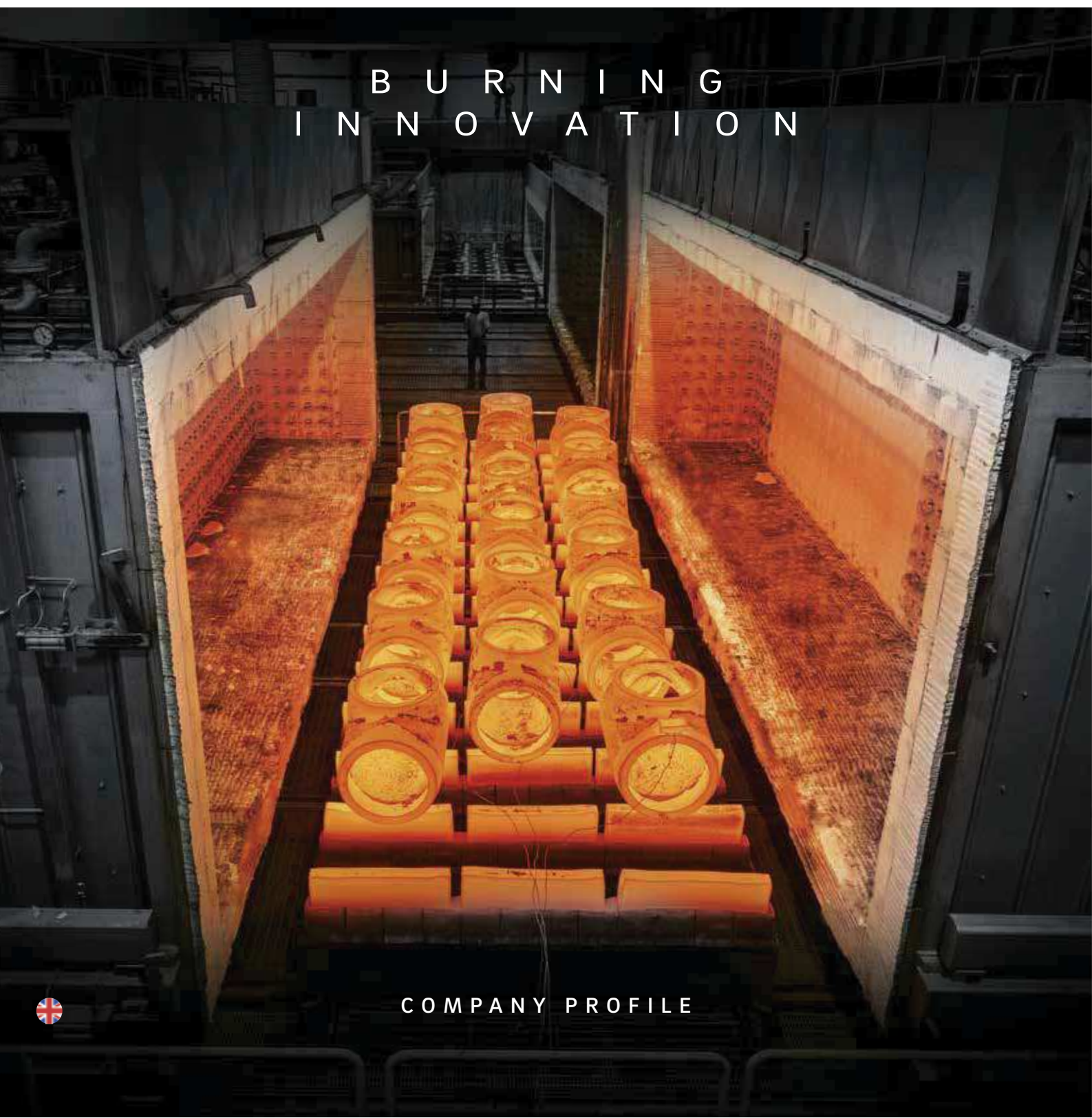




B U R N I N G
I N N O V A T I O N



COMPANY PROFILE





GF-ELTI is an Italian industrial corporation with an international presence, operating in the production of **Plants for the Steel Industry**. Founded in **1966**, the Company was originally devoted to the production of Industrial Burners and, thanks to its great innovative spirit and pioneering vision, in 1976 the core business was expanded to include the design and manufacture of **Industrial Furnaces**. The inborn attitude to Research & Development activities brought to the creation of a Business Spin-off dedicated to **Heat Treatment Services on third-party products**, which empowers product and process experimentation aimed at granting Quality, Efficiency and Results. **Engineering, Construction, Commissioning** and **Service** are the milestone of GF-ELTI's way of doing business which, together with its **highly qualified and experienced staff**, dedicates care and attention to the development of innovative projects in full **respect of the environment**.



“ Sustainability, Experience, and Innovation are the cornerstones of GF-ELTI, a company characterised by operational rigour, high quality-standards and concrete results. ”





Our History

“**P**assion, tradition, and experience drive the company's growth, creating innovation and offering cutting-edge solutions.”

FRATUS

Production
of Industrial Burners

1966

ELTI

Construction of Plants
for Steel Industry

1976

GENERAL FORNI

Construction
of Industrial Furnaces

1976

The **Fratus** was founded in Lovere (BG) in a small workshop, which was poor in equipment, but rich in ideas and “will to do”, and in a short time, thanks to its innovative vision and R&D efforts, specialised in the construction of the first automatic Naphtha-run Burners covered by the first of many other Industrial Patents. In the years that followed, new technologies were developed, such as the first electro-pneumatic regulation systems for Industrial Furnaces, aimed at optimising combustion and thus saving energy and protecting the Environment. This vision, experimentation and an innovative spirit will be the company's heritage and working method for the years to come.

The company Elettrotermica Industriale was founded in Sovere (BG), with the acronym **ELTI**, inheriting the legacy of Ditta Fratus. In the early years, ELTI specialised in the design and production of steelworks equipment: from ladle and tundish preheating systems to the more complex fluid insufflation systems for electric arc furnaces (chemical energy). ELTI installed the first LF in Italy, at Falck Unione, and the first three-phase induction melting furnace for the production of spheroidal cast iron.

General Forni was established as a company dedicated to the production of Industrial Furnaces for rolling mills and was the inventor of the construction technique known as **“Modular Prefabrication”**: an innovative method still used in the industry today.

HEAT TREATMENT DIVISION

Third-party Heat
Treatment Services

GF-ELTI

A Single Company

2000**2017****TODAY**

The **Heat Treatment Division** dedicated to Heat Treatment Services on third-party products was created in 2000: entity characterised by rapid development, which would enable it to become a qualified and trusted partner for Customers of the highest importance.

In 2017 **ELTI** and **General Forni** merged into a single company: **GF-ELTI**. The aim was to create a single reference point and a reliable partner in the steel market, capable of providing Turnkey Equipment and Heat Treatment Services.

GF-ELTI is now an industrial reality that operates internationally in the supply of Industrial Plants and Heat Treatment Services, distinguishing itself through its Know-how, Design Experience, High Plant Performances, R&D, Innovative and Sustainable Practices.



Organizational Structure

“ Industrial Plants and Heat Treatment Services compose the offer that GF-ELTI makes available to its Customers. ”

Industrial Turnkey Equipment

GF-ELTI
OPERATES IN
2
RELATED
BUSINESSES

Heat Treatment Services

- Steelworks Area
 - Rolling Mill Area
 - Forging Area
 - Heat Treatment Area
 - Quenching Systems
 - Auxiliary Systems
-
- Third-party Heat Treatment of products up to 150 Ton for a production capacity of 50,000 Ton/year



■ Normalization, Quenching & Tempering Line for Pipes

85,000+

SQM COVERED SURFACES

100+

PROFESSIONALS

20+

PLANTS INSTALLED
IN-HOUSE

15+

THERMIC PROCESSES
DOABLE IN-HOUSE



■ Semi-automatic Heat Treatment Plant

Production Process

“Whoever chooses GF-ELTI, finds a Turnkey Service. The highly qualified staff guarantees the Customer complete assistance from design to After-Sales Service.”

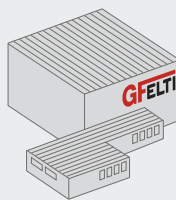
PRELIMINARY ACTIVITIES

- Customer - GF-ELTI Contact
- Video Conference Call, Meetings and Field Inspections
- Feasibility Studies
- Technical and Commercial Proposal
- Project Discussion and Approval
- Order



IN-HOUSE ACTIVITIES

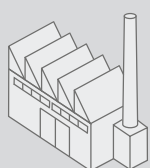
- Design, Engineering Development, 3D Simulation validated with F.E.M. Analysis
- Manufacturing of Plant Components and GF-ELTI Thermic Equipment
- Modular Prefabrication
- Check of Project Data Compliance
- Hot and Cold Tests
- Equipment Acceptance
- Disassembly, Packing and Shipping



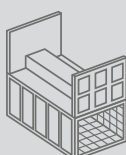
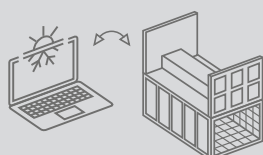
GF-ELTI's structure and its qualified staff work daily to turn Customer's ideas and needs into **tailor-made equipment solutions** that are the benchmark in terms of performance, consumption and emissions. The **entire production chain** lies within the Company: from the management of the Customer's request to the shipment.

At the Customer's premises, GF-ELTI takes care of the **installation of the Equipment**, from assembly to start-up, as well as Customer's personnel training. The **After-Sales Service** guarantees the technical reliability of the Equipment over time: remotely online as far as possible or through on-site interventions. The Customer can turn to it for **any operational need**: maintenance planning, emergency interventions, supply of spare parts, assistance with Plant performance re-certification, revamping or whatever is necessary.

ON-SITE ACTIVITIES



- Building Works and Foundations
- Set-up of Prefabricated Modules
- Equipment Start-up
- Hot and Cold Tests
- Check and Analysis of Emissions
- Check of Performance Compliance
- Hot Test
- Turnkey Equipment Delivery



AFTER-SALES SERVICE

- Planned Maintenance
- Regular Servicing
- Remote Assistance
- Equipment Re-certifications
- Spare Parts Supply
- Revamping





4.0 Furnaces for Sustainable Steelmaking

“ Innovation is the beating heart of GF-ELTI. Attention, professionalism, quality, and availability are the guidelines of every strategic choice. ”





■ Vertical Heat Treatment Furnace



■ Automatic Plant for Heat Treatment

GF-ELTI Plants are designed and realized to comply with the most severe **Environmental Regulations**, according to the **Modular Prefabrication Technique** and in conformity with **Industry 4.0** requirements. The use of the most

advanced **modelling, simulation, automation, supervision and process-control** techniques characterizes each project and allows to meet and satisfy the Norms and Standards required by the **Sector Regulations**.



90%

THERMIC EFFICIENCY
ACHIEVABLE BY PLANTS

100%

COMPLIANCE WITH
BAT REGULATIONS (BEST
AVAILABLE TECHNIQUES)

4.0
INDUSTRY

40+

PATENTS

50+

PROJECTS
PER YEAR



■ Bogie Furnace for Forging - Nuclear Sector



Markets



KNOW-HOW, SPECIFIC DESIGN AND CONSTRUCTION EXPERIENCE, TOGETHER WITH KNOWLEDGE OF QUALITY HEAT TREATMENT PROCESSES ALLOW GF-ELTI TO PRODUCE TAILOR-MADE PLANTS ENTIRELY "MADE IN ITALY".

GF-ELTI Equipment and the Heat Treatment Services are intended for the most varied **sectors of use** such as: Transport and Infrastructure, Quality Mechanics, Mining, Automotive, Power Generation, Oil & Gas, Nuclear, Aeronautical, Aerospace, Military and Defence, Petrochemical, and Naval. GF-ELTI is able to develop **tailor-made solutions** for the transformation process of the following **Commodities**: ingots, blooms, billets, slabs, sheets, flat rolled products, bars, coils, pipes and tubes, wheels and railway axles, castings, forged products, ferrules, rotors, rolling cylinders, fittings, flanges, joints, specials, curves, bearings, etc.



“ **T**he quality of a product
100% Made in Italy
worldwide. **”**

30+
COUNTRIES

100+
CUSTOMERS

800+
INSTALLATIONS



Competitive Advantage

“**H**aving a Furnace Fleet built and managed in-house is one of the Added Values of the Company.”

■ Controlled Atmosphere
Normalization, Stress
Relieving Line for Pipes



■ Patented Heat
Treatment Plant
for Quenching
& Tempering



THE COMPETITIVE ADVANTAGE RESULTING FROM THE OWNERSHIP AND DIRECT MANAGEMENT OF A COMPLETE AND DIFFERENTIATED FURNACE FLEET IS TWOFOLD:

Test

It allows GF-ELTI to test **unexplored applications** on an industrial scale and then offer them to the market, reducing the time needed for the development and **validation of the tests** performed.

Showcase

Represents at the same time a real «**Showcase**» that is always available to Customers, thanks to which it is possible to show the **various equipment, production and technological solutions** as well as highlighting the obtained results.

Today, GF-ELTI has the necessary requirements and qualifications to act as a **one-stop-partner**, capable of understanding the Customer's needs and translating them into a complete range of products and services: **innovative technical solutions** that guarantee the **reliability of the Equipments**.



Research and Development

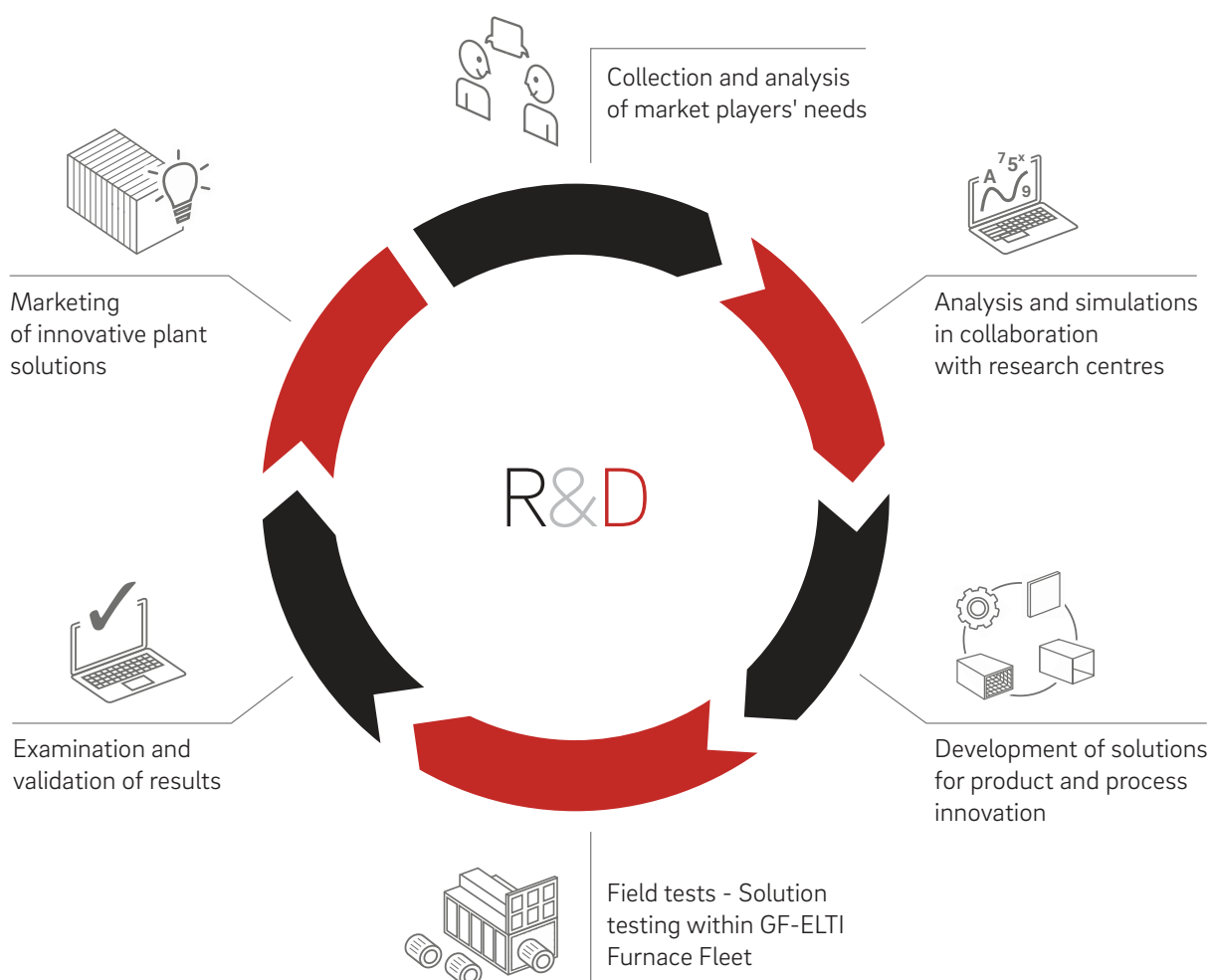


“ For GF-ELTI, the satisfaction of the Customer is a source of pride and encouragement for the Development of further Product and Process Innovations. ”



The **optimisation** and **efficiency** of each phase of the production process are the main objective of the Company's constant **Research and Development** activity. Over the years, GF-ELTI's team of experts has developed a wide range of **Innovative Solutions** able to respond to Markets and Customer several needs.

The collaboration with **Universities** and **Research Institutes**, as well as with Customer and Supplier **R&D Centres**, has enabled the development of value-added products and the improvement of production processes. GF-ELTI has its own **Laboratory** to carry out **Tests and Research** on heat-treated products, offering valid support both to the Customer and to all production activities.





Quality

GF-ELTI QUALITY MANAGEMENT SYSTEM PLACES CONTEXT ANALYSIS, CONTINUOUS DEVELOPMENT AND SUSTAINABILITY AT THE HEART OF ITS OPERATIONAL PROCESSES.

GF-ELTI approach to quality offers great opportunities both in terms of effectiveness and efficiency, bringing benefits that can be summarised in:

- better **coordination** across the various functions at all levels of the organisation
- increased **productivity** and greater **competitiveness**
- guarantee and enhancement in the **performance** of the products and services offered
- **satisfaction** of customers' expectations

The environmental impact generated by the steel industry must be minimised through ingenuity and rational use of technology. To this end, the quality of the operating processes must be accompanied by quality and respect for the **environment** and **safety** standards that give to the GF-ELTI world an absolute **seal of quality**. Complying with **International Standards on Quality, Safety and the Environment** is of fundamental importance for GF-ELTI, therefore it is certified and operates in full compliance with the most important international reference Standards.



CERTIFICATIONS

“ **C**ompliance with International Standards at all levels of the organisation is a guarantee of concrete performance and results. ”



■ **UNI EN ISO 14001**

Environnemental Management System

■ **UNI EN ISO 9001**

Quality Management System of Company's Internal Processes

■ **UNI ISO 45001**

Workplace Health and Safety Management System

■ **UNI EN 9100**

Quality Management System for Aerospace and Defence Sectors

■ **ABS**

(American Bureau of Shipping)
Naval and Off-Shore Industry International Standards for Heat Treatment Processes

■ **NADCAP**

Heat Treatment Certification Program for Aerospace and Defence Sectors

■ **API 6A**

Oil & Gas Industry International Standard for Heat Treatments and Temperature Uniformity Test Management

■ **ASTM A991**

International Standard for Temperature Uniformity Test Management on Heat Treatment Furnaces for Steel Products

■ **AMS 2750**

International Standards on Pyrometric Requirements for Heat Treatment Instrumentation, Equipment and Furnaces

■ **NORSOK M-650**

Oil & Gas Industry International Standard for Heat Treatments

Sustainability

“**T**he Environment, Human Capital and Energy Efficiency: these are the priorities to which GF-ELTI dedicates commitment, resources and attention.”



GF-ELTI's **Culture of Sustainability** is oriented to three main areas: **Economic, Environmental** and **Social**. Every choice in business and relations with its stakeholders is inspired by the principles of Corporate Social Responsibility and is aimed at achieving corporate well-being.

The constant commitment to respect the **Best Available Techniques** (BAT), the continuous search for **Innovation in Production Processes** and the promotion of a **Sustainable and Conscious Industrial Activity** characterise the operating methods promoted in GF-ELTI. At GF-ELTI, the philosophy of sustainability is spread across all levels.





The Equipment designed and manufactured by GF-ELTI incorporate and operate in accordance with the guidelines dictated by the Kyoto and Paris protocols and stand out for their reduced emissions into the atmosphere (NO_x and CO₂), as well as their limited consumption of primary energy. Best practices implemented by the Company also include the redevelopment of all buildings and the use of photovoltaic systems, as well as the promotion of sustainable mobility and responsible recycling.

The enhancement of **Human Resources**, the awareness of employees to issues such as **Health** and **Safety** in the workplace, as well as the welfare project combined with the **Promotion and Protection of the Territory** increase the value of GF-ELTI's sustainable policy.

300,000+

KW/Y ELECTRICAL
ENERGY PRODUCED WITH
PHOTOVOLTAIC PANELS

800+

TON/Y CO₂ NOT EMITTED
FROM THE HEAT TREATMENTS
DIVISION FURNACES

90%

RECOVERY
OF WASTE

20%

SPACES KEPT
GREEN



“ Always by our
Customers' side ”



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