

## ENVIRONMENTAL PERFORMANCE. The Calculation of Fonderie Palmieri's Carbon Footprint . Year 2024



### 1. INTRODUCTION AND DEFINITION OF CARBON FOOTPRINT

The **Carbon Footprint** is a standardised "measurement" methodology that quantifies the impact of a process, activity, or product on **climate change**. This indicator expresses the total quantity of **greenhouse gases (GHG)**, converted into carbon dioxide equivalent **CO2[eq]**, emitted in one or more phases of the product's life cycle (upstream emissions of company production, production-related emissions, downstream emissions of the production cycle). In the specific case under analysis, emissions relating to the entire

product life cycle were considered. A higher value indicates a greater contribution to the greenhouse effect and global warming.

Fonderie Palmieri Context:

Fonderie Palmieri calculated its Carbon Footprint for the year 2024. The calculation was carried out using an Excel-based software developed by Assofond, based on the principles of Life Cycle Assessment (LCA) and Carbon Footprint.

## 2. CALCULATION METHODOLOGY: THE EMISSION SCOPES

The Carbon Footprint calculation distinguished the company's emissions according to the three **Scopes** outlined in the international GHG methodology:

| Scope  | Emission Type            | Description  | Relevant Examples  |
|--------|--------------------------|--|--|
| Scope1 | Direct Emissions         | Emissions generated directly and internally by the company during its operations.                                    | Gas emissions from chimneys.   |
| Scope2 | Indirect Emissions       | Emissions connected to the production of energy purchased and consumed by the company.                               | Purchase of electricity.   |
| Scope3 | Other Indirect Emissions | Upstream and downstream emissions of the activity, not directly produced by the company but connected to it and due. | Production of raw materials (e.g., cast iron ingots) and waste disposal. |

### 3. RESULTS AND DETAIL (YEAR 2024)

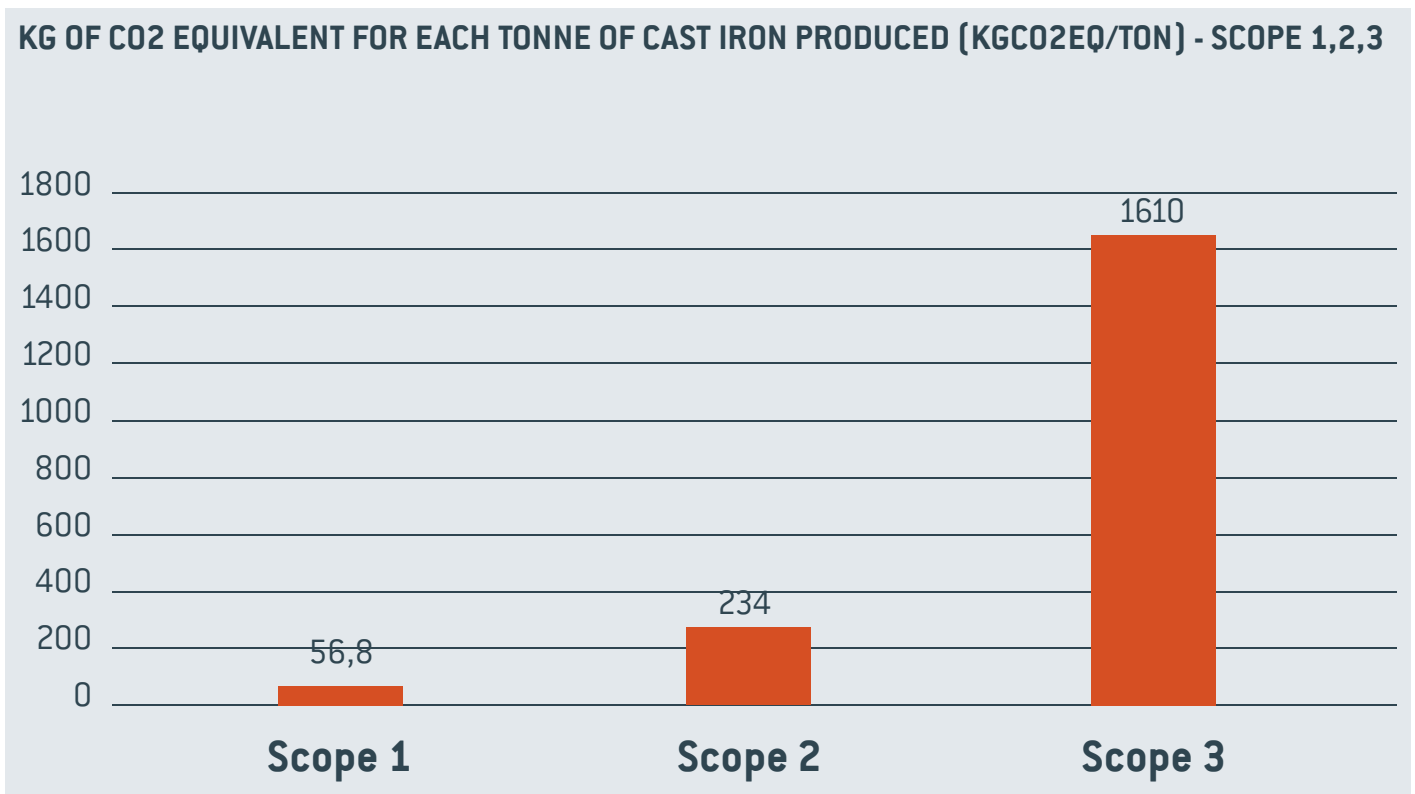
The overall Carbon Footprint value for Fonderie Palmieri in the year 2024 amounts to:

**1898,85 kgCO<sub>2</sub>eq/ton**

[Cumulative and total value calculated based on the production of an average casting].

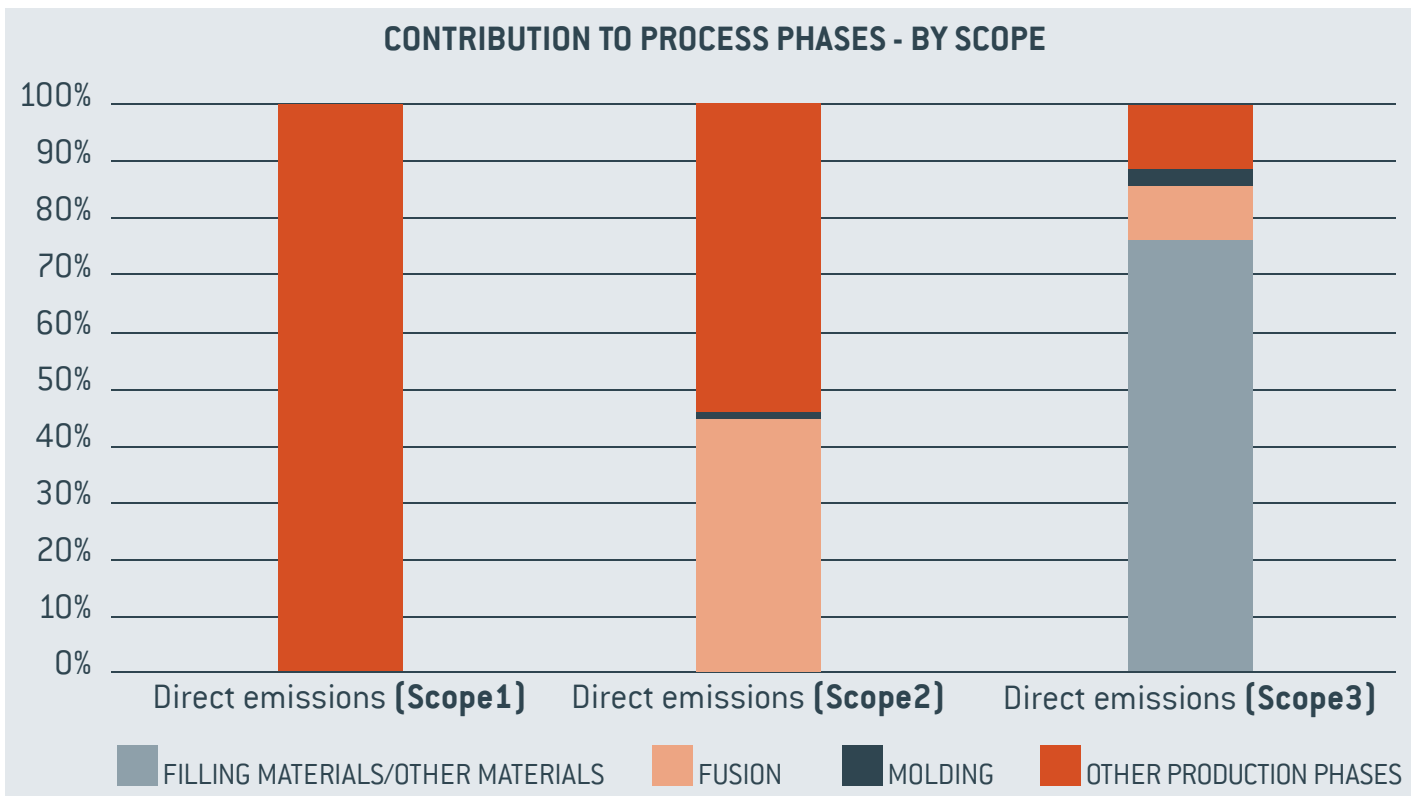
#### 3.1. DETAIL OF VALUES BY SCOPE

Below is the detail of the values expressed in kilograms of CO<sub>2</sub>[eq] equivalent for each tonne of cast iron produced



### 3.2. CONTRIBUTION OF PROCESS PHASES

The percentage breakdown highlights the contribution of individual production processes within each Scope:



### 4. COMMITMENT TO SUSTAINABILITY AND FUTURE PROSPECTS

The analysis identified energy as one of the aspects with the greatest impact on the company's CO2 Footprint. Sourcing from renewable sources is therefore a fundamental lever for significantly reducing this figure.

#### Sustainable Development Objectives:

- **Green Energy Purchase:** As it does not have direct physical sustainable sources (e.g., photovoltaic), Fonderie Palmieri is committed to purchasing certified electricity originating from renewable sources.
- **Total Coverage:** The corporate strategy aims to achieve, in the coming years, total coverage of energy needs through electricity supplies with Guarantee of Origin (GO) from renewable sources.