

# Environmental Footprint

## OBJECTIVES

To minimise our environmental impact on the Planet Earth.

## ACTIONS

Increasing knowledge of Circular Economy by involving university experts.  
Analysing consumption of certain categories of renewable and recycled resources.



**“An industrial economy that is conceptually regenerative and reproduces nature in actively improving and optimising the systems through which it operates”.**

*Source: Ellen MacArthur Foundation.*

The Lucefin Group exerts direct and indirect impacts on the environment. Monitoring and reducing such impacts at both the decision-making and operational levels remains a corporate priority to be actualised by:

- pursuing efficient selection and utilisation of raw materials and less impacting consumption modes;
- improving waste management;
- finding alternative enviro-friendly technologies and solutions for the work environment;
- stimulating awareness about this important issue both inside and outside the company.

This operational approach is necessary to root a resource management culture based on circular economy principles at all levels.

The Lucefin Group has already started the following **innovating processes:**

- partial reuse of blasting dust as an under-product (at the sites of Trafifix Berzo and Esine Production Unit);
- a filtering system of new design on the grinding machines at Trafifix Berzo Production Unit. The filter installed purifies the grinding emulsion that is recirculated in a closed system, thereby decreasing water consumption and improving material workability thanks to a cleaner emulsion. A decrease in waste generation also occurs as the grinding sludge built up at process end are drier and lighter.

**In the coming three-year period**, the company will work in view of:

- implementing circular economy logics in cooperation with university experts;
- evaluating the selection of recycled consumables (such as packaging items);
- analysing consumption of certain categories of renewable resources taking into account their use and disposal.

# Materials used

Technically speaking, steel, the input element in our production process, is not a renewable material as it is of mineral origin and comes from potentially exhaustible veins. However, it can be 100% recycled thanks to the technological level achieved in the steel circular economy chain.

Even though other materials used to make and package our products account for less than 1% of the materials used by the Group, the organisation has decided to report all materials used and define their origin either from renewable or non-renewable sources.

	2021	2022	2023
<b>TOTAL NON RENEWABLE MATERIALS USED (t)</b>	<b>224.934,14</b>	<b>212.240,20</b>	<b>162.900,94</b>
Steel (either processed or marketed)	223,598	211,005	161,910
Steel for packaging	1,184.16	1,070.33	829,52
Polyester	65,3	38,42	60,4
Chemical	40,94	42,14	30,8
Oils	45,74	84,31	70,12
<b>TOTAL RENEWABLE MATERIALS* USED (t)</b>	<b>356,11</b>	<b>430,61</b>	<b>308,4</b>
Wood	269	322,92	258,6
Paper	87,11	107,69	49,8
<b>TOTAL WEIGHT OF MATERIALS USED (t)</b>	<b>225,290.25</b>	<b>212,670.81</b>	<b>163,209.34</b>



\*Note: Renewable material - Material that comes from plentiful resources that are rapidly reconstituted through ecological cycles or agricultural processes. Therefore, the services obtained from these resources and other associated ones are not compromised and remain available for the future generations.

As to the Group production units, we assessed the origin of the work cycle input elements of our suppliers, either mainly from scrap (electric furnace) or iron ore (blast furnace).

This analysis provided the following results:

	2021	2022	2023
<b>TOTAL WEIGHT OF PROCESSED MATERIAL (Steel) t</b>	166,030	156,463	121,275
<b>TOTAL WEIGHT OF RECYCLED MATERIALS USED (Steel) t</b>	136,304	121,030	100,394
<b>PERCENTAGE OF RECYCLED MATERIAL USED</b>	82.10%	77.35%	82.78%



**100%**  
RECYCLABLE  
PRODUCTS  
DELIVERED

Note: The values shown are calculated based on the recycled material percentage declared by suppliers. Steel procurements of production sites are taken into account.

Generally speaking, value chain Sustainability is an aspect that will deserve increasing attention, also following the risk and opportunity analysis. In this sense, the Procurement and Sustainability Areas shall cooperate in building deep knowledge of steel suppliers, in terms of Carbon footprint, recycled material %, green steel production and actions implemented to decrease their impact on the environment.

# Waste Production and Significant Associated Impacts

The calculations shown below are taken from the waste management software installed in our Italian sites as of 2022. For sake of completion, the sites abroad supply their data taken from the waste management documentation prescribed.

COMPARED TO PREVIOUS REPORT, THE TYPES LISTED BELOW WERE REVIEWED FOR CLEARER CLASSIFICATION OF CORPORATE WASTE.

ALSO, THANKS TO INFORMATION SUPPLIED BY OUR PARTNERS, WE COULD DEFINE MORE PRECISELY THE WASTE AMOUNTS TO BE INCINERATED, WHICH IMPROVED THE DIVISION OF WASTE TO BE DISPOSED OF OR TO BE RECOVERED (NOT COMMITTED TO THE DUMP).

Waste type	2021		2022		2023	
	To be disposed of	To be recovered	To be disposed of	To be recovered	To be disposed of	To be recovered
Metals and minerals	11	7.659	11	7.824	13	6.078
Oils, sludge and solutions	244	11	245	26	318	21
Packaging (plastics, wood)	113	-	54	-	43	-
Production equipment	27	-	22	-	15	-
PPE	12	-	10	-	11	-
Other	11	-	1	-	14	-

Total weight in t.

Scrap is the main processing waste. It is managed in accordance with circular economy by sending it to recovery facilities.

Waste management is a critical aspect in Lucefin's environmental policies. The company is engaged in minimising dangerous waste and supports sending it to recovery facilities, which increases economic efficiency and decreases the environmental impact.



Waste type	2021		2022		2023	
	Dangerous	Not dangerous	Dangerous	Not dangerous	Dangerous	Not dangerous
Metals and minerals	1	7.670	4	7.831	1	6.089
Oils, sludge and solutions	254	-	226	44	320	19
Packaging (plastics, wood)	-	113	-	54	-	43
Production equipment	3	22	2	20	4	10
DPI	12	-	10	-	11	-
Other	-	11	-	1	1	14










*Note: urban solid waste is managed by the municipality and its municipalised companies; this is why they it is not quantified. Data collection and monitoring processes are connected with law obligations.*

WASTE TO BE  
RECOVERED  
**94%**



# Interacting with Water as a Shared Resource

There are no industrial drainage systems, but only domestic ones that flow into the town sewage system.

		 Heat treatment	 Fire ring	 Production facilities	 Civilian and sanitary use
TRAFILIX Berzo Production Unit	 Well	●			
	 Aqueduct		●	●	●
TRAFILIX S. Colombano Stainless Production Unit	 Aqueduct		●	●	●
TRAFILIX Esine Production Unit	 Well		●		
	 Aqueduct		●	●	●

Water consumption (in ML)

	2021	2022	2023
TRAFILIX Berzo Production Unit	3,93	3,85	2,94
TRAFILIX S. Colombano Stainless Production Unit	0,88	0,75	1,50
TRAFILIX Esine Production Unit	1,47	6,76	5,50



# Transport Means

Every year, the Group considerably invests in mobility by replacing part of its fleet with vehicles characterised by consumption efficiency.

Data about Euro-6 transport means considerably increased compared to 2020, when the **"Together We Change"** Sustainability project was launched.

To be underlined: the decrease in categories generating higher emissions.

Data will expectedly further improve in 2024, also thanks to recent investments among which the purchase of three Euro 6 tractors for fleet replacement.

Lucefin places its trust in innovation and is open to evaluate new partnerships in view of implementing alternative and potentially sustainable sources.



TRUCKS

	2021	2022
<b>TOTAL TRANSPORT MEANS TRUCKS</b>	<b>32</b>	<b>32</b>
<b>EURO 6</b>	63%	69%
<b>EURO 5</b>	28%	25%



FOCUS 2023

