

5TH COMMITMENT

Environmental
Sustainability

FUND CLIMATE ACTION

We persist in maintaining our Carbon Neutrality status offsetting our residual emissions through certified and verified carbon credits, which fund vital climate action projects all over the world that would not get funded otherwise.



Environmental
Sustainability
Highlights

52,083 t CO₂
offset

6,657 TOE
of energy saved in the
Calendar Year 2022 thanks
to the cogeneration and
trigeneration plants

264,176 m³
of industrial water recovered
thanks to the dedicated reuse plant

45% of waste
allocated for recovery

368 GJ
of electricity produced by
the photovoltaic plant at
the HQ in Milan



5.1 Actions for *Climate Change*

14 years ago, in 2009, our Company obtained the Carbon Neutrality certification for the very first time. The certification is awarded based on offsetting of greenhouse gas emissions through carbon credits deriving from certified and verified offsetting projects.

Acquiring carbon credits allows to fund vital climate action projects around the world that would not be financed otherwise, bringing tangible social benefit to the impacted territories. The Safety and Environment Policy we have adopted spotlights our values and principles, and sheds a light on all the activities carried out by our organisation, with particular regard to environmental protection and worker safety. The main aim is to mitigate and reduce the impact that production processes have on the environment through the implementation of a series of

actions concerning:

- the improvement of environmental efficiency and minimising environmental impact;
- constant training and briefing on the most important environmental issues;
- raising awareness and communication outside the Company.

Alcantara is created using a complex and still unrivalled production process that typically combines textile operations such as spinning, carding, dyeing and finishing, involving specifically developed

chemical processes. The entire cycle takes place in-house, at the Nera Montoro site. As shown in the diagram in the next page, the main processing phases include spinning, felting, greige product, dyeing and finishing processes. However, these processes can undergo changes depending on the type of use for which the product is intended. Generally speaking, the main environmental impacts of our production processes concern the emissions released into the atmosphere, water discharges and waste.

Alcantara® production processes



In order to limit potential negative impacts on the environment and the surrounding area, and in accordance with the provisions of our certified Environmental Management System, we have identified all the most significant environmental interaction

parameters relating to:

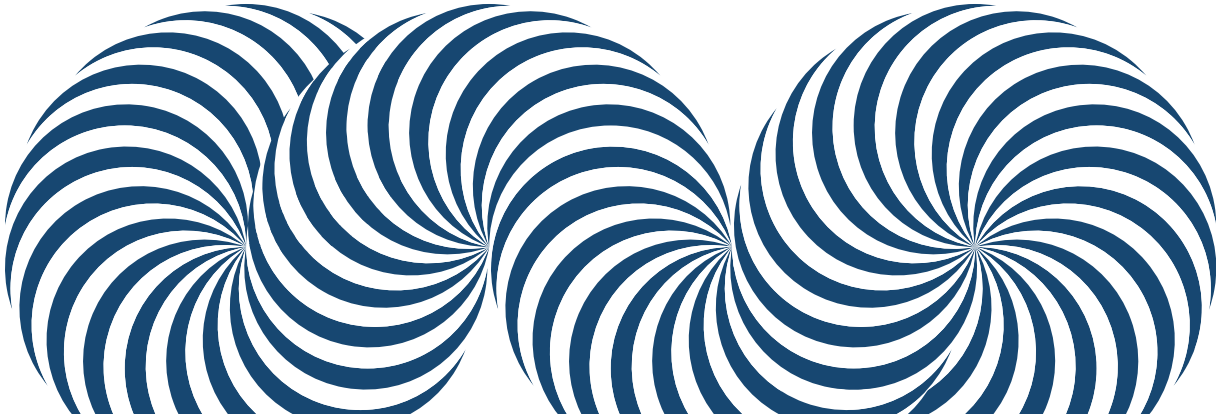
- storage and use of chemicals;
- atmospheric emissions;
- wastewater drainage;
- noise pollution;
- waste;
- energy;
- water resources;
- soil and subsoil protection.

These parameters, and the production processes on which they depend, are constantly monitored and evaluated as part of the management review established by the system.

CERTIFICATIONS

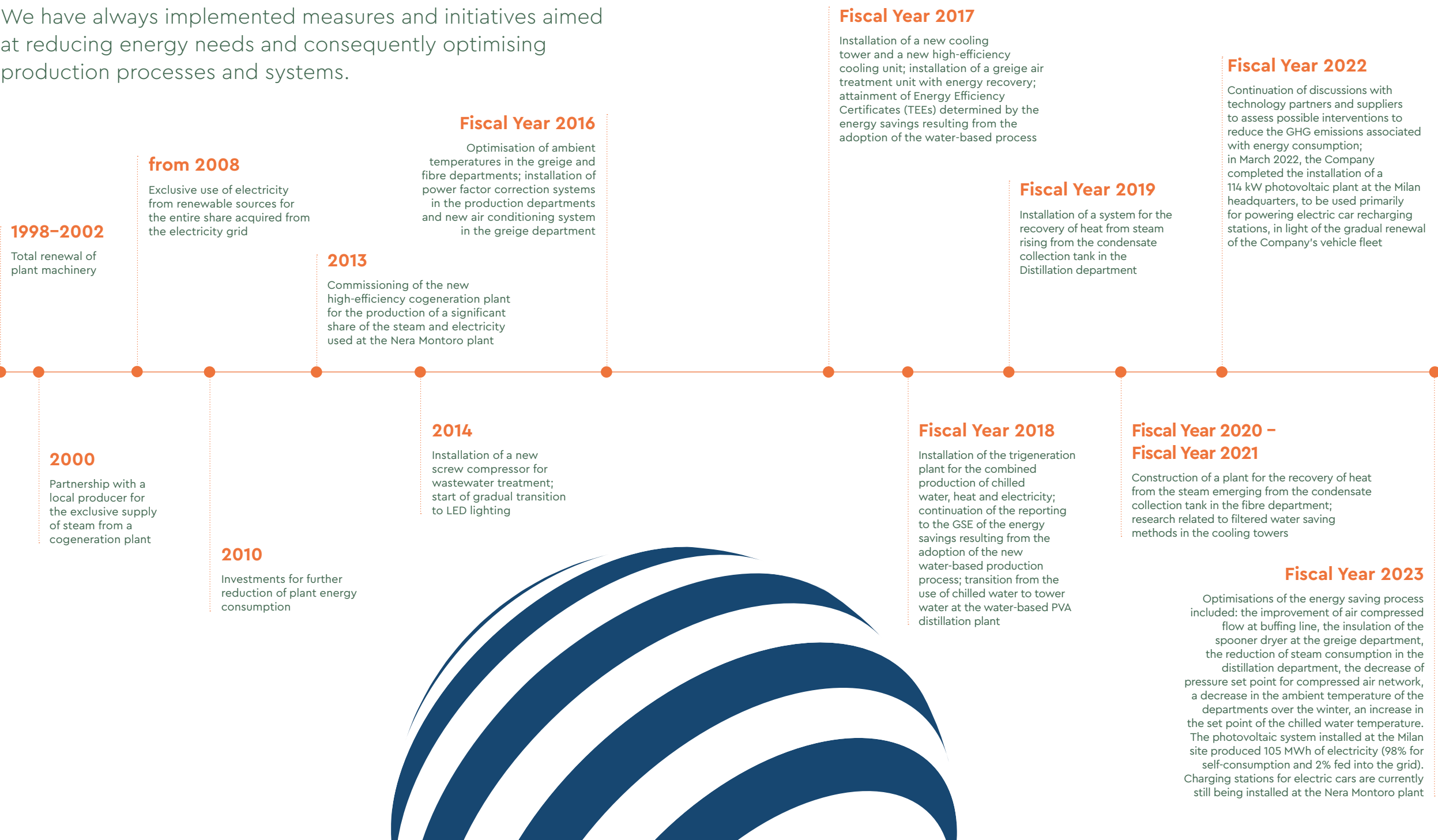
Our commitment to environmental issues is also demonstrated by the significant certifications we have obtained:

Certification of the Environmental Management System (EMS) since 2000, in accordance with UNI EN ISO 14001	Integrated Environmental Authorisation (IEA), valid until May 2025	Certified Carbon Neutral to PAS 2060 since 2009	Water Footprint report since 2014	ISO 50001 Energy Certification since 2017
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5.2 Energy Requirements and *Savings*

We have always implemented measures and initiatives aimed at reducing energy needs and consequently optimising production processes and systems.

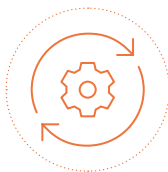


ENERGY EFFICIENCY

Since 2013, thanks to a contract with the company ENGIE, we have been operating a cogeneration plant for the supply of electricity and steam recognised by the GSE (Gestore nazionale Servizi Energetici – National Energy Services Manager) as a high-efficiency cogeneration plant in a User Efficiency

System. This plant is able to provide steam for a maximum contractual capacity of 48 t/h and electricity up to about 50,000 MWhe/year. In 2019, following the increase in energy consumption generated by the increase in production, we expanded the capacity of the plant by installing a trigeneration plant, in order

to maintain the availability of electricity produced inside the plant. This led to significant economic savings and reduced the impact of production on the environment.



Cogenerative endothermic engine: 2.67 MWe



Recovery boiler: 1,279 kWt



Absorption refrigerator: 1,392 kWf

The plant has a production capacity of 21,050 MWh of electricity per year, cogenerated without energy input:

- 10,697 MWh of thermal steam per year;
- 8,174 MWh of refrigeration per year.

Over the last three years, this plant has

allowed us to obtain about 900 Energy Efficiency Certificates (EECs). In the Calendar Year 2022, compared to the separate production of electricity, heat and refrigeration, we avoided the emission of 2,526 tons of CO₂ and saved 12,483 MWh of energy.

TRIGENERATION PLANT	UM	2022
Natural Gas saved	MWh	12,483
	TOE	1,074
CO ₂ avoided	tons	2,526

In addition, following the positive outcome of the Environmental Impact Assessment in May 2021 and after obtaining ENGIE's authorisation, the construction of an additional cogeneration plant has been planned and will begin soon.

In the Fiscal Year 2023, the cogeneration plant supplied 214,576 MWh of thermal steam and 46,632 MWh of electricity (53% of the total electricity needs of the Nera Montoro plant), providing considerable energy, environmental and economic benefits. As a matter of fact, the cogeneration plant has reduced energy consumption by about 5,200 tons of oil equivalent per year, and has generated considerable economic savings, due to:

- high energy efficiency thanks to next generation technologies;

- cogeneration of around 13 t/h in simple recovery (zero-cost steam produced by hot vapour);
- benefits derived from white certificates, i.e. negotiable documents certifying that savings in the end-use of energy have been achieved through measures and projects directed at improving energy efficiency (one certificate is awarded for every Ton of Oil Equivalent (TOE) saved);
- tax benefits for the methane supplied to HEC qualified power stations;
- electricity bill reductions thanks to the SEU system

declaration, made possible because the entire electricity distribution network produced by Turbogas is internal to the plant.

The following table, which shows the figures for each calendar year, quantifies the actual benefits generated by the cogenerator:

- a significantly reduced energy bill in economic terms;
- energy independence and a more reliable supply;
- no capital used to construct the plant, leaving it available for the Company's core business.

COGENERATOR BENEFITS ¹												
	UM	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
Saved gas	MWh	51,034	61,148	58,166	56,661	66,329	71,018	66,030	53,512	63,152	64,913	552,536
	TOE	4,389	5,259	5,002	4,873	5,704	6,108	5,679	4,602	5,431	5,583	52,630
Benefits	EECs	5,780	6,926	6,588	6,420	7,510	8,039	7,474	6,058	7,148	7,350	69,293
CO ₂ avoided	tons	10,399	12,499	11,921	11,315	13,418	14,370	13,301	10,833	12,780	13,136	123,972

¹ Figures are calculated by ENGIE and validated by GSE.

ENERGY CONSUMPTION

Energy consumption recorded in the commercial and administrative offices at the Milan headquarters is related for the most part to the use of:

- natural gas for heating rooms;
- electricity for normal office activities, cooling rooms and the operation of the heating plant.

The Nera Montoro production site, on the other hand, consumes:

- natural gas for direct heating,

for the production of steam at a pressure of 6 bar, and for the canteen;

- steam at a pressure of 6 bar, guaranteed by the cogeneration plant and the new trigenerator inside the plant;
- electricity, mainly used for the production process;
- diesel fuel.

The energy peaks exceeding the capacity of the installed production plants were

covered by the national high voltage (HV) grid. The medium voltage (MV) supply is used only if the HV grid is down or under maintenance. Both supplies are derived from renewable sources. In order to calculate Scope 1 emissions, we also monitor the fuel consumption of the corporate fleet across both sites.

ENERGY CONSUMPTION WITHIN THE COMPANY	TOTAL TJ FY 2021	TOTAL TJ FY 2022	TOTAL TJ FY 2023
MILAN			
Natural gas	2.256	1.246	0.560
Of which: for heating	2.256	1.246	0.560
Electricity	1.748	2.338	2.314
Of which: Purchased	1.748	2.338	1.946
Of which: Self-produced from photovoltaic plant	-	-	0.368
Diesel	0.079	1.520	1.144
Of which: for business travel by company cars	0.079	1.520	1.144
NERA MONTORO			
Natural gas	70.458	85.594	79.556
Of which: for the canteen	0.296	0.46	0.278
Of which: for the productive plant	70.162	85.548	79.278
Diesel	0.227	0.420	0.391
Of which: for production processes	0.131	0.131	0.094
Of which: for business travel by company cars	0.096	0.243	0.297
Electricity	278.329	318.503	318.461
Of which: self-produced from cogeneration plant	223.356	248.114	235.866
Of which: purchased from national grid	54.973	70.237	82.594
Other	721.067	839.495	804.640
Steam	721.067	839.945	804.640

The total electricity produced from renewable sources in the Fiscal Year 2023 amounts to 84.908 TJ, broken down as follows:

ELECTRICITY FROM RENEWABLE SOURCES	TJ FY 2023
Wind	83.037
Solar	1.267
Gaseous biomass	0.605
TOTAL	84.908

CONSUMPTION OUTSIDE OF THE COMPANY	MJ
Energy to transport products and by-products	21,465,948
Energy to transport raw materials	24,915,548
Energy on business air travel	1,798,414
Energy on employee commutes	25,919,901
TOTAL CONSUMPTION OUTSIDE OF THE COMPANY	74,099,811



5.3 Carbon *Neutrality*

Alcantara was one of the first industrial companies in the world, and the first in Italy, to become Carbon Neutral in 2009. The certification was awarded by TÜV SÜD, an authoritative independent international certification body with over 1,000 offices worldwide, which has granted more than 600,000 certifications in the quality, energy, environment, safety and product fields.

Financing climate action with certified carbon credits is a key part of our strategy, testifying to the Company's willingness to promote and implement a sustainable and innovative business strategy.

Every year, we measure the carbon dioxide emissions attributable to our business activities and product, from the beginning of the production process (raw materials included) to the end of the product's useful life.

Residual emissions are offset, as current technology does not allow to eliminate them yet. This allows us to provide our clients with a **Carbon Neutral product, according to the PAS 2060:2014 standard.**

RESIDUAL GHG EMISSION FY 2023 ²	Tons of CO ₂ e	%
Diesel	7.008	0.01%
Use of assets and services	33.461	0.06%
Business trips	242.123	0.46%
External processing	312.414	0.60%
Water	584.562	1.12%
Electricity	714.115	1.37%
Product use and end of life	1,403.899	2.70%
Work-home commute	1,867.591	3.59%
Product transport	2,178.151	4.18%
Waste transport and disposal	4,628.124	8.89%
Natural gas	4,680.051	8.99%
Raw material (including transport)	35,431.529	68.03%
TOTAL RESIDUAL GHG EMISSIONS	52,083.028	100.00%

² These are the residual GHG emissions, downstream of the existing compensations in the supply chain and the reduction actions implemented. These emissions are then offset directly by Alcantara through carbon credits deriving from certified and verified offsetting projects.



The total emissions offset amount to 52,083.028 tons of CO₂e and consist of corporate emissions, excluding cogeneration plant emissions, offset according to the EU-ETS system pursuant to the PAS 2060:2014 standard, and of those compensated by suppliers, related to raw materials, outsourced processing, and transportation.

CO₂ OFFSETTING PROJECTS

Thanks to the quantification of emissions for each Fiscal Year, the Company is able to offset the residual CO₂ emissions through the financing of certified and verified offsetting projects. These are validated and tested by an accredited

third party (following the rigorous audits that all offsetting projects undergo), and help to improve the planet's economic, social and environmental conditions (see Deep Dive at page 156).

Credits acquired during the Fiscal Year 2023 are related to the production of electricity from wind power and hydroelectric sources. **These initiatives led to a total of 52,083 tons of CO₂ equivalent offset.**

PROJECT	TYPE	STANDARD	COUNTRY	QUOTAS	%
Huaneng Liaoning Fuxin	Wind	CDM	China	11,724	23%
Asahan 1 Hydroelectric	Hydro	CDM	Indonesia	10,657	20%
Ba Thuoc 2 Hydropower	Hydro	CDM	Vietnam	29,703	57%

Huaneng Liaoning Fuxin Phase II Wind Farm Project, China

				TYPE OF PROJECT	COUNTRY	QUOTAS	%
				Wind	China	11,724	23%


The proposed project is located in Fumeng County, Fuxin City, Liaoning Province. The project consists of 200 wind turbines with an aggregate capacity of 300MW. The wind turbines are estimated to generate 639,490 MWh of electricity annually and the operation of the project will lead to a reduction in emissions of approximately 659,993 tonnes of CO₂e per year during the first crediting period. The proposed project thus helps the local government in promoting economic development

and improving air quality. The project assists China in stimulating and accelerating the commercialisation of grid-connected wind power technologies and markets, which are important goals for the Chinese government. The project therefore helps reduce GHG emissions compared to the high-growth coal-dominated business-as-usual scenario. Furthermore, the project improves air quality and local livelihood, and promotes the development of the sustainable renewable energy industry.

The project promotes local sustainable development through:

- the reduction of CO₂, SO₂ and NOx emissions;
- the creation of local employment opportunities during the assembly and installation stages of wind turbines, and then later to allow them to operate;
- the reduction of other particulate pollutants resulting from the fossil fuel fired power plants compared with a business-as-usual scenario.

Asahan 1 Hydroelectric Project, Indonesia

				TYPE OF PROJECT	COUNTRY	QUOTAS	%
				Hydro	Indonesia	10,657	20%

The project is located in Indonesia's North Sumatra province and uses the flow of the Asahan River, which in turn receives water from its own natural source, Lake Toba. The main objective is to provide modern, reliable and sustainable power to the Sumatera Grid, located on the island of Sumatra.





This network is currently carbon-intensive and highly impactful, and it still is not connected to the power grid of other islands, e.g. Java, Kalimantan.

The project promotes local sustainable development through:

- +180 MW of power capacity

- +600 new working opportunities for local communities
- Construction of resilient infrastructures to enhance innovation
- +940,000 tCO₂e annual reduction and concrete contribution to mitigation of climate changes.

Ba Thuoc 2 Hydropower Project, Vietnam

				TYPE OF PROJECT	COUNTRY	QUOTAS	%
				Hydro	Vietnam	29,703	57%

The Ba Thuoc 2 Hydropower Project activity entails the construction and operation of a run-of-river hydropower project that utilises water resources from the Ma River in the Thanh Hoa Province of Vietnam. This run-of-river hydropower plant has a small run-of-river reservoir and consists of a weir and spillway dam, a penstock, a powerhouse (containing turbines and generators) and a tailrace.

This project will decrease the combustion of thousands of tonnes of fossil fuels which are used to generate electricity for the Vietnam electricity grid, resulting in emission reductions. In doing so, this project will help preserve non-renewable resources by promoting the use of renewable resources, where the contribution of renewable energy to overall electricity reduces year by year.

The project promotes local sustainable development through:

- 80MW installed capacity
- 284,504 MWh approximal generation of power to the national grid annually by using water turbines
- 137,860 tCO₂e annual estimated reduction in emissions during the first seven-year crediting period
- new working opportunities for local communities.

LIFE CYCLE ANALYSIS

In the Fiscal Year 2023, the annual analysis of the product life cycle 'from cradle to grave', which was conducted for the first time in 2011, was carried out following the ISO 14064-1 and the Greenhouse Gas Protocol – Product Life Cycle Accounting and Reporting Standard. The assessment also complies with the ISO 14040 Environmental Management – Life Cycle Assessment – Principles and framework and with the ISO 14044 Environmental Management – Life Cycle Assessment – Requirements and guidelines relating to the assessment of product greenhouse gas emissions. In particular:

- the methods used to perform the LCA are consistent with the international standard and with the technical specification applied;
- the methods used to perform the LCA are valid from a scientific and technical point of view;
- the data used are appropriate and reasonable in relation to the objective of the study;
- the study report is transparent and consistent.

The subsequent offsetting of residual carbon dioxide emissions is carried out in accordance with the PAS 2060 standard.

Two reports are issued:

- a so-called 'corporate' Green House Gases (GHG) emissions report, in accordance with the directives of the UNI ISO 14064-1:2018 standard. Operational boundaries include all direct emissions (Scope 1) and indirect emissions associated with the generation of electricity and purchased steam (Scope 2). They also include indirect emissions (Scope 3) not attributable to the product and, in particular, those related to:
 1. employee business trips and employee transport from/to the workplace;
 2. e-mail and conference call;
 3. leased assets;
 4. direct and indirect activities for the production and transportation of raw materials, tertiary processing activities on the finished product, the production and transportation of the finished product to the gates of the receivers in the next stage of processing;

5. packaging, forming and washing at the industrial user's place;
6. end of life (landfill, incineration, recycling);
7. waste transportation and disposal.

- a GHG emissions report attributable to the product in accordance with the Product Life Cycle Accounting and Reporting Standard of the Greenhouse Gas Protocol. The life cycle includes:
 1. Scope 1 and Scope 2 emissions associated with the activities of the Nera Montoro production site, considering the cogeneration plant within the boundaries of the site;
 2. Scope 3: direct and indirect activities for the production and transport of raw materials, outsourced processing activities on the finished product, and the production and transport of the finished product to the gates of the recipient for the next stage of processing;
 3. packaging and shaping at industrial users;
 4. end of life (landfill, waste-to-energy, recycling).

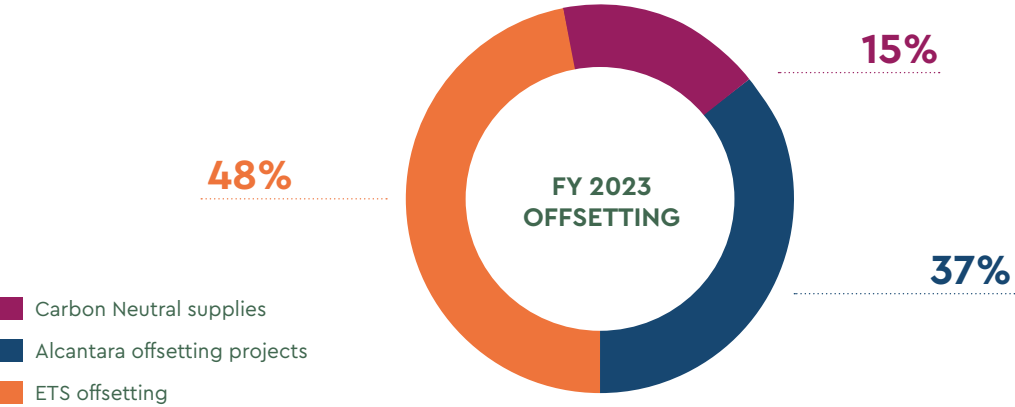
CALCULATION OF EMISSIONS

For the high-efficiency cogeneration plant, the impact in terms of CO₂ in the Fiscal Year 2023 equalled to 66,920.51 tons. These were fully offset through the European Union's Emissions Trading Scheme (EU-ETS), aimed at reducing greenhouse gas emissions in the industrial sectors with the greatest impact on climate change.

With regard to the indirect emissions associated with electricity drawn from the national grid, falling within the Scope 2 emissions, the relative contribution (evaluated using Sima Pro software) is minimal, since all the energy drawn from the grid is produced by plants that exploit renewable energy sources. The origin of the electricity drawn from

renewable sources is certified through the purchase and cancellation of guarantee of origin certificates (GO certificates). Values of carbon dioxide emissions, verified by TÜV SÜD and expressed in tons of CO₂ equivalent are summarised in the table below. Note that categories 3, 4 and 5 equal Scope 3 emissions calculated in the Fiscal Years 2021 and 2022.

RESULTS OF CORPORATE INVENTORY (ton CO ₂ e)	FY 2021	FY 2022	FY 2023
Total category 1 – Direct emissions	65,864	74,181	71,715
Total category 2 – Indirect GHG emissions from imported energy	422	522	714
Total category 3 – Indirect GHG emissions from transportation			6,245
Total category 4 – Indirect GHG emissions from product used by organisation	31,680	56,804	57,373
Total category 5 – Indirect GHG emissions associated with the use of products from the organisation			3,880
Total Corporate	97,966	131,507	139,927
Supplier offsetting	18,107	20,171	20,924
Electricity and Thermal Energy offsetting from ENGIE Cogeneration (EU Allowances)	61,743	69,059	66,921
Total tons of CO ₂ to be offset/neutralised (total corporate net of carbon neutral supplies – ETS offsetting)	18,116	42,277	52,083



Compared to the Fiscal Year 2022:

- there was a 3.3% decrease in Category 1 – Direct emissions, despite the 3.0% increase in production volumes, thanks to the energy saving activities described in chapter 5.2;
- total corporate emission increased due to the alignment with ISO 14064-1:2018 and related non-exclusion of by-products (9,376 tons CO₂e), whose contribution was deducted in the past years. If the same criterion of deducting

by-products had been considered for this fiscal year as well, the total corporate emissions would amount to 130,551 ton CO₂e, i.e. with a minor reduction against past fiscal years despite the increase of production volumes;

- as reported in the Fiscal Year 2022, in comparison to the Fiscal Year 2021 and previous years, an increased consumption of energy was registered due to air conditioning at the new premises, built as part of the project to increase production capacity

(the volume of plant buildings increased by approximately 25% over the Fiscal Year 2021).

The table below provides data regarding other emissions of pollutants into the atmosphere from IEA authorised emission points (abatement installation flues, hoods, etc.). The pollutant SO₂ has been replaced with dust, as this is more significant given the commissioning of important new emission points in the greige department, and current dust emission reduction projects.

OTHER ATMOSPHERIC EMISSIONS	UM	FY 2021	FY 2022	FY 2023
NOx (nitrogen oxides)	Kg	2,553	18,965	3,887
Dust	Kg	532	608	1,104
VOC (Volatile Organic Compounds)	Kg	6,157	5,635	6,926

CARBON DISCLOSURE PROJECT

Alcantara is reporting its environmental and GHG emission performance through the Carbon Disclosure Project (CDP). CDP is a not-for-profit organisation that runs the global disclosure system for investors, companies, cities, states and regions, to manage their environmental impacts (see <https://www.cdp.net/en/info/about-us>).

Each year, the CDP analyses the data reported by thousands of companies to map trends, model emissions data, pinpoint emerging best practices and evaluate performances. Alcantara S.p.A. data are available for stakeholders upon request at www.cdp.net.

Alcantara received a “B-” ranking for CDP 2022, and is amongst 52% of companies that reached Management level in the “Other materials” Activity Group.

DEEP DIVE⁴: FINANCING CLIMATE ACTION
WITH CERTIFIED CARBON CREDITS

To meet the Paris Agreement 1.5°C objective, the world needs to reach net-zero emissions by 2050, achieve a reduction of 43% in comparison with 2019 levels by 2030⁵, and make sure global emissions peak in 2025. The current global actions are far from sufficient and the Intergovernmental Panel on Climate Change (IPCC) and the global scientific community expects that emissions cuts will miss the 1.5°C target by a large margin⁶. Current levels of climate investment need to increase at least sevenfold by the end of this decade: governments cannot achieve this alone and the private sector plays a key role in this. The Voluntary Carbon Market remains one of the most viable, near-term, credible options for companies to accelerate their climate action beyond their value chain and measurably reduce global emissions. Buying carbon credits allows businesses to fund vital climate action projects around the world that would not get funded otherwise. These climate action projects don't just reduce emissions, they also offer a host of social benefits such as improving health, offering better education and building sustainable communities.

HOW DOES IT WORK?

Around the world, climate action projects reduce or avoid (i.e. prevent the release of) greenhouse gas emissions. These certified projects generate emission savings that translate into 'carbon credits': each credit is a certificate with a unique serial number, vouching that 1 metric tonne of carbon dioxide equivalent (1 tCO₂e) has been avoided or reduced. Companies can then buy these carbon credits to compensate for the equivalent number of emissions to those in their carbon footprint. Every carbon credit is stored in a public registry; as soon as it is sold, it is removed (or 'retired'), to make sure that it can only be used once, so there is no risk of double counting. High-quality carbon credits have gone through a strict verification: this is because the project they come from is registered with a world-class verification standard, approved by the ICROA (the organisation promoting best practices within the Voluntary Carbon Market), like the Clean Development Mechanism, Verra or the Gold Standard. This standard sets strict criteria and arranges independent reviews to vet the project, making sure the carbon reduction is permanent and additional to what would happen without the project being in place. It also requires

the project to support sustainable development in the Global South, as populations located there are the most vulnerable to climate change.

A KEY TOOL TO ACCELERATE COMPANIES' CLIMATE STRATEGY

When it comes to climate finance, there is no time to lose. Of course, the single most important action a company can take to combat climate change is to reduce its carbon footprint within its value chain. But buying carbon credits isn't separate from this strategy, it's a key part of it. Any company operating today, even the most committed to decarbonising, will be left with leftover emissions – officially known as 'unavoidable' or 'residual' emissions. Compensating residual emissions by buying the equivalent number of certified carbon credits means that a company is doing everything in their power for the environment. This is recognised by the Paris Agreement, particularly in Article 6.4, and by the Science Based Targets initiative (SBTi), which recommends that companies 'take immediate action above and beyond their science-based targets to contribute to reaching global net-zero through beyond value chain mitigation'.

⁴ This deep dive has been written in collaboration with Carbonsink, a South Pole Company.
⁵ The evidence is clear: The time for action is now. We can halve emissions by 2030, IPCC.
⁶ Climate Change 2022: Mitigation of Climate Change, IPCC.



5.4 Water *Requirements*

The primary source of water for the industrial operations at the Nera Montoro plant is the Nera River.

River water is used for various purposes including firefighting, irrigation, sanitary and industrial purposes and is used above all in dyeing the finished product.

The wastewater produced by these processes is then sent to an internal treatment plant. Other sources used include groundwater wells and the municipal supply. We are particularly careful with regard

to the quantity of drinking water that is drawn from the municipal supply, in order to enable greater consumption by local communities and new production sites in the area.

WATER WITHDRAWAL, DISCHARGE AND CONSUMPTION

In the Fiscal Year 2023, we also supplied ENGIE with the industrial water necessary for the production of steam, for a total of 264,176 m³. The values in the table (both withdrawal and discharge) do not include

the water managed by ENGIE's Turbogas plant. Overall, in the Fiscal Year 2023, the amount of water withdrawn equalled to 2,232,364 m³. As detailed in the table below the main sources are the Nera River,

wells and the municipal supply. 100% of the water used is withdrawn from and discharged in water-stressed areas.

WATER WITHDRAWAL BY SOURCE	UM	FY 2021	FY 2022	FY 2023
Nera River via artificial reservoir	m³	1,626,994	1,852,513	2,150,411
Nera River direct withdrawal	m³	-	808	49,590
Plant groundwater wells	m³	59,666	53,258	30,616
Terni Province municipal supply	m³	2,957	2,193	1,747
TOTAL WITHDRAWALS	m³	1,698,617	1,908,772	2,232,364
Water discharge into the Nera River	m³	1,667,748	1,945,777	2,001,383

TOTAL WITHDRAWAL FROM ALL AREAS BY SOURCE	UM	FY 2021	FY 2022	FY 2023
Surface water	MI	1,627	1,853	2,200
Groundwater	MI	60	53	31
Seawater	MI	-	-	-
Water produced	MI	-	-	-
Third-party water resources	MI	-	2	2
TOTAL WITHDRAWALS	MI	1,690	1,909	2,232
of which: fresh water (≤1,000mg/l total dissolved solids)	MI	1,690	1,909	2,232
of which: other types of water (>1,000mg/l total dissolved solids)	MI	-	-	-

TOTAL DISCHARGES FROM ALL AREAS BY SOURCE	UM	FY 2021	FY 2022	FY 2023
Surface water	MI	1,668	1,946	2,001
Groundwater	MI	-	-	-
Seawater	MI	-	-	-
Third-party water resources	MI	-	-	-
TOTAL	MI	1,668	1,946	2,001
of which fresh water (≤1,000mg/l total dissolved solids)	MI	1,668	1,946	2,001
of which other types of water (>1,000mg/l total dissolved solids)	MI	-	-	-

WATER CONSUMPTION	UM	FY 2021	FY 2022	FY 2023
Total water consumption in all areas	MI	22	(37)	231
Total water consumption in all water-stressed areas	MI	22	(37)	231
Change in water storage (if this appears to have a significant impact on water use)	MI	-	1	-

Wastewater from the production process and on-site processes, as well as the first rainwater from the discharge area at the warehouse, are subject to purification. The treated water is delivered via a single discharge into the surface water body, that is, into the Nera River. The discharge point is located in the protected area of Lake San Liberato and, in addition to being authorised and controlled by the provincial administration of Terni, it is

managed in compliance with legal obligations. For all the parameters relating to the authorised discharges (including the presence of hazardous substances pursuant to Tab. 5, Annex 5 to Part III of Italian Legislative Decree 152/06, as subsequently amended), checks are carried out by qualified external laboratories, in compliance with the requirements of the Integrated Environmental Authorisation. It should be noted that the

wastewater quality parameters are well below the limits established by the current legislation, keeping values within an extremely safe range. In addition, the acute toxicity tests carried out on the wastewater have always given results below the set limits. The table below shows the average values of the main pollutants with the greatest environmental impact, compared with the legal limits.

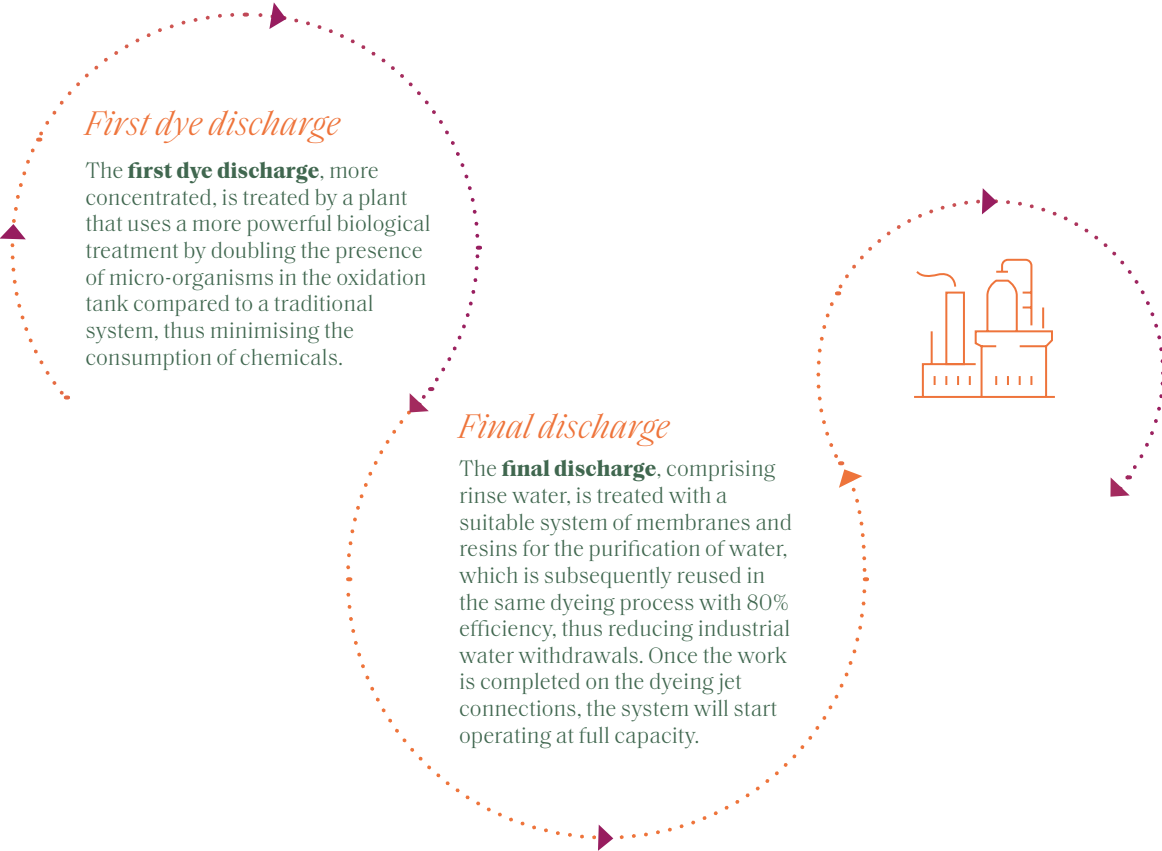
QUALITY OF INDUSTRIAL WASTEWATER: ANNUAL AVERAGE VALUES FOR THE MAIN POLLUTANTS												
Parameter	pH	Suspended solids	BOD ₅	COD	Chrome VI	Nitrous nitrogen	Ammoniacal nitrogen: NH ₄	Total surfactants	Organic nitrogen solvents	Chlorinated solvents	Escherichia Coli	Acute Toxicity Assay
UM	-	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	UFC/100ml	-
Legal limits for discharge into surface water	5.5–9.5	80	40	160	0.2	0.6	15	2	0.1	1	5,000	≤ 50% tot
Average value in 2019–2020 test	8.15	9	4.3	<15	<0.03	0.04	<0.01	0.4	<0.1	<0.1	9.0	Acceptable
Average value in 2020–2021 test	7.69	2.1	<5	3.98	<0.01	<0.01	<0.01	0.2	<0.05	<0.5	0.0	Acceptable
Average value in 2021–2022 test	8.31	2.4	10.5	23.4	<0.01	<0.05	<0.01	0.46	<0.05	<0.5	0	Acceptable
Average value in 2022–2023 test	8.4	1.5	8.1	27.5	<0.01	<0.05	0.11	0.88	<0.05	<0.5	0	Acceptable

WATER TREATMENT INITIATIVES

Phyto-treatment allows for the use of plant systems to reduce or eliminate the transfer of sludge leachates from the internal landfill outside of the plant. The intervention carried out will allow for an overall environmental improvement of the landfill area. It will also interrupt the cycle that leads to the production of

waste and will open up new destinations for the biological sludge produced by the water treatment system. After eleven years the phyto-treatment plant has proven its usefulness with regard to its initial objectives, by managing of sludge leachates in safe and legal conditions.

Following few adverse events (fungus and frosts), with the aim to restore the full functionality of the vegetation, Alcantara appointed the University of Tuscia to prepare a replanting project, which is now in progress, as it was approved by Regione Umbria.



In the Fiscal Year 2021, two new plants were installed for the treatment of water discharges from dyeing jets. The water reuse plant downstream of the wastewater treatment plant has been operational since January 2021. As at 31 March 2023, it had recovered 141,117 cubic metres of industrial water. Among the many initiatives we have launched, we continue to

upgrade our water treatment plants in order to increase the recovery and reuse of water in our processes. After the building of a plant to treat the separate water flows from the dyeing cycle, based on cutting-edge MBR technology, we agreed to supply a plant for the treatment of wastewater from the greige process. This is aimed at the recovery and reuse of the acid

aqueous solution, following separation of the surfactants, thanks to the specific experience and know-how developed in this area. The plant's structure involves a combination of ultrafiltration and nanofiltration, with a physical pre-treatment section. The compact, highly automated plant will come into operation in June 2023.

WATER FOOTPRINT

Since 2011, we have applied the LCA (Life Cycle Assessment) methodology, in line with the ISO 14046 standard, to assess our water footprint and the potential environmental impacts of the life cycle of production from cradle to grave. It thus includes all production activities and processes (water consumption, electricity and thermal energy, waste production, etc.), both upstream (raw materials, transport) and downstream (distribution, use, end of life).

The specific method used for the water footprint is the Available Water REmaining (AWARE) method (Boulay et al., 2016), which represents the remaining water available per area after human and ecosystem demand has been met. It therefore involves the assessment of the potential for water deprivation for both humans and ecosystems, assuming that the less water is available, the greater the likelihood that another user will be deprived. The greatest contributions to the water

footprint are raw materials, the plant's direct water consumption and auxiliary materials. The table below shows the results of the evaluation of the AWARE water footprint, calculated in the Fiscal Years 2022 and 2023. It should be noted that data for the Fiscal Year 2022 were recalculated using the AWARE 1.05 method to enable comparison with the Fiscal Year 2023, calculated using the same method.

WATER FOOTPRINT - AWARE 1.05 Method	(m³ eq)		(m³ eq/Kg)		(m³ eq/m²)	
	FY 2022	FY 2023	FY 2022	FY 2023	FY 2022	FY 2023
Alcantara average total	58,591,412	66,553,880	28.3	31.0	9.2	10.1
Alcantara average dyeing process only ⁷	29,005,208	27,488,086	14.0	12.8	4.5	4.2
Alcantara average excluding dyeing process ⁸	29,586,204	39,065,794	14.3	18.2	4.6	5.9

⁷ To evaluate the AWARE water footprint of the Alcantara dyeing process, the following items were included: water consumption, equal to 75% of the consumption of total soft water produced; 100% of the raw materials associated with dyeing; 75%-100% of the chemicals used for water treatment; 50% of the electricity consumption used for water treatment; and electricity and thermal energy consumption related to the dyeing department.
⁸ The value has been calculated by subtracting from the total WSF that related to the dyeing process only.

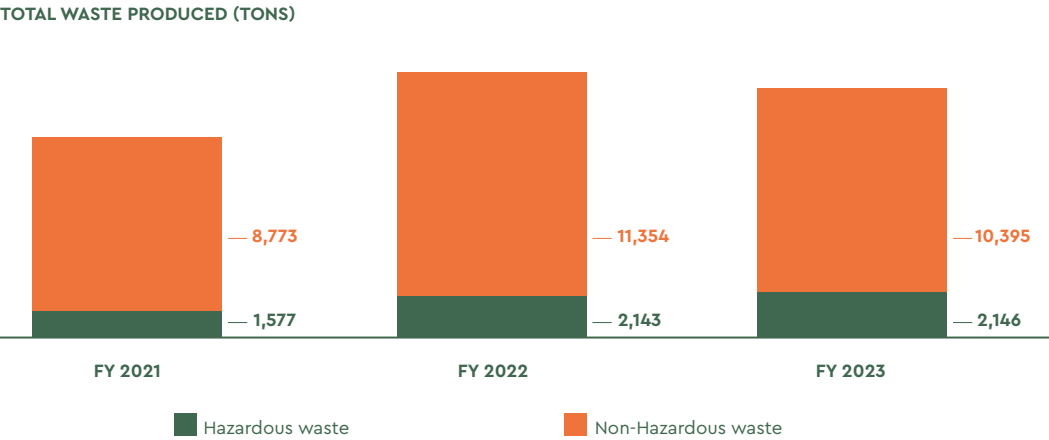
5.4 Waste *Management*

Our waste is subject to off-site recovery or disposal.

In the Fiscal Year 2023, we generated 12,541 tons of waste; 83% of the waste produced was non-hazardous. The main types of non-hazardous waste

were sludge from on-site wastewater treatment (75% of non-hazardous waste), waste chemicals (25%). Hazardous waste represents 17% of the total, of which 61% refers to

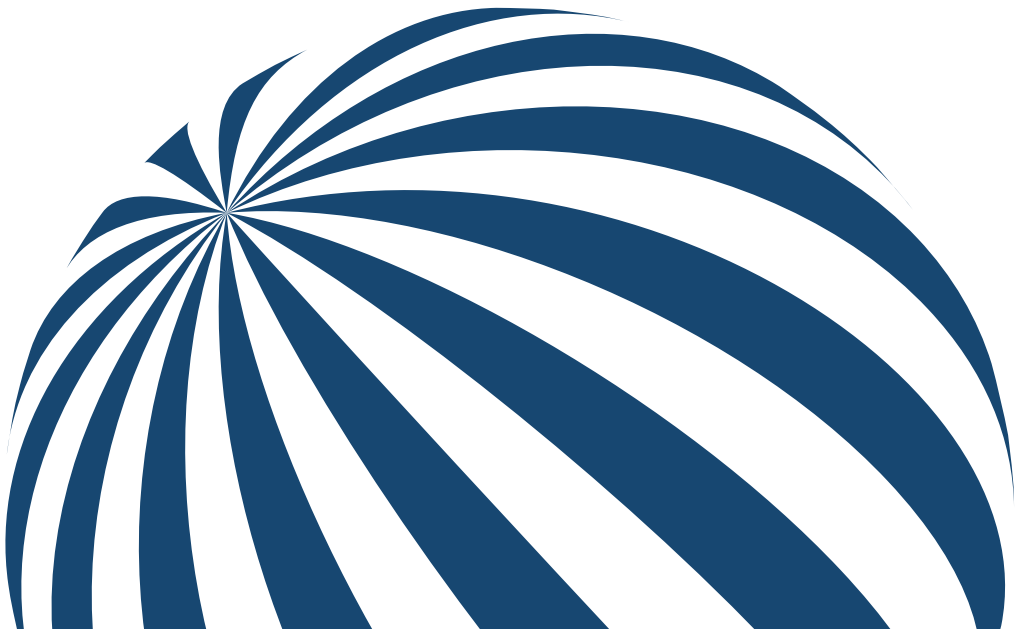
organic waste containing hazardous substances, 17% to filter cakes and spent absorbents and, lastly, 21% to packaging containing hazardous substance residue.



WASTE FY 2023	UM	QUANTITY (TONS)	OF WHICH DIVERTED FROM DISPOSAL		OF WHICH DIRECTED TO DISPOSAL	
Total waste generated	Tons	12,541	5,674	Recovery operations	6,866	Disposal operations
Of which: Hazardous waste	Tons	2,146	1,226	Recovery or Regeneration	919	Other
Of which: Non-hazardous waste	Tons	10,395	4,447	Recovery	5,947	Landfill or other

The following tables show, by type and volume, the list of waste produced and disposed of at the Nera Montoro plant only, as no waste was produced at the Milan headquarters in the Fiscal Year 2023. All waste is sent to locations within Italy.

WASTE PRODUCED AT THE NERA MONTORO PLANT					
WASTE MANAGEMENT METHODS FY 2023	UM	HAZARDOUS	NON-HAZARDOUS	TOTAL	% TOTAL
Regeneration	Tons	55.8	-	55.8	0.44%
Recycling	Tons	-	-	-	-
Compost	Tons	-	-	-	-
Recovery, including energy recovery	Tons	1,171	4,448	5,618	44.80%
Incineration	Tons	-	-	-	-
Deep aquifer injections	Tons	-	-	-	-
Landfill	Tons	-	601	601	4.79%
Other	Tons	920	5,346	6,266	49.96%
TOTAL	Tons	2,146	10,395	12,541	100%



DESTINATION CODE	DESTINATION DESCRIPTION	NON- HAZARDOUS (kg)	HAZARDOUS (kg)	TOTAL (kg)
D1	Deposit on the ground or underground (for example, landfill)	601,020	-	601,020
D9	Physical and chemical treatment not specified elsewhere in this annex, which generates compounds or mixtures disposed of in accordance with one of the procedures indicated under D1 to D12 (evaporation, drying, calcination, etc.)	3,956,100	22,740	3,978,840
D10	Incineration at ground level	-	-	-
D13	Preliminary grouping prior to one of the procedures indicated under D1 to D12	-	-	-
D15	Preliminary deposit prior to one of the procedures indicated under D1 to D14 (excluding temporary deposits, prior to collection, at the site where it is produced)	1,390,146	896,914	2,287,060
TOTAL DISPOSED OF	kg	5,947,266	919,654	6,866,920
	Percentage of total waste generated	47.42%	7.33%	54.75%
R1	Primary use as fuel or other means of producing energy	-	-	-
R2	Regeneration/recovery of solvents	-	55,800	55,800
R3	Recycling/recovery of organic substances which are not used as solvents (including composting and other biological transformation processes)	-	-	-
R5	Recycling/recovery of other inorganic substances	423,900	-	423,900
R7	Recovery of the products used to capture pollutants	-	-	-
R12	Exchange of waste prior to subjecting it to one of the procedures indicated under R1-R11	133,240	-	133,240
R13	Storage of waste prior to subjecting it to one of the procedures indicated under R1 to R12 (excluding temporary deposit, prior to collection, at the site where it is produced)	3,890,451	1,170,904	5,061,355
TOTAL RECOVERED	kg	4,447,591	1,226,704	5,674,295
	Percentage of total waste generated	35.46%	9.78%	45.25%
TOTAL WASTE	kg	10,394,857	2,146,358	12,541,215
	Percentage of total waste generated	82.89%	17.11%	100.00%

Environmental Sustainability: *2022-2025 Targets*

Carbon Neutrality

- Confirm Carbon Neutral status
- Define allocation criteria for calculating the carbon footprint for different types of processes and products
- Define absolute and intensity decarbonisation targets

Water Footprint

- Continue with the annual water footprint analysis, to be shared promptly with Arpa
- Identify areas for improvement in the production process to reduce water consumption

Energy Efficiency

- Define a procedure to analyse the investments made in terms of the impact on energy efficiency and carbon footprint
- Renew certification with ISO 50001 energy management system

Renewable Fuels

- Assess the possibility of using renewable fuels