the installation of soundproofing panels.



# **APPENDIX** TO GRI STANDARDS

# ECONOMIC RESPONSIBILITY

#### Group\* costs for personnel social security and insurance contributions

	2016	2017
Compulsory public social security	10,673,247	11,283,723
Compulsory private social security	163,557	151,223
Voluntary private social security	58,826	35,065
Compulsory public insurance	1,234,776	1,181,021
Voluntary private insurance	263,710	284,977
Public welfare	-	90,037
Welfare and pension plans	12,383,532	13,026,045

\* Italy. Germany and Algeria.

An exchange rate of 2016 1€=120DA; 2017 1€=130DA was adopted for personnel in Algeria.

#### Ratio between standard salary and local minimum wage

ITALY		2016	2017
	Salary level applied (average salary)	26,538	27,581
Men	Minimum salary level	21,070	21,158
	Percentage ratio between standard salary by gender and local minimum wage	125.95	130.36
	Salary level applied (average salary)	26,438	27,581
Women	Minimum salary level	21,137	21,158
	Percentage ratio between standard salary by gender and local minimum wage	125.08	130.36
GERMAN	Y	2016	2017
	Salary level applied (average salary)	19,212	19,926
Men	Minimum salary level	17,748	18,458
	Percentage ratio between standard salary by gender and local minimum wage	108.25	107.95
	Salary level applied (average salary)	19,212	19,926
Women	Minimum salary level	17,748	18,458
	Percentage ratio between standard salary by gender and local minimum wage	108.25	107.95
CZECH R	EPUBLIC	2016	2017
	Salary level applied (average salary)	7,233	8,275
Men	Minimum salary level	4,397	5,168
	Percentage ratio between standard salary by gender and local minimum wage	164.51	160.12
	Salary level applied (average salary)	7,994	8,457
Women	Minimum salary level	4,397	5,168
	Percentage ratio between standard salary by gender and local minimum wage	181.81	163.64
ALGERIA		2016	2017
	Salary level applied (average salary)	2,000	1,846
Men	Minimum salary level	1,800	1,662
	Percentage ratio between standard salary by gender and local minimum wage	111.11	111.11
	Salary level applied (average salary)	2,000	1,846
Women	Minimum salary level	1,800	1,662

The average weighted value of actual salary for first role is compared with the minimum wage stipulated in the collective contract. For Italy the figures relate to Feralpi Holding. The figure is not calculated for Hungary as there is no contractual or legal minimum wage. Algeria: exchange rate applied 120 DA =  $1 \in$  for 2016, 130 DA =  $1 \in$  for 2017.

#### Percentage of senior managers recruited in the local community

At a Group level, on 31.12.2017, managers recruited from the local community represented 96% of the amount of total managers.

### Members of the Feralpi Holding's Board of Directors by gender and age group

AGE	MALE	FEMALE	TOTAL
< 30	0	0	0
Between 30 and 50	2	0	2
> 50	4	2	6
Total	6	2	8

# SOCIAL RESPONSIBILITY

Additional personnel information

#### Feralpi Group personnel on 31.12.2017

PERSONNEL	MEN	WOMEN	TOTAL
Permanent	1,275	85	1,360
Temporary	33	5	38
Total employees	1,308	90	1,398
Full time	1,298	72	1,370
Part time	10	18	28
Total employees	1,308	90	1,398
Apprentices	40	1	41
Total personnel employed	1,348	91	1,439
Seasonal staff and other types of contracts	66	5	71
Interns	5	1	6
Contractor personnel	2,479	34	2,513
Total personnel	3,898	131	4,029
Total personnel employed:	1,348	91	1,439
- Italy	673	35	708
- Germany	609	45	654
- Czech Rep,	46	7	53
- Hungary	10	2	12
- Algeria	10	2	12

#### Breakdown of Feralpi Group personnel by gender and age group

GENDER	2	2016		017
Men	1,312	93.65%	1,348	93.68%
Women	89	6.35%	91	6.32%

AGE		2016		2017
< 30	202	14.42%	229	15.91%
30-50	674	48.11%	674	46.84%
> 50	525	37.47%	536	37.25%

#### Movement of personnel by geographical area and gender

PERSONNEL RECRUITMENT RATE <sup>1</sup> (%)		2016	2017
	Men	11	13.2
Group	Women	10	15.4
	Total	10	13.3
	Men	7	8.3
Italy	Women	9	11.4
	Total	7	8.5
	Men	13	17.1
Germany	Women	11	22.2
	Total	13	17.4
PERSONNEL TURNOVER RATE <sup>2</sup> (%)		2016	2017
	Men	8	10.2
Group	Women	10	8.8
	Total	9	10.1
	Men	5	8.3
Italy	Women	9	2.9
	Total	5	8.1
	Men	11	11.2
Germany	Women	11	15.6
	Total	11	11.5

<sup>1</sup> Recruitment rate (A) is calculated with the following formula: A=new hires/total workforce\*100.
<sup>2</sup> Turnover rate (T) is calculated with the following formula: T=leavers/total workforce\*100.

#### Movement of personnel by geographical area and age group

PERSONNEL RECRUITMENT RATE <sup>1</sup> (%)		2016	2017
	< 30	27	27.9
Crown	30-50	10	14.5
Group	> 50	4	5.6
	Total	10	13.3
	< 30	11	12.0
	30-50	9	10.7
Italy	> 50	3	5.0
	Total	7	8.5
	< 30	31	40.2
Cormony	30-50	11	17.0
Germany	> 50	7	5.6
	Total	13	17.4
PERSONNEL TURNOVER RATE <sup>2</sup> (%)		2016	2017
	< 30	19	16.6
Crown	30-50	5	7.4
Group	> 50	9	10.8
	Total	9	10.1
	< 30	6	7.0
Italy	30-50	2	5.5
ltary	> 50	7	11.0
	Total	5	8.1
	< 30	21	23.1
Germany	30-50	8	8.0
Ochinaliy	> 50	10	10.3
	Total	11	11.5

<sup>1</sup> Recruitment rate (A) is calculated with the following formula: A=new hires/total workforce\*100.

<sup>2</sup> Turnover rate (T) is calculated with the following formula: T=leavers/total workforce\*100.

#### Employees with high incidence or risk of work-related diseases

In 2017 INAIL (National Insurance Institute for Industrial Accidents) accepted the request from an employee to have hearing impairment recognised as a work-related condition. This impairment was first diagnosed in 1999 and the employee submitted a request in 1999 and 2012, which INAIL rejected on both occasions.

#### Total number of deaths

There were no work-related deaths on Group premises during the financial year reported.

#### Severity rate

		2016	2017
	Men	805.42	924.98
Group	Women	0.00	0.00
	Total	756.25	867.99
	Men	894.94	1,096.96
Italy	Women	0.00	0.00
	Total	853.57	1,043.96
	Men	559.38	625.31
Germany	Women	0.00	0.00
	Total	522.26	584.24

Severity rate = (number of absent days /number of hours worked)\*1.000.000

Absent days are calendar days. Commuting accidents and those requiring less than 3 days of absence are excluded.

The 2016 figures differ from the information in the previous report following changes to calculation methods.

#### Hours of annual training by gender and role

		2016	2017
	Men	15	16
Group	Women	20	17
	Total	16	16
Italy	Men	14	14
	Women	15	9
	Total	14	14
Germany	Men	18	20
	Women	27	27
	Total	19	21
	Manual workers	11	11
Croup	Middle managers and office personnel	27	31
Group	Managers	19	21
	Total employees	16	16
	Manual workers	10	10
ltak	Middle managers and office personnel	23	22
Italy	Managers	27	18
	Total employees	14	14
	Manual workers	13	13
C	Middle managers and office personnel	36	45
Germany	Managers	7	38
	Total employees	19	21

#### Percentage of employees receiving performance appraisals, by gender

		2016	2017
	Men	79.36	84.57
Group	Women	44.32	58.24
	Total	77.16	82.90
	Men	73.40	83.51
Italy	Women	15.63	45.71
	Total	70.78	81.64
	Men	94.65	94.75
Germany	Women	75.56	77.78
	Total	93.27	93.58

Notes: At Feralpi Holding managerial staff have regular performance appraisals. A regular performance appraisal plan is in place for Feralpi Siderurgica and Acciaierie di Calvisano employees. Employees can view their appraisal file produced by their manager.

#### Percentage of employees receiving performance appraisals, by role

		2016	2017
	Manual workers	82.47	88.55
Croup	Middle managers and office personnel	62.57	67.38
Group	Managers	79.17	80.77
	Total	77.45	82.90
	Manual workers	74.75	87.30
	Middle managers and office personnel	58.06	66.83
Italy	Managers	93.75	94.44
	Total	70.78	81.64
	Manual workers	99.79	99.80
Germany	Middle managers and office personnel	73.47	74.51
	Managers	66.67	66.67
	Total	93.27	93.58

#### Comparison between average male and female remuneration

%		2016	2017
	Manual workers	-	-
Feralpi Holding	Middle managers and office personnel	74.80	80.46
	Managers	-	-
	Manual workers	89.10	84.39
Nuova Defim	Middle managers and office personnel	55.37	56.06
	Managers	-	-
	Manual workers	-	-
ESF	Middle managers and office personnel	61.67	64.04
	Managers	-	-

The table shows only branches where female personnel are present or where the breakdown by role concerns at least 6 members of female personnel. The calculation method used for ESF differs to the method used for other companies in Italy, and the ESF figure for 2016 differs from the information in the previous report because a different calculation method was used.

#### **Corruption prevention activities**

Under Italian legislation, the implementation of regulation 231/2001 and subsequent amendments requires corruption risk to be analysed for all Group companies, and related compulsory information provided for all personnel and suppliers.

The company is not aware of any episodes of corruption and no cases regarding corruption have been reported. No legal proceedings or penalties are in progress against Feralpi or its employees relating to accusations of corruption.

# ENVIRONMENTAL RESPONSIBILITY

#### Information on the characteristics and location of premises subject to environmental analysis and on the potential negative effects on local communities

#### 1. Lonato del Garda site

The subsidiary Feralpi Siderurgica S.p.A. is situated in an industrial estate 3 kilometres from the built-up area. The site has an area of 52.1 hectares and borders the Milan-Venice railway line to the North, which in that section runs along a raised embankment, and the A4 motorway to the South. Not only does this important infrastructure facilitate site accessibility, it also distances it from other buildings, and has its own specific environmental impact separate from Feralpi activities. The plants managed at the site include a scrap cutting, crushing and sorting plant, a steel mill with electric arc furnace, a ladle refining furnace, continuous casting machine, and rolling mills for bars, coils and wire rod.

The movement of materials creates traffic with HGVs on provincial road no. 11, estimated at over 300 vehicles a day approximately 300 days a year. Small amounts of scrap and products are collected and dispatched by rail via links with Lonato train station.

With regard to effects on nearby water ecosystems, the bodies of water considered are Lake Garda and the River Chiese. Lake Garda is situated to the North upstream of the site at a distance of roughly 8 km as the crow flies, but it's separated from it by the high ground that is home to the castle and old town of Lonato. The stretch of the River Chiese involved is the responsibility of Consorzio di Bonifica Medio Chiese and it flows to the west of the site at a minimum distance of around 4.5 km. Considering the materials processed and the technologies used, any effects on aquatic ecosystems can be ruled out. Waste water is discharged into a body of surface water after purification and used for irrigation purposes.

There were no incidents regarding significant spillages of pollutants or hazardous substances in the years considered in this report.

#### 2. The Calvisano site

The plants managed by the subsidiary Acciaierie di Calvisano S.p.A. are situated in Viadana, in the district of Calvisano (BS) and cover a total area of 16.6 hectares. The plants consist of an electric arc steel mill and a continuous casting machine.

A particular feature of this plant is the use of a heat exchanger between the steel mill cooling circuit and the heating system for the hatching facility at the nearby fish farm belonging to Agroittica Lombarda S.p.A., a company connected to the Feralpi Group. This technological solution enables considerable energy and financial savings on the costs to manage the plant, which receives heat to the benefit of the surrounding environment.

The plant is located quite close to a built-up area with only the railway line separating it from the hamlet of Viadana Bresciana. The plant borders the aforementioned Agroittica Lombarda S.p.A. plant to the south, while theother sides border farmland and an industrial estate.

With regard to effects on nearby water ecosystems, the body of water potentially affected is the River Chiese, which is the responsibility of the Consorzio di Bonifica Medio Chiese, and flows to the east of the site at a minimum distance of around 2.2 km. Given the production technology adopted, which uses closed-circuit cooling systems with reduced makeup operations, the company believes that significant effects on aquatic ecosystems can be excluded.

There were no incidents regarding significant spillages of pollutants or hazardous substances in the years considered in this report, and the company did not receive any fines or penalties for non-compliance with environmental legislation.

#### 3. The Riesa site

The ESF Elbe-Stahlwerke Feralpi GmbH in Riesa covers a total area of 55.6 hectares, and is situated in the industrial estate adjacent to the city and known for its well-established steelmaking tradition, which ensures an efficient supply chain by road, rail and river. North of the plant there is a link to Elba river port, while the railway station borders the southern end of the site. The steel mill is flanked by a rolling mill and a plant for producing drawn wire and welded wire mesh.

There were no incidents regarding significant spillages of pollutants or hazardous substances in the years considered in this report. The site uses water drawn from the aqueduct and the cooling plant is a closed-circuit model. Waste water undergoes purification and it's regularly analysed to ensure legal compliance. The company believes it has no significant impact on protected water basins, biodiversity or water ecosystems. During the period reported the company did not receive any fines or penalties for non-compliance with environmental legislation.

#### 4. The Ecoeternit-controlled landfill

Ecoeternit is a landfill site authorised to operate in Lombardy and it is designed to dispose of waste containing asbestos. It is situated in the hamlet of Vighizzolo roughly 6 km from Montichiari (Brescia), near the districts of Castenedolo and Calcinato. The site covers an area of approximately 6.8 hectares and can be accessed without vehicles containing waste passing through the nearby residential area.

The landfill site is the only facility in Lombardy able to meet the growing need to dispose of material containing asbestos still present in the region. Ecoeternit was established to meet the requirements of the Regional Asbestos Plan, which prioritises the removal of asbestos in Lombardy within 10 years of the plan coming into force, and the resulting requirement for disposal facilities to receive and make cleared materials safe.

The landfill site is run by staff with specific expertise, who complete regular training and refresher courses, and closely monitor all delivery, handling and landfill operations.

The project involves waterproofing systems and measures more precautionary than those stipulated in legislation.

The total volume of authorised batches is 867,000 m<sup>3</sup>, approximately 80% of which is waste containing asbestos and plastic roofing materials, and the remaining 20% is non-hazardous waste (the consignment of which has not yet commenced).

The landfill site is scheduled to receive waste until 2022, following which a waterproof cover will be placed and completely covered with vegetation. Ecoeternit will manage the site until 2052, i.e. for another 30 years, until the physiological waste inertisation and mineralisation processes are complete.

The waste consists of asbestos material and sheets that arrive at the facility already packaged with resistant plastic covers and the relevant symbols required by legislation. The waste is unloaded and put away using mechanical lifting operations to ensure the integrity of the waste safety packaging. The waste is subject to SISTRI tracking standards.

The facility makes a regular payment to Montichiari Council and the Brescia Provincial Government in proportion to the waste volumes managed. Ecoeternit has also signed up to the ATE43 agreement along with otherlandfill sites in the district, on the basis of which they agree to bear infrastructure costs required for optimum operation and inclusion in the environment (creation of roads, trees and full monitoring of the landfill area).

In 2017 the landfill facility disposed of approximately 80,000 tonnes of waste containing asbestos (EWC code 17.06.05). The company carries out all checks required by legislation, which includes monitoring to ensure hygienic working conditions for personnel, and environmental monitoring (asbestos fibres dispersed in the air), with air samples taken weekly in positions agreed with the authorities and tested in the laboratory. All monitoring confirmed that operations were carried out properly and in compliance with environmental requirements, the tests show there were no changes to levels of asbestos fibres compared with the situation before disposal operations commenced. The Ecoeternit facility has obtained ISO 14001 certification for its environmental management standards, and OHSAS 18001 certification for the system to manage health and safety in the workplace.

2017 saw the conclusion of a matter that commenced in 2012 regarding accusations made by the judicial authorities on the management of the Ecoeternit facility, with the investigated company managers fully acquitted following a final ruling.

#### 5. The Nave site

The Nave site (BS) produces rolled products (angular sections, U-sections, T-sections and special profiles, mostly for highlyspecialist industries such as the lift and rail sectors) obtained by hot rolling billets from the Group's steel mills.

The site covers an area of 43,000 m<sup>2</sup>, with 15,500 m<sup>2</sup> under cover and 14,350 m<sup>2</sup> outdoors with waterproofing as required. The covered area contains a billet heating furnace in line with a rolling mill with 15 rolling stands, in addition to shearing machines, a cooling plate, straightening machine, binders and packaging and weighing equipment. The site borders a yard in front of provincial road no. 237 to the north, a residential area to the east, companyowned farmland to the south, and a small-business estate to the west. The environmental impact of the site is typical of hot rolling processes using natural gas to heat billets. After taking over the site in 2016 and resuming operations, the year reported was characterised by significant equipment upgrade operations to comply with safety and energy efficiency regulations, which are still in progress.

There were no incidents regarding significant spillages of pollutants or hazardous substances in the years considered in this report. During the financial year ARPA (Italian environment agency) carried out checks on the presence of an emission point not identified with the relevant initials and not described in the technical documentation provided by the previous owner (the plant, which was connected to an extraction system with a mobile outlet for a work bench, had never commenced operation). ARPA also highlighted the failure to communicate the resumption of production activities to the relevant authorities after the long stoppage following the communication from the previous owner to suspend operations, and the subsequent takeover by Feralpi with the transfer of the permit. The investigations resulted in an administrative fine of  $\notin$  3,054.40.

#### 6. Sites with lower environmental impact

The Feralpi Group has smaller sites with a lower environmental impact that carry out steel cold-drawing processes. The absence of hot-drawing operations and the contained dimensions of these production sites mean their environmental impact is negligible for the purposes of this report, demonstrated by the fact that annual electricity consumption at these sites is less than 1% of consumption for each of the three steel mills. Consequently, the analytical reporting of this sustainability report only relates to the three steel mills and adjacent rolling mills, where the most significant production operations are implemented.

In Italy the subsidiary Nuova Defim has two industrial sites situated at approximately 2 km from each other in Alzate Brianza and Anzano al Parco in the province of Como. These sites specialise in steel cold-drawing operations to produce electrowelded wire mesh, fencing and grids for the building trade. In this case, some processing phases for various products, such as painting, are outsourced to external suppliers and may have an impact on the environment. Other subsidiaries specialising in upstream operations or in the sale of Feralpi products are situated in the following locations:

- Presider, based in Borgaro Torinese (TO). Another two sites in Italy, in Maclodio (BS) and Pomezia (Rome), are part of Presider.
- MPL is based in Rivoli (TO), which operates in the structural steelwork industry.
- The company Feralpi Hungaria Kft is situated in Csepel, Budapest in Hungary, and mainly deals in drawn products and welded wire mesh for the building trade.
- The company Feralpi Praha Sro operates in the Czech Republic, and is based in Kralupy near Prague, also dealing in drawn products and welded wire mesh for the building trade.
- In France, the Paris-based Presider Armatures operates through the subsidiary Presider, and specialises in shaping reinforcements for reinforced concrete. The site covers an area of 37,000 m<sup>2</sup>, which includes a covered area of 8,000 m<sup>2</sup>.

2016			2017		
Material	Unit	Used	% Recycled	Used	% Recycled
Scrap	t	2,654,111	99.4	2,713,552	100
Lonato		1,200,218	98.67	1,199,561	100
Calvisano		424,057	100	460,222	100
Riesa		1,029,836	100	1,053,769	100
Additives <sup>1</sup>	t	29,813	0	27,770	0
Lonato		15,971	0	13,550	0
Calvisano		3,335	0	3,782	0
Riesa		10,506	0	10,438	0
Lime	t	98,833	1.8	105,812	0.1
Lonato <sup>2</sup>		45,154	3.93	52,865	0.2
Calvisano		21,847	0	19,941	0
Riesa		31,832	0	33,006	0
Iron alloys	t	33,659	0	35,619	0
Lonato		15,655	0	15,633	0
Calvisano		5,051	0	5,368	0
Riesa		12,952	0	14,618	0
Refractory materials	t	19,427	0	18,489	0
Lonato		7,775	0	6,474	0
Calvisano		5,142	0	5,025	0
Riesa		6,509	0	6,990	0
Oxygen	Sm <sup>3</sup>	71,078,819	0	69,118,575	0
Lonato		35,809,976	0	33,319,472	0
Calvisano		9,036,038	0	9,414,382	0
Riesa		26,232,805	0	26,384,721	0
Inert gases	Sm <sup>3</sup>	2,484,139	0	2,051,325	0
Lonato		605,145	0	640,967	0
Calvisano		883,998	0	653,502	0
Riesa		994,996	0	756,856	0

#### Use of materials and % recycled

<sup>1</sup> The additives used are charge carbons, and bulking, desulphurising, deoxidising and recarborising agents.

<sup>2</sup> Includes 112.32 tonnes of lime recovered internally.

#### Use of energy by source

	Unit	2016	2017
Electricity	MWh	1,443,830	1,473,523
Lonato		644,772	646,078
Calvisano		243,917	258,020
Nave		-	6,591
Riesa		555,141	562,834
Natural Gas	Sm <sup>3</sup> - Standard mc	62,440,761	63,532,093
Lonato		36,932,145	36,536,960
Calvisano		2,872,590	2,757,106
Nave		-	2,976,654
Riesa		22,636,026	21,261,373
Diesel <sup>1</sup>	Litres	1,312,517	1,380,066
Lonato		312,500	335,729
Calvisano		24,000	36,000
Nave		-	146
Riesa		976,017	1,008,191
Charge carbon	Tonnes	-	13,242
Lonato		-	8,040
Calvisano		-	896
Nave		-	0
Riesa		-	4,306
Photovoltaic	MWh	541	509
Lonato		541	509
Calvisano		0	0
Nave		-	0
Riesa		0	0
Waste foam	Tonnes	-	9,046
Lonato		-	1,303
Calvisano		-	2,357
Nave		-	0
Riesa		-	5,386

<sup>1</sup> The figure does not include diesel consumption for Feralpi Logistik which amounts to 778,795 litres.

#### Use of energy by source, expressed in GJ

	2016	2017
Electricity	5,197,790	5,304,683
Lonato	2,321,179	2,325,882
Calvisano	878,103	928,872
Nave	-	23,728
Riesa	1,998,509	2,026,201
Natural Gas	2,467,373	2,499,645
Lonato	1,437,481	1,416,647
Calvisano	111,680	106,881
Nave	-	115,337
Riesa	918,212	860,781
Diesel <sup>1</sup>	46,553	49,325
Lonato	11,255	12,092
Calvisano	864	1,297
Nave	-	5
Riesa <sup>2</sup>	34,434	35,931
Charge carbon <sup>3</sup>	-	381,969
Lonato	-	231,909
Calvisano	-	25,845
Nave	-	0
Riesa	-	124,215
Photovoltaic	1,948	1,832
Lonato	1,948	1,832
Calvisano	0	0
Nave	-	0
Riesa	0	0
Waste foam <sup>3</sup>	-	260,927
Lonato	-	37,583
Calvisano	-	67,989
Nave	-	-
Riesa	-	155,355
Total	7,713,664	8,498,382

<sup>1</sup> Italy: specific weight 0.84 tonnes/m<sup>3</sup> and ETS coefficient 42.877 GJ/t. Riesa: conversion factors GEMIS-Datebank, 42.63 MJ/kg and 0.836 kg/l.

<sup>2</sup> The figure does not include diesel consumption for Feralpi Logistik which amounts to 27,755 GJ.
<sup>3</sup> PCI of 28.844 GJ/tonnes used (table of standard ETS parameters).

#### Indirect energy consumption, expressed in GJ

	2016	2017
Feralpi Siderurgica (Lonato)		
Employee commuting	4,900	5,253
Scrap transport	103,172	108,532
Upstream	108,072	113,785
Transport & distribution	102,823	110,734
Downstream	102,823	110,734
Acciaierie di Calvisano		
Employee commuting	2,397	1,980
Scrap transport	35,427	30,582
Upstream	37,824	32,562
Transport & distribution	7,728	8,937
Downstream	7,728	8,937
Fer-Par (Nave)		
Employee commuting	-	874
Scrap transport	-	0
Upstream	-	874
Transport & distribution	-	7,160
Downstream	-	7,160
Feralpi Stahl (Riesa)		
Employee commuting	7,257	6,907
Scrap transport	56,926	64,077
Upstream	64,183	70,984
Transport & distribution	94,943	114,886.13
Downstream	94,943	114,886.13

The transport of incoming scrap and outgoing products refers to road transport only, and is estimated at 28 tonnes for each load. With regard to employee commuting, one round trip a day per person was considered; during 2017 the figure was 232 days for Italy and 230 days for Germany. Volumes of water recycled and % reused in  $m^3/h$ 

	2016	2017
Total hourly circuit flow rate (Qt)		
Lonato	10,000	10,000
Calvisano	3,500	4,090
Nave	-	700
Riesa	6,834	6,636
Hourly makeup water (Qp)		
Lonato	263	234
Calvisano	40	147
Nave	-	49
Riesa	67	69
Total hourly volume of recycled and reused water (Qr)		
Lonato	9,737	9,766
Calvisano	3,460	3,943
Nave	-	651
Riesa	6,767	6,567
% of water recycled/reused		
Lonato	97	98
Calvisano	99	96
Nave	-	93
Riesa	99	99

The total circuit flow rate expressed in cubic metres/hour results from a calculation based on contributions measured at different points in the cooling circuits for water distributed to the plants. The value of makeup flow rate in cubic metres/hour is obtained from the ratio of total taken from wells and number of hours of operation for the main cooling circuits. Percentage of water recycled/reused=Qr/Qt, dove Qr=Qt-Qp

#### Total direct greenhouse gas emissions (GHG) (Scope 1: tCO<sub>2</sub>eq)

	2016	2017
EU ETS	205,877	208,438
Lonato	109,881	104,792
Calvisano	18,403	20,326
Nave	-	5,767
Riesa	77,593	77,553
Refrigerant gases	111	272
Lonato	94	231
Calvisano	17	19
Nave	-	22
Riesa	0	0

Scope 1 emissions of EDF (424.39 tCO<sub>2</sub>) and Feralpi Logistik (2,042.17 tCO<sub>2</sub>) were not included for Riesa.

#### Indirect greenhouse gas emissions (GHG) resulting from electricity use (Scope 2: tCO2eq)

	2016	2017
Indirect emissions resulting from electricity use	602,162	622,925
Lonato	231,473	242,279
Calvisano	87,566	96,757
Nave	-	2,472
Riesa	283,122	281,417
Indirect emissions resulting from steam	-	0
Lonato	-	0
Calvisano	-	0
Nave	-	0
Riesa	-	0

To calculate indirect  $CO_2$  emissions resulting from electricity use at Italian sites (Lonato, Calvisano and Nave) a national Italian electricity emission factor was used corresponding to 359 gCO<sub>2</sub>/kWh for 2016 and 375 gCO<sub>2</sub>/kWh for 2017; for Germany a national German factor was applied equivalent to 510 gCO<sub>2</sub>/kWh and 500 gCO<sub>2</sub>/kWh, for 2016 and 2017 respectively. An emissions factor of zero was used for photovoltaic energy.

#### Other indirect greenhouse gas emissions (GHG) (Scope 3)

	2016	2017
Incoming scrap transport - tCO2	14,159	14,978
Lonato	7,592	7,986
Calvisano	2,378	2,250
Nave	-	0
Riesa	4,189	4,742
Outgoing product transport - tCO <sub>2</sub>	15,074	17,835
Lonato	7,566	8,148
Calvisano	522	658
Nave	-	527
Riesa	6,986	8,502
Employee commuting - tCO <sub>2</sub>	998	1,057
Lonato	344	371
Calvisano	118	140
Nave	-	70
Riesa	536	476

The transport of incoming scrap and outgoing products refers to road transport only, and it is estimated at 28 tonnes for each load. With regard to employee commuting, one round trip a day per person was considered; during 2017 the figure was 232 days for Italy and 230 days for Germany. The following parameters were used to calculate emissions: average diesel consumption of 0.202 JG of diesel/km (Source INEMAR ARPA - relevant Lombardy organisations - for the year 2014), emission factor 3.155tCO<sub>2</sub>/t diesel (Source: standard ETS factors for the year 2017).

#### Intensity of greenhouse gas emissions

tCO <sub>2</sub> /t finished product	2016	2017
Direct emissions (Scope 1)		
Lonato	0.09	0.09
Calvisano	0.05	0.05
Nave	-	0.09
Riesa*	0.09	0.09
Indirect emissions resulting from electricity use		
Lonato	0.19	0.21
Calvisano	0.24	0.24
Nave	-	0.04
Riesa	0.21	0.32

The intensity of emissions is calculated on the basis of Scope 1 and Scope 2 emissions as the numerator and on the basis of the finished product (i.e. everything that leaves rolling mills) as the denominator.

\*The figure for 2016 differs from the information in the previous report due to a change to the calculation method.

#### Emissions into the atmosphere<sup>1</sup>

	Unit	2016	2017
Dust <sup>2</sup>	t		
Lonato		2.55	3.57
Calvisano		1.62	1.45
Nave		-	0.0
Riesa		1.98	2.59
PM10	t		
Lonato		2.07	0.58
Calvisano		1.57	1.24
Riesa		1.63	2.19
NO <sub>x<sup>2</sup></sub>	t		
Lonato		92.07	154.1
Calvisano		29.64	55.08
Nave		-	5.23
Riesa		89.61	89.86
C0 <sup>2</sup>	t		
Lonato		1,156.75	1,303.15
Calvisano		153.12	463.07
Nave		-	0.29
Riesa		1,070.75	1,092.70
Dioxins and furans	gl-TEQ		
Lonato		0.05	0.07
Calvisano		0.05	0.05
Riesa		0.09	0.10
IPA	kg		
Lonato		0.07	0.06
Calvisano		0.09	0.12
Riesa			
СОТ	t		
Lonato		27.23	23.74
Calvisano		6.06	8.4
Riesa			
Pb	kg		
Lonato		69.29	34.42
Calvisano		24.02	9.53
Riesa <sup>3</sup>		195.26	11.52
Zn	kg		
Lonato	3	634.50	561.07
Calvisano		516.23	224.42
		0.0.20	

(segue alla pagina sucessiva)

#### Emissions into the atmosphere<sup>1</sup>

	Unità	2016	2017
Нд	kg		
Lonato		108.10	52.88
Calvisano		2.94	3.25
Riesa		11.80	11.89
SO <sub>X</sub> <sup>2</sup>	t		
Lonato		12.11	25.56
Calvisano		40.11	49.77
Nave		-	0.03
Riesa		55.01	56.02
Pcb <sup>₄</sup>	kg		
Lonato		0.05	0.04
Calvisano		0.01	0.11
Riesa		0.17	0.17

<sup>1</sup> The figures for Nave concern substances produced by rolling operations only.
<sup>2</sup> Figure for the site.
<sup>3</sup> Emissions in 2016 were high compared with 2017 as fugitive emissions are included.

<sup>4</sup> Dioxin-like without toxicity factor.

#### Total water discharged by destination in m<sup>3</sup>

	2016	2017
Discharged into sewers	15,260	13,264
Lonato	0	0
Calvisano	0	0
Riesa	15,260	13,264
Discharged into surface water	961,419	636,478
Lonato	953,057	631,851
Calvisano	8,362	4,627
Riesa	0	0
Total water discharged	976,679	649,742

#### Analysis of water discharged

		2016	2017
Lonato			
COD	mg/l	17.25	9.00
Suspended solids	mg/l	2.50	6.83
Total hydrocarbons	mg/l	0.39	0.25
Zinc (Zn)	mg/l	0.04	0.07
Iron (Fe)	mg/l	0.20	0.08
Nickel (Ni)	mg/l	0.02	0.01
Copper (Cu)	mg/l	0.05	0.03
Total surfactants	mg/l	0.15	0.10
Lead (Pb)	mg/l	0.05	0.01
Phosphorous (P)	mg/l	0.43	0.40
Electrical conductivity	μS/cm	2,660	2,477
Calvisano			
Suspended solids	mg/l	5.00	6.00
Iron (Fe)	mg/l	0.10	0.12
Lead (Pb)	mg/l	0.05	0.03
Phosphorous (P)	mg/l	0.20	0.10
Electrical conductivity	μS/cm	521	649
Nave			
COD	mg/l	-	12.50
Suspended solids	mg/l	-	2.50
Total hydrocarbons	mg/l	-	0.25
Zinc (Zn)	mg/l	-	0.03
Iron (Fe)	mg/l	-	0.04
Copper (Cu)	mg/l	-	0.01
Lead (Pb)	mg/l	-	0.01
Phosphorous (P)	mg/l	-	0.25
Electrical conductivity	μS/cm	-	588
Riesa			
COD	mg/l	56.04	56.04
Suspended solids	ml/l	1.05	0.83
Total hydrocarbons	mg/l	0.58	0.17
Zinc (Zn)	mg/l	0.25	2.67
Copper (Cu)	mg/l	0.04	0.17
Lead (Pb)	mg/l	0.02	0.40
Phosphorous (P)	mg/l	0.47	0.59
Electrical conductivity	μS/cm	1,480	1,536

#### Total weight of waste by type (t)

	2016	2017
Fume abatement dust	45,541	44,691
Lonato	23,172	20,805
Calvisano	6,341	8,353
Riesa	16,028	15,534
Heavy crushed waste	2,057	2,415
Lonato	48	0
Calvisano	0	0
Riesa	2,008	2,415
Mill scale	30,337	34,951
Lonato	16,188	18,731
Calvisano	838	906
Nave	-	854
Riesa	13,311	14,461
Black slag	187,645	254,401
Lonato <sup>1</sup>	48,197	101,577
Calvisano	45,133	52,533
Riesa	94,314	100,292
White slag	73,563	92,899
Lonato	40,637	53,510
Calvisano	17,938	23,573
Riesa	14,988	15,816
Light crushed waste (fluff)	1,833	2,603
Lonato	244	0
Calvisano	0	0
Riesa	1,589	2,603
Other waste	69,673	77,810
Lonato	32,575	33,909
Calvisano	2,634	5,820
Nave		3,783
Riesa	34,464	34,298
Total waste	410,648	509,773

<sup>1</sup> In 2017 there was an increase in black slag classed as waste (rather than by-product) due to a lack of operational sites authorised to use it as a by-product.

Increases in general waste are mainly due to increases in production volumes.

#### Total weight of waste by type and destination (t)

		2016	2017			
Waste type:	Recovered	Disposed of	Total	Recovered	Disposed of	Total
Non-hazardous						
Lonato	91,151	41,497	132,648	138,712	64,394	203,106
Calvisano	48,080	17,938	66,018	59,162	23,573	82,735
Nave	-	-	-	4,517	82	4,599
Riesa	159,237	1,016	160,253	154,956	14,563	169,519
Total	298,468	60,451	358,919	357,347	102,612	459,959
Hazardous						
Lonato	17,913	10,500	28,413	16,937	8,489	25,426
Calvisano	6,286	582	6,868	6,850	1,600	8,450
Nave	-	-	-	4	33	37
Riesa	14,383	2,065	16,448	12,993	2,908	15,901
Total	38,582	13,147	51,729	36,784	13,030	49,814
Total waste			410,648			509,773

	2017								
Waste type:	Reuse	Recycling	Recovery	Landfill	Incinerator	Composting	Other treatment	Total	
Non-hazardous									
Lonato	0	0	138,703	64,383	0	10	10	203,106	
Calvisano	0	0	59,162	23,573	0	0	0	82,735	
Nave	0	0	4,517	82	0	0	0	4,599	
Riesa	70	121,091	33,796	11,959	2,603	0	0	169,519	
Hazardous									
Lonato	0	0	16,937	4,055	0	0	4,434	25,426	
Calvisano	0	0	6,850	1,600	0	0	0	8,450	
Nave	0	0	4	0	0	0	33	37	
Riesa	286	9	12,698	2,876	32	0	0	15,901	
Total waste								509,773	

#### Hazardous waste exports, imports, treatment and % of waste sent abroad (t)

Hazardous waste	Imported from abroad		Exported abroad		Handled		% sent abroad	
	2016	2017	2016	2017	2016	2017	2016	2017
Lonato	0	0	0	0	28,413	25,426	-	0
Calvisano	0	0	0	0	6,868	8,450	-	0
Nave	-	0	-	0	-	37	-	0
Riesa	0	0	5,044	4,535	16,448	15,901	31	29




## METHODOLOGY NOTE

### METHODOLOGY Note

#### Introduction

The Feralpi Group Sustainability Report has been drawn up on an annual basis for the first time, and this edition covers the 2017 financial year. The Group's previous Sustainability Report covered the 2015-2016 two-year period and can be consulted in the Sustainability section on the website

#### http://www.feralpigroup.com/en/.

The Feralpi Group is outside the scope of the application of legislative decree no. 254/2016.

Compared with the previous edition, the 2017 reporting period has changed as follows: now annual instead of biennial, increase in scope following the takeover of production sites in the reporting period, reporting criteria in relation to the GRI Sustainability Reporting Standards published in 2016 by the Global Reporting Initiative (GRI), with the resulting review of the materiality matrix and the themes reported.

#### Applied reporting criteria

With regard to economic and social performance, the scope of the report is in line with the Feralpi Group Financial Statements 31st December 2017, and includes all subsidiaries (except Presider and MPL, which were taken over halfway through 2017) and excludes associate companies. With regard to environmental performance, specific reference is made to the individual major businesses carrying out hot-working processes, namely Feralpi Siderurgica S.p.A. in the district of Lonato del Garda (BS), Acciaierie di Calvisano S.p.A. in the district of Viadana di Calvisano (BS), ESF GmbH in the district of Riesa, Saxony, and Fer-Par Srl in the district of Nave (BS). These sites produce steel in billets using electric arc furnace technology and, with the exception of Calvisano, carry out subsequent hot-drawing operations. The Nave site only deals with the hot-drawing phase. Comparisons with the previous year are not available for the Nave site as it only became fully operational during the year reported.

The other production sites in Italy in Pomezia (Rome), Alzate Brianza (CO), Anzano al Parco (CO), Montichiari (BS), Maclodio (BS), Borgaro Torinese (TO), Rivoli (TO), France in Paris, the Czech Republic in Kralupy, Hungary in Czepel and Algeria in Hai El Amir (Orano), have insignificant environmental impact when compared with hot-working operations, whereas the economic and social impact contributes to the overall effect of the Group, even though it would be insignificant if considered separately. As a result their analysis falls within the scope of reporting on the Group as a whole.

The report states the following:

- a) the term Feralpi Group or Group or Feralpi refers to the Group as a whole and includes the scope of the Financial Statements for the parent group Feralpi Holding;
- b) the term Feralpi Siderurgica refers to the business operations located at Lonato del Garda site;
- c) the term Acciaierie di Calvisano refers to the business operations located at the Calvisano site;
- d) the term Feralpi Stahl refers to the business operations located at the Riesa site and those located in the Czech Republic, Hungary, for which ESF GmbH acts as sub-holding for foreign operations.

This sustainability report was completed in accordance with the GRI standards core option. The comprehensive method of the GRI version G4 guidelines were adopted in the previous sustainability report relating to the 2015 and 2016 financial years.

The name of the organisation reported is Feralpi Group, which includes the set of companies controlled by the parent group Feralpi Holding S.p.A.

The new reporting standards were studied beforehand by a work group, in order to carry out preliminary activities before completing the sustainability report. The work group included the sustainable policy manager, external consultants and departmental managers. The first version of the results of the process were successfully presented to the Group Sustainability Committee on 12<sup>th</sup> October 2017.

As with previous editions, in accordance with the decision of the Board of Directors the company had this report audited by a leading external auditor.

#### Definition of material topics to be reported

The GRI Standards require sustainability reports to contain information of aspects deemed 'material' - i.e. which reflect significant impact for the organisation in economic, environmental and social terms, and which affect stakeholder assessments and decisions considerably. The guidelines also require companies to be held accountable in a process designed to identify material aspects to be reported, in accordance with the information in the implementation manual. This process is implemented in four phases - identification, allocation of priority, approval and review. Given that the Group has been completing sustainability reports for numerous years, the company can count on materiality analyses that were applied to previous editions of the report. The present edition of the report is based on the review of the materiality matrix presented in the 2015-16 report. The criteria and topics reported in previous editions were therefore reviewed at the Sustainability Committee meeting on 12<sup>th</sup> October 2017, and the topics to be reported in the 2017 version were identified at the subsequent meeting on 21st January 2018 on the basis of any new aspects that had transpired. These topics then underwent an internal and external prioritisation process.

In particular, the decision on the importance of topics is based on assessing significant impact for the organisation in economic, environmental and social terms. This assessment is carried out by the management team (company vision) according to costopportunity criteria arising from selected topics set out in the reporting standards, in addition to four topics not present in the GRI Standards but which Feralpi deem to be relevant - research and innovation, contribution to supporting local jobs, contribution to local wellbeing, and the ongoing improvements in product quality. With regard to stakeholder opinion, a survey on a sample of stakeholder groups (clusters) was carried out in relation to their strategic significance for the company (see section below). The survey is based on responses to a questionnaire that formulates a summary opinion for each topic, expressed using five levels of the Likert scale.

The report shows detailed information relating to 2016, for which the reporting method has changed since the last sustainability report.

#### Procedure to identify and select significant stakeholders engaged by Feralpi

All departmental managers and not just the Sustainability Committee took part in identifying the stakeholders during a training course held on 16<sup>th</sup> February 2018. On that occasion, starting with a list proposed by the sustainability reporting work group, each participant completed an individual form which asked for groups of stakeholders and individual stakeholders within each group to be arranged in decreasing order of importance on the basis of three criteria: a) the significance the company attributed to the groups of stakeholders in past reports on the basis of mutual involvement (historical significance criterion); b) the progression of involvement in relation to the Group's recent developments (criterion of emerging significance; c) strategic choices of inclusion and selection, which excluded local stakeholders in smaller sites and the media, being considered a tool of communication with stakeholders rather than stakeholders in their own right.

As a result eight focus groups of stakeholder categories were obtained. The stakeholder mapping was approved electronically by the members of the Sustainability Committee in March 2018.

A mailing list of stakeholder representatives was created in accordance with quota sampling techniques, on the basis of geographical distribution of the stakeholder groups. 87 questionnaires were sent and a response rate of 64% was obtained.

# SUSTAINABILITY REPORT 2017

#### Census of Feralpi stakeholders and average ranking obtained

Stakeholder groups	Structure within groups
Employees:	Entire workforce
	Trade unions
	Community union representatives
	Subcontractors
Suppliers:	Scrap
	Energy
	Technology suppliers
	Environmental services
	Maintenance operators
Institutions & public administration	Ministry for Industry
	Chamber of Commerce
	Universities
	Tax and revenue agencies
	Trade associations
	Ministry for the Environment
	Certification bodies
Tertiary sector:	Local sports associations
	Local parishes
	Important local NGOs
	Local foundations
	Diocesan organisations
Customers:	Building trade bar and steel
	Special steels
	Additional products: grids, weathering steel, section bars
	Asbestos operators
Shareholders:	Shareholders covering managerial roles
	Shareholders not involved in management
Community:	Local mayors where sites are situated
	Local ARPA (Italian Environment Agency)
	Vice chairs of local council committees
	Educational institutes
	Provincial and Regional Authority technical depts.
	Health agencies
Media:	Local newspapers
	Social media, local networks

Banks/insurance companies

#### Creation of the Feralpi Group Materiality Matrix for the period reported

Two rankings were produced when prioritising material topics, one approved by the Sustainability Committee on 21st January 2018 and one expressed by stakeholders who responded to the questionnaire. The overall result is shown in the table below which reports the level of importance for each topic, for the company and stakeholders. Topics are grouped into five areas and the report shows the management approach for each of them. The matrix used for 2017 mainly shows elements of continuity with respect to the previous edition, but there are some differences in the evaluation expressed by management. In particular, various environmental aspects have acquired relative importance, such as

waste treatment and emissions into the atmosphere, which recently saw specific investment. Product quality and standards have also acquired increasing importance, following the company strategy aimed at producing special steels. The priority of personnel development policies has decreased following the implementation of long-term training schemes, with the involvement of external organisations and the introduction of the innovative dual workeducation approach in Italy. Coming out of a long period of recession in the industry has also made the topic of generating economic value less of a priority.



#### Feralpi Group Materiality Matrix for the period reported

- B: Market presence
- D: Corruption
- E: Competition
- F: Compliance with environmental regulations
- N: Research and innovation
- O: Product quality
- P: Job support

- S: Diversity and equal opportunities
- management
- U: Involvement and focus on local communities
- V: Supply chain

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#### Significant reporting areas, description of material topics and their scope

		Corresponding	S	Scope of Material Top	ic
Material Topic	Description	GRI Standards	Internal Scope	External Scope	Constraints
Economic value generated	Redistribution of economic value generated to stakeholders	GRI 201: Economic Performance	Feralpi Group		
Market presence	Capability of Feralpi to ensure good remuneration for its employees; Expenditure focused on local suppliers	GRI 202: Market Presence	Feralpi Group		
Contribution to community wellbeing	Feralpi's contribution to local community wellbeing; Indirect economic impact, investment in infrastructure and services	GRI 204: Procurement Practices	Feralpi Group		
Research and Innovation	Ability to innovate through planned research activities	-	Feralpi Group		
Corruption	Measures adopted and results achieved on preventing corruption	GRI 205: Anti-corruption	Feralpi Group		
Competition	Compliance with competition protection regulations	GRI 206: Anti-competitive behaviour	Feralpi Group		
Compliance with environmental regulations	Compliance with environmental regulations	GRI 307: Environmental Compliance	Feralpi Group	Contractor companies for internal operations and outsourcing of cold production	Reporting on this aspect not extended to contractor companies for internal operations and those dealing with outsourced cold production operations
Materials used	Monitoring of materials used in production, and reuse of waste and by-products	GRI 301: Materials	Feralpi Siderurgica, Feralpi Stahl, Acciaierie di Calvisano		
Waste	Reducing waste through the principles of a circular economy, maximising recycling and improving waste treatment	GRI 306: Effluents and waste	Feralpi Siderurgica, Feralpi Stahl, Acciaierie di Calvisano FER-PAR	Contractor companies for internal operations and outsourcing of cold production	Reporting on this aspect not extended to contractor companies for internal operations and those dealing with outsourced cold production operations
Water	Controlling the use of water and maintaining the quality of water discharged	GRI 303: Water	Feralpi Siderurgica, Feralpi Stahl, Acciaierie di Calvisano FER-PAR		
Energy	Controlling consumption, saving energy, using sources of clean energy, through self-generation too.	GRI 302: Energy	Feralpi Siderurgica, Feralpi Stahl, Acciaierie di Calvisano FER-PAR	Scrap suppliers, transporters of finished products	
Emissions	Control and reduction of direct and indirect emissions into the atmosphere and the adoption of the most advanced technologies.	GRI 305: Emissions	Feralpi Siderurgica, Feralpi Stahl, Acciaierie di Calvisano FER-PAR	Scrap suppliers, transporters of finished products, contractor companies for internal operations and outsourced cold production	Reporting on this aspect not extended to contractor companies for internal operations and those dealing with outsourced cold production operations

	Description	Corresponding GRI Standards	Scope of Material Topic		
Material Topic			Internal Scope	External Scope	Constraints
Product quality	Capability of the Group to ensure high quality products and compliance with legislation		Feralpi Group		
Job support	Ability to create work and contribute to safeguarding local jobs	GRI 401: Employment	Feralpi Group		
Involvement and focus on local communities	Operations that involve local communities and their positive/ negative actual and potential impact	GRI 413: Local Community	Feralpi Group		
Supply chain	Responsible supply chain management; Supplier evaluation on the basis of social and environmental criteria	GRI 308: Supplier Environmental Assessment; GRI 414: Supplier Social Assessment; GRI 204: Procurement Practices	Feralpi Group	Suppliers	Reporting on this aspect is not extended to suppliers
Protecting health and safety	Focus on occupational health and safety and the wellbeing of employees both in and outside the work environment	GRI 403: Occupational Health and Safety	Feralpi Group	Contractor companies for internal operations and outsourcing of cold production	Reporting on this aspect not extended to contractor companies for internal operations and those dealing with cold production operations
Development of human capital	Personnel training plans and investment	GRI 404: Training and Education	Feralpi Group		
Diversity and Equal Opportunities	Protection of equal opportunities for personnel and absence of gender, age and racial discrimination.	GRI 405: Diversity and Equal Oppor- tunities	Feralpi Group		
Employment relations and management	Recognition of workers' rights and ability to establish loyal and transparent relationships	GRI 402: Labour / Management Relations	Feralpi Group	Contractor companies for internal operations and outsourcing of cold production, limited to workers' rights	Reporting on this aspect not extended to contractor companies for internal operations and those dealing with outsourced cold production operations

The companies Feralpi Siderurgica, Acciaierie di Calvisano, FER-PAR and Feralpi Stahl, reflect the production plants of Lonato del Garda, Calvisano, Nave and Riesa, respectively as to environmental impact.

For more details on the Sustainability Report, please contact **comunicazione@it.feralpigroup.com** 







GRI		Chapter – Section	Omissions		
Standards	Disclosure	and / or URL	Omissions	Reasons	Explanation
GENERAL DISCLOSU	JRES				
	Organisation profile Disclosure 102-1 Name of the organisation	Ch. 1 - §. 2; Methodology note - Applied reporting criteria			
	Disclosure 102-2 Activities, brands, products and services	Ch. 4 - §. 3.4			
	Disclosure 102-3 Location of headquarters	Ch. 1 - §. 2; Methodology note - Applied reporting criteria			
	Disclosure 102-4 Location of operations	Group highlights; Ch. 1 - §. 2; Methodology note - Applied reporting criteria			
	Disclosure 102-5 Ownership and legal form	Ch. 4 - §. 2			
	Disclosure 102-6 Markets served	Ch. 3 - §. 2, Ch. 4 - §. 3.4			
	Disclosure 102-7 Scale of organisation	Group highlights			
GRI 102	Disclosure 102-8 Information on employees and other workers	Appendix to GRI Standards - Feralpi Group personnel as at 31.12.2017			
General Disclosures	Disclosure 102-9 Supply chain	Ch. 4 - §. 4.1			
	Disclosure 102-10 Significant changes to the organisation and its supply chain	No significant changes transpired during the reporting year			
	Disclosure 102-11 Precautionary Principle or approach	Ch. 5 - §. 2			
	Disclosure 102-12 External initiatives	Ch. 2 - §. 1			
	Disclosure 102-13 Membership of associations	Ch. 2 - §. 1 Participation of Feralpi in industry associations			
	Strategy				
	Disclosure 102-14 Statement from senior decision-maker	Letter to stakeholders			
	Ethics and integrity				
	Disclosure 102-16 Values, principles, standards and norms of behaviour	Ch. 1 - §. 1			
	Governance				
	Disclosure 102-18 Governance structure	Ch. 1 - §. 3			

GRI	Diala	Chapter – Section		Omissions	
Standards	Disclosure	and / or URL	Omissions	Reasons	Explanation
GENERAL DISCLOS	URES				
	Stakeholder engagement Disclosure 102-40	Methodology note -			
	List of stakeholder groups	Census of Feralpi stakeholders and average ranking obtained			
	Disclosure 102-41 Collective bargaining agreements	Ch. 4 - §. 1.13			
	Disclosure 102-42 Identifying and selecting stakeholders	Ch. 2 - §. 2; Methodology note - Procedure to identify and select significant stakeholders engaged by Feralpi			
	Disclosure 102-43 Approach to stakeholder engagement	Ch. 2 - §. 3, 4			
	Disclosure 102-44 Key topics and concerns raised	Ch. 2 - §. 4; Methodology note			
	Reporting practice			r	
	Disclosure 102-45 Entities included in the consolidated financial statements	Ch. 1 - §. 2; Methodology note - Applied reporting criteria			
	Disclosure 102-46 Defining report content and topic boundaries	Methodology note - Definition of material aspects to be reported			
GRI 102 General Disclosures	Disclosure 102-47 List of material topics	Methodology note - Feralpi Group materiality matrix for the period reported			
	Disclosure 102-48 Restatements of information	Methodology note - Definition of material aspects to be reported			
	Disclosure 102-49 Changes in reporting	Methodology note - Introduction			
	Disclosure 102-50 Reporting period	Methodology note - Introduction			
	Disclosure 102-51 Date of most recent report	Methodology note - Introduction			
	Disclosure 102-52 Reporting cycle	Methodology note - Introduction			
	Disclosure 102-53 Method of requesting information regarding the report	Methodology note - Creation of the Feralpi Group Materiality Matrix for the period reported			
	Disclosure 102-54 Claims of reporting in accordance with the GRI Standards	Methodology note - Applied reporting criteria			
	Disclosure 102-55 Content index GRI	Content Index			
	Disclosure 102-56 External assurance	Methodology note - Applied reporting criteria			

#### **Material Topics**

GRI 200 ECONOMIC	STANDARDS			
Economic Performa				
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 3 - §. 1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 3 - §. 1		
	Disclosure 103-3 Evaluation of the management approach	Ch. 3 - §. 1		
	Disclosure 201-1 Direct economic value generated and distributed	Ch. 3 - §. 3, 4		
GRI 201: Economic Performance	Disclosure 201-3 Direct benefit plan obligations and other retirement plans	Appendix to GRI Standards - Group costs for personnel social security and insurance contributions		
	Disclosure 201-4 Financial assistance received from government	Ch. 4 - §. 5.2		
Market Presence			-	
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 3 - §. 5, 7		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 3 - §. 5, 7		
	Disclosure 103-3 Evaluation of the management approach	Ch. 3 - §. 5, 7		
GRI 202: Market	Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Ch. 3 - §. 3, 4; Appendix to GRI Standards - Ratio between standard salary and local minimum wage		
Presence	Disclosure 202-2 Proportion of senior management hired from the local community	Appendix to GRI Standards - Percentage of senior managers recruited in the local community		
Research and Inno	vation			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 5, 7		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 5, 7		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 7		

GRI 200 ECONOMIC	STANDARDS			
Procurement Pract	ices			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 4.1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 4.2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 4.3		
GRI 104: Procurement Practices	Disclosure 204-1 Proportion of spending on local suppliers	Ch. 4 - §. 4.1		
Anti-corruption				
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 5.1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch.4 - §. 5.2		
	Disclosure 103-3 Evaluation of the management approach	Ch.4 - §. 5.2		
GRI 205:	Disclosure 205-1 Operations assessed for risks related to corruption	Appendix to GRI Standards - Corruption prevention activities		
Anti-corruption	Disclosure 205-3 Confirmed incidents of corruption and actions taken	Appendix to GRI Standards - Corruption prevention activities		
Ant-competitive Be	haviour			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 1 - §. 3.2		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 1 - §. 3.2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 1 - §. 3.2		
GRI 206: Anti-competitive Behaviour	Disclosure 206-1 Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	Ch. 1 - §. 3.2		

1 300 ENVIRONN	IENTAL STANDARDS				
aterials					
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2			
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3			
GRI 301:	Disclosure 301-1 Materials used by weight or volume	Ch. 5 - §. 5.1; Appendix to GRI Standards - Use of materials and % recycled			
Materials	Disclosure 301-2 Recycled input materials used	Ch. 5 - §. 5.1; Appendix to GRI Standards - Use of materials and % recycled			
iergy					
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1, 5.2			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2, 5.2			
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3, 5.2			
	Disclosure 302-1 Energy consumption within the organisation	Ch. 5 - §. 5.2; Appendix to GRI Standards - Use of energy by source			
GRI 302:	Disclosure 302-2 Energy consumption outside of the organisation	Appendix to GRI Standards - Indirect energy consumption GJ			
Energy	Disclosure 302-3 Energy intensity	Ch. 5 - §. 5.2			
	Disclosure 302-4 Reduction of energy consumption	Ch. 5 - §. 5.2	Quantity of consumed energy reduced	Information not available	Qualitative information reported
ater					
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2			
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3			
GRI 303: Water	Disclosure 303-3 Water recycled and reused	Ch. 5 - §. 5.4; Appendix to GRI Standards - Volume of water recycled and % reused in m <sup>3</sup> /h			

nissions				
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3		
GRI 305: Emissions	Disclosure 305-1 Direct (Scope 1) GHG emissions	Ch. 5 - §. 5.5; Appendix to GRI Standards - Total direct greenhouse gas emissions (GHG) (Scope1: tCO2eq)		
	Disclosure 305-2 Indirect (Scope 2) GHG emissions	Ch. 5 - §. 5.5; Appendix to GRI Standards - Indirect greenhouse gas emissions (GHG), resulting from electricity used (Scope2: $tCO_2eq$ ). Scope 2 emissions calculated using Feralpi Group "market- based" methods amount to 832.644 $tCO_2eq$ for 2017.		
	Disclosure 305-3 Other indirect (Scope 3) GHG emissions	Ch. 5 - §. 5.5; Appendix to GRI Standards - Other indirect greenhouse gas emissions (GHG) (Scope 3)		
	Disclosure 305-4 GHG emissions intensity	Ch. 5 - §. 5.6; Appendix to GRI Standards - Intensity of greenhouse gas emissions		
	Disclosure 305-7 Nitrogen Oxides (NOx), Sulphur Oxides (SOx) and other significant air emissions	Ch. 5 - §. 5.5; Appendix to GRI Standards - Emissions into the atmosphere		

GRI 300 ENVIRONM	ENTAL STANDARDS			
Effluents and wast	e			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3		
	Disclosure 306-1 Water discharge by quality and destination	Ch. 5 - §. 5.4; Appendix to GRI Standards - Total water discharged by destination in m <sup>3</sup> ; Analysis of water discharged		
GRI 306: Effluents and Waste	Disclosure 306-2 Total weight of waste by type and method of disposal	Ch.5 - §. 5.3; Appendix to GRI Standards - Total weight of waste by type (t); Total weight of waste by type and destination (t)		
	Disclosure 306-4 Transport of hazardous waste	Appendix to GRI Standards - Hazardous waste exports, imports, treatment and % of waste sent abroad (t)		
nvironmental Cor	npliance		1	,
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 5 - §. 1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 5 - §. 2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 5 - §. 3		
GRI 307: Environmental Compliance	Disclosure 307-1 Non-compliance with environmental laws and regulations	Appendix to GRI Standards - Information on the characteristics and location of premises subject to environmental impact analysis and on potential negative effects on local communities		
Supplier Environm	ental Assessment		_	
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 4.1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 4.2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 4.3		
GRI 308: Supplier Environmental Assessment	Disclosure 308-1 New suppliers that were screened using environmental criteria	Ch. 4 - §. 4.4		

GRI 400 SOCIAL STA	ANDARD				
Employment			1		T
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 1.1			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 1.2			
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 1.3			
GRI 401: Employment	Disclosure 401-1 New employee hires and employee turnover	Ch. 4 - §. 1.4; Appendix to GRI Standards - Movement of personnel by geographical area and gender; Movement of personnel by geographical area and age group			
	Disclosure 401-3 Parental leave (paternity and maternity)	Ch. 4 - §. 1.10			
Labour and Manag	ement Relations		I		1
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 1.13			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 1.13			
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 1.13			
GRI 402: Labour and Management Relations	Disclosure 402-1 Minimum notice periods regarding operational changes	The company complies with collective contract requirements.			
Occupational Heal	th and Safety				
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 1.7			
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 1.7			
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 1.7			
GRI 403: Occupational Health and	Disclosure 403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Ch 4 - §. 1.6, 1.7 Appendix to GRI Standards - Employees with high incidence or risk of work- related diseases; Total number of deaths; Severity rate.	Accident indicators for contractors	Information not available	Figures collected for the employees of Feralpi Group only
Safety	Disclosure 403-3 Workers with high incidence or high risk of diseases related to their occupation	The company is not aware of work positions with a high incidence or risk of industrial diseases.			

GRI 400 SOCIAL STA	ANDARD			
Training and Educa	tion			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 1.8		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 1.8		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 1.8		
	Disclosure 404-1 Average hours of training per year per employee	Appendix to GRI Standards - Hours of annual training by gender and role		
GRI 404: Training and Education	Disclosure 404-3 Percentage of employees receiving regular performance and career development reviews	Appendix to GRI Standards - Percentage of employees receiving performance appraisals by gender; Percentage of employees receiving performance appraisals by role		
Diversity and Equa	l Opportunity			
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 1.10		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 1.10		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 1.10		
GRI 405: Diversity and Equal Opportunity	Disclosure 405-1 Diversity of governance bodies and employees	Ch. 4 - §. 1.12, 2; Appendix to GRI Standards - Breakdown of Feralpi Group personnel by gender and age group, Members of the Feralpi Holding's Board of directors by gender and age group		
	Disclosure 405-2 Ratio of basic salary and remuneration of women and men	Appendix to GRI Standards - Comparison between average male and female remuneration		
Local Communities			 	
	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 6.1		
GRI 103: Management Approach	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 6.2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 6.3		
GRI 413: Local Communities	Disclosure 413-1 Operations with local community engagement, impact assessment and development programs	Five sites are involved in initiatives to engage with local communities Ch. 4 - §. 6.4, 6.5, 6.6		

GRI 400 SOCIAL ST	ANDARD			
Supplier Social Ass	sessment			
GRI 103: Management Approach	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 4.1		
	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 4.2		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 4.3		
GRI 414: Supplier Social Assessment	Disclosure 414-1 New suppliers that were screened using social criteria	Ch. 4 - §. 4.4		
Product Quality				
GRI 103: Management Approach	Disclosure 103-1 Explanation of the material topic and its boundary	Ch. 4 - §. 3, 3.2, 3.5		
	Disclosure 103-2 The management approach and its components	Ch. 4 - §. 3.2, 3.5		
	Disclosure 103-3 Evaluation of the management approach	Ch. 4 - §. 3.3		



## PROJECT GROUP REPORT



#### Feralpi Holding S.p.A.

Independent auditors' report on the "Sustainability Report 2017" (Translation from the original Italian text)



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#### Independent auditors' report on the "Sustainability Report 2017"

(Translation from the original Italian text)

To the Board of Directors of Feralpi Holding S.p.A.

We have carried out a limited assurance engagement of the document "Sustainability Report 2017" (hereinafter "Sustainability Report") of Feralpi Holding S.p.A. and its subsidiaries (hereinafter the "Group") as of December 31, 2017.

#### Directors' responsibility on the Sustainability Report

The Directors are responsible for the preparation of the Sustainability Report in accordance with the "GRI Sustainability Reporting Standards" issued in 2016 by GRI –Global Reporting Initiative that are detailed in the paragraph "Methodology note" of the Sustainability Report, as well as for that part of internal control that they consider necessary in order to allow the preparation of a Sustainability Report that is free from material misstatements, even caused by frauds or unintentional behaviours or events. The Directors are also responsible for defining commitments of the Group regarding the sustainability performance and for the reporting of the results achieved, as well as for the identification of the stakeholders and of the significant matters to report.

#### Auditors' responsibility

It is our responsibility the preparation of this report on the basis of the procedures carried out. Our work has been conducted in accordance with the criteria established by the principle "International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (hereinafter "ISAE 3000 Revised"), issued by the International Auditing and Assurance Standards Board (IAASB) for the engagements that consist in a limited assurance.

This principle requires the respect with the independence and other ethical requirements in compliance with professional standards and applicable legal and regulatory requirements and the maintenance of a comprehensive system of quality control ISQC (Italy) n. 1, as well as the planning and the execution of our work in order to obtain a limited assurance that the Sustainability Report is free from material misstatements.

These procedures included inquiries, primarily with company's personnel responsible for the preparation of the information included in the Sustainability Report, document analysis, recalculations

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The procedures were related to the compliance with the Standard "GRI 101: Foundation 2016" for defining report content and quality of the Sustainability Report and are summarised below:

- a. comparison of economic and financial data and information included in the Sustainability Report with those included in the Group's consolidated financial statements as of 31<sup>st</sup> December 2017 on which we issued our audit report, pursuant to art. 14 of Legislative Decree dated January 27, 2010, on June 13, 2018;
- b. analysis, through interviews, of the governance system and management process of the issues related to the sustainable development regarding the Group's strategy and operations;
- c. analysis of the process relating to the definition of material aspects included in the Sustainability Report, with reference to the criteria applied to identify priorities for the different stakeholders categories and to the internal validation of the process outcomes;
- d. analysis of the operation of the processes that support the generation, recording and management of the quantitative data reported in the Sustainability Report. In particular, we have carried out the following procedures:
  - interviews and discussions with personnel of the management of the Feralpi Holding S.p.A. and with the personnel of Feralpi Siderurgica S.p.A., Acciaierie di Calvisano S.p.A. and ESF GmbH, to obtain an understanding about the information, accounting and reporting systems in use for the preparation of the Sustainability Report, as well as about the internal control processes and procedures supporting the collection, aggregation, data processing and transmission of data and information to the department responsible for preparation of the Sustainability Report;
  - on site verifications at the production site of Acciaierie di Calvisano S.p.A. (Brescia, Italy) and of ESF GmbH (Riesa, Germany);
  - analysis on a sample basis of the documentation supporting the compilation of the Sustainability Report, in order to confirm the processes in use, their adequacy and the operation of the internal control for the correct processing of data and information in relation to the objectives described in the Sustainability Report;
- e. analysis of the compliance and internal consistency of the qualitative information included in the Sustainability Report to the guidelines identified in paragraph "Directors' responsibility on the Sustainability Report" of the present report;
- f. analysis of the process relating to stakeholders engagement, with reference to procedures applied, through review of minutes or any other existing documentation relating to the main topics arisen from discussions with them;
- g. obtaining of the representation letter, signed by the legal representative of Feralpi Holding S.p.A., relating to the compliance of the Sustainability Report with the guidelines indicated in paragraph "Directors' responsibility on the Sustainability Report", as well as to the reliability and completeness of the information and data presented in the Sustainability Report.

Our engagement is less in scope than a reasonable assurance engagement in accordance with ISAE 3000 Revised and, as consequence, we may not have become aware of all the significant events and circumstances which we could have identified had we performed a reasonable assurance engagement.



#### Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the "Sustainability Report 2017" of Feralpi Group as of December 31, 2017 is not in compliance, in all material aspects, with the "GRI Sustainability Reporting Standards" issued in 2016 by the GRI - Global Reporting Initiative, as stated in the paragraph "Methodology note" of the Sustainability Report.

Brescia, 13th June 2018

EY S.p.A. Signed by: Stefano Colpani, Partner

This report has been translated into the English language solely for the convenience of international readers

## THANK YOU Very much to everyone

*"Gratitude is the memory of the heart"* Lao Tsè

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