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OUR COMMITMENT TO THE ENVIRONMENT



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5.1 ENVIRONMENTAL APPROACH AT KCE

3-3 / 2-27

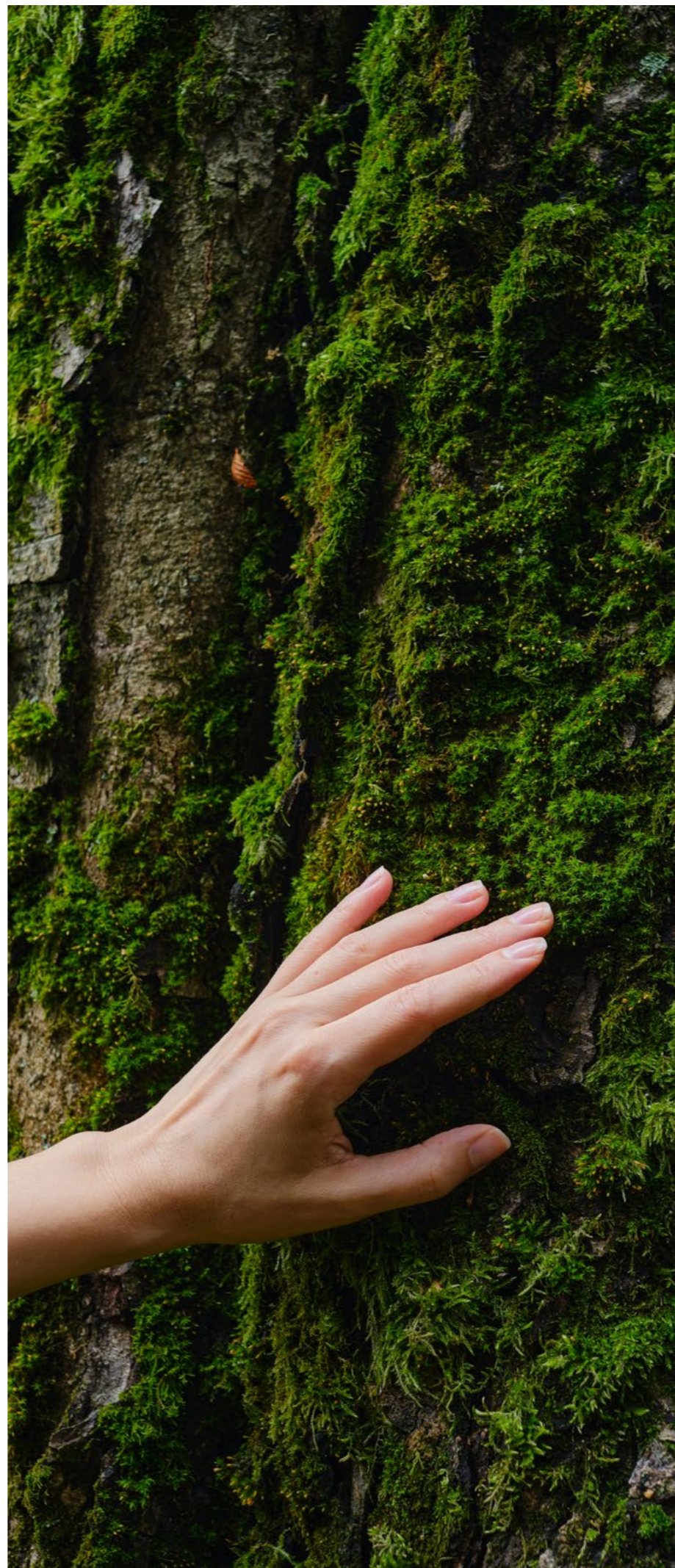
Environmental management at KCE is directly determined by the corporate philosophy and strategy.

Some corporate programmes that shape KCE's environmental management are Responsible Care® (see section 2.6) and Eco Together, created in 2009, through which the Group establishes its commitment to responsible environmental management and carries out efforts in environmental conservation with clients, suppliers, companies to which a portion of production is contracted, local communities, NGOs, governments, and other stakeholders.

In addition, KCE integrates into its environmental management not only everything that derives from the legislation of each country but also from the pacts and programmes of each region in which it is located, such as the "European Green Deal".

Finally, each KCE company incorporates the requirements derived from the internal commitments assumed with the communities in which they operate, where applicable, and those of the certifications to which they have voluntarily obtained, such as ISO 14001, EMAS or ISO 50001, depending on the company (see section 2.5).

Given this, Kao's environmental management focuses on the activity itself, society and the environment, placing emphasis on the entire life cycle, from the inputs used, the processing technology, the energy consumed, the products manufactured, their sale and subsequent disposal.



5.2 ENVIRONMENTAL COMMITMENTS 2030

In 2020¹, we established our ESG objectives for 2020-2030:

Area	Indicator	Target value*	Base year
Decarbonization	Reduction emissions scope 1+2 CO ₂ , absolute	55%	2017
Energy	Renewable electricity purchased Energy consumption reduction	100% 1%	- Previous year
Zero waste	Ratio to landfill and to incineration	<1%	-
Water conservation	Water consumption reduction	45%	2005
Resources	Acquisition of certified palm oil according to RSPO	100% ²	-

* The target value is to be achieved by 2030, using a specific (base) year as a starting point for each indicator, except for those that do not specify one.

¹ In 2021, the decarbonisation target was modified in a more ambitious direction than initially set.

² Target to be achieved by 2025.



5.3

MAIN ENVIRONMENTAL RISKS THAT AFFECT THE ORGANIZATION

3-3

Kao has identified the main risks that could negatively affect the Group's sustainable and profitable development. KCE has prioritised those that have the greatest impact within the framework of its activity and environment, and has established its own management and monitoring plan (see section 2.7.1). These include the environmental risks associated with climate change³.

These associated risks include the possibility of suspending operations due to extreme weather events, increased costs due to the strengthening

of regulations, depleted resources, environmental contamination, the security of the water supply, and the loss of biodiversity.

In this respect, KCE implements action programmes to reduce the environmental impact on the remaining aspects identified in its assessments: use of water and water pollution prevention, prevention of air pollution, waste management, management of chemical substances, soil preservation, preservation of biodiversity, light pollution, etc.

The following sections detail the progress of these programmes and the associated indicators. There are basically two types of indicators:



Those that indicate the **total annual absolute value** – consumption, production, emission or generation – in the area considered; for example, the annual water consumption expressed in m³. They are calculated as the sum of the absolute value of each KCE company. .



Those that indicate the **relationship between the absolute value and the object of the activity** (production expressed in tonnes), that is, the ratio or rate, such as the cubic metres of water consumed per unit produced (m³/t). Starting with this year's report, they are calculated as the sum of the absolute total annual value of each company and the annual reference value that represents the activity (sum of the production of each company)⁴, which means that all ratios from previous years have been recalculated.

³ Risks related to large-scale earthquakes, other natural disasters and accidents. (Risk of obstacles arising that hinder our ability to supply our products to market due to damage to employees, facilities and the supply chains as a result of large-scale earthquakes, major typhoons associated with climate change, floods and other natural disasters. Risk of significant damage to employees and the surrounding area due to a fire or explosion at the plant.)

⁴ In previous reports it was calculated as the average of the ratio of each KCE company.

5.4

CLIMATE CHANGE

3-3

Climate change caused by global warming over recent decades affects people's lives and the natural ecosystems in many ways. The melting of glaciers, rising sea levels, floods and droughts, and other extreme weather phenomena observed have had consequences on marine and terrestrial ecosystems, affecting food production and people's health.

Our main environmental commitments are linked to the mitigation of climate change, since the activity carried out involves the emission of greenhouse gases, either from the activity itself (direct emissions) or because of the activity itself (indirect emissions).

In 2006, the Group implemented a system aimed at prioritising investments in more efficient technologies with low CO₂ emissions, as well as in climate-resilient activities, the *Internal carbon pricing* (ICP).

At the same time, the Group has intensified actions to reduce both direct and indirect emissions, expanding the reporting of scope 3 emissions, for example, and increasing their monitoring in an effort to reduce them.

In our commitment to collaborate in the mitigation of climate change, each of the companies that make up KCE has developed a transition plan that provides a response in the short, medium and long term. This plan covers already consolidated and incipient measures, such as the replacement of the technology used in lighting with LEDs, the purchase of electrical energy from renewable sources, the installation of photovoltaic panels, and the replacement or shut-down of installations that use fossil fuels, such as natural gas.

In 2023, KCSA ceased operating the cogeneration plant. In 2024 the site plans to use steam from a biomass plant located at the Olesa de Montserrat premises.

Air conditioning and refrigeration equipment is selected according to the criteria defined by the Group, which considers the environmental impact of the refrigerant. In addition, we have a defined plan for the progressive replacement of equipment that uses refrigerant gases with a heavier impact, in line with the Kigali Amendment to the Montreal Protocol.

We are committed to zero CO₂ emissions by 2040 and being carbon negative by 2050.



5.4.1 GREENHOUSE GAS EMISSIONS (GHG)

305-1 / 305-2 / 305-3 / 305-5

KCE monitors scope 1, 2 and 3 CO₂ emissions, as shown below:

KCE	2021	2022	2023
Total direct GHG emissions (scope 1) (t CO _{2e})	72,620	72,330	57,729
Scope 1 emissions / production (kg CO _{2e} /t)	191.11	203.58	176.66
Total indirect energy GHG emissions (scope 2) (t CO _{2e})	5,675	5,075	3,974
Scope 2 emissions / production (kg CO _{2e} /t)	14.94	14.28	12.16
Other indirect GHG emissions (scope 3) (t CO _{2e})	22,960	16,831	21,630
Scope 3 emissions / production (kg CO _{2e} /t)	60.42	47.37	66.16
Total GHG emissions (t CO _{2e})	101,256	94,236	83,364
Total GHG emissions / production (kg CO _{2e} /t)	266.47	265.24	254.97

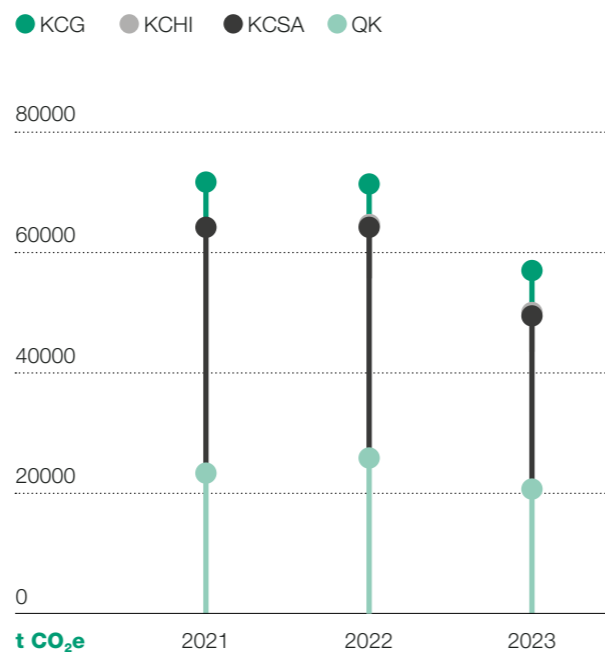
CO₂ emissions (scope 1 and 2) have been reduced by 35% (33,274 t) compared to 2017, the base year for this indicator.

This is the result of several factors, mainly the shutdown of the cogeneration plant in June 2023 at KCSA's Olesa de Monserrat facility, as well as the decrease in QK's natural gas consumption as the cogeneration plant is not operating.

Scope 2 emissions have been reduced, as has the ratio per ton of production, since QK has begun a gradual process of purchasing green energy (65% in 2024, 100% in 2025). One hundred percent of the electricity from the rest of the subsidiaries is of renewable origin.

The increase in scope 3 emissions is mainly due to the fact that this report includes emissions associated with aspects that until now have not been quantified, such as those generated during the distribution of the finished product in the case of QK, those from the mobility of the KCSA workers, and those associated with the waste transportation of the same company. In the coming years, they are expected to continue increasing due to the quantification of minor indirect emissions sources, not currently considered.

DIRECT GHG EMISSIONS (SCOPE 1) BY KCE COMPANIES



5.4.2 ACTIONS FOR MITIGATION

3-3

To a lesser extent and depending on the company, there are certain processes that also generate GHG emissions, such as refrigerant gases used in process installations or in the air conditioning of installations.

KCE implements different initiatives to guarantee the reduction of its greenhouse gas emissions:

- **In the acquisition of raw materials:** these incorporate green purchasing concepts and specific actions at the different KCE companies.
- **In the product development process:** these comply with the environmental standards described in the design guidelines.
- **In the manufacturing process:** these include initiatives to reduce energy consumption by introducing more efficient equipment and eliminating points of energy loss. We also promote the use of cleaner energy, more environmentally friendly refrigerants, and equipment maintenance to prevent leaking refrigerants or other greenhouse gases.
- **In the distribution process:** by increasing shipment volumes, these promote cleaner freight methods and the improvement of cargo ratios.

5.4.3 ACTIONS FOR ADAPTATION

3-3

Kao is deploying a line of work aimed at climate change adaptation, identifying those facilities at risk of water scarcity or with a high probability of suffering extreme natural phenomena. For its part, KCE has initiated a process to specifically evaluate the physical risks associated with climate change that affect each subsidiary.

In recent years, drought has become evident in some territories where we operate, which has already led to the adoption of measures to adapt to the availability of this resource.

At KCE, we report the monthly volumes of the various existing water supplies. The objective is, by 2024, to establish a plan that allows us to reduce water use throughout the lifecycle per sales unit, especially in regions with water scarcity, using 2017 as a base year. We expect this reduction target to be defined in 2024.

Regarding energy, KCE promotes the installation of solar panels that generate electricity for own use, reducing dependence on external supplies, while increasing the company's resilience in case of need.

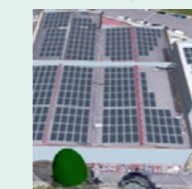
PHOTOVOLTAIC CAPACITY

QK



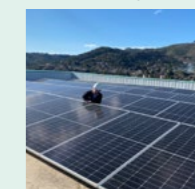
499 kWp

KCHI (Rubí)



185,33 kWp

KCSA (Olesa)



97 kWp

5.5 POLLUTION PREVENTION

3-3

KCE acts to prevent air and water pollution in areas near production plants and to reduce the pollutant load from its wastewater treatment plants.

To that end, multiple initiatives are carried out such as reduction at source of the generation of pollutants and the use of the best available techniques to combat pollution.

5.5.1 AIR POLLUTION PREVENTION

3-3

KCE's main commitments target strict compliance with specific laws and regulations and the implementation of the principle of pollution prevention. This entails, among other actions, the gradual introduction of the best available techniques, the modification of processes to reduce emissions, and their exhaustive monitoring.

KCE publishes the emissions data of KCG, QK and KCSA under the PRTR (Pollutant Release and Transfer Registers).

AIR EMISSIONS

305-7

IKCE carries out quantified monitoring of CO, NO_x, CH₄, HFCs, PFCs, NF₃, SF₆, PM and VOC emissions, the results of which can be consulted in the final section of the report.

This monitoring demonstrates that in 2023 emissions from combustion gases (CO, NO_x and SO₂) decreased due to a decline in natural gas consumption resulting from the definitive stoppage of KCSA cogeneration and the temporary stoppage of QK cogeneration.

Regarding particle emissions, KCSA and QK report the highest emissions. The observed decrease is due primarily to the fact that production has been lower. HFC emissions correspond to KCSA and QK, with QK contributing the majority this year.

As in previous years, all Group companies except KCG report VOC emissions. Among those that report, only KCHI reports diffuse emissions, which are significant due to the handling of volatile solvents involved in its activity. KCSA and QK report only channelled VOC emissions, which are minimal compared to those at KCHI. Note that KCHI has continued to undertake actions to minimise diffuse emissions. This year they decreased by 1.6 tons compared to the previous year.

5.5.2 WATER POLLUTION PREVENTION

The amount of pollutants that can be released into the water is regulated by each country. KCE has wastewater treatment facilities at most of its production centres, except KCG, where it is treated externally, KCSA Barberà and KCHI, where wastewater is comparable to urban waste.

WATER DISCHARGE DATA

303-4

KCE conducts wastewater monitoring that includes the amount of water discharged, the mass load of TOC, TSS, N and P, as well as their respective ratios vis-à-vis the final production, as detailed in the tables at end of the report. The amount of water discharged by KCE in 2023 decreased considerably, by just over 51 Mm³. The ratio per ton produced also declined relative to the previous year.

QK contributed significantly to this reduction due to a greater acquisition of previously osmotised water that prevents the generation of rejects from this type of facility. Additionally, all companies have reduced their respective water consumption.

The TOC⁵ pollution load decreased by 1.7 tons compared to the previous year. The greatest reduction occurred at KCG and QK, while at KCSA it has increased.

However, pollution load per ton produced increased by 8.1%, which is common when consumption drops and optimised purification treatments are maintained. Other factors attributable to this rise involve the decrease in production and the productive mix, since shorter productions and more frequent product changes lead to more cleaning.

The only parameter that increased at KCE, and at all affiliates, is the matter in suspension. This is attributed to the increase in certain cleanings performed at manufacturing facilities.

⁵ In relation to the contaminant load of wastewater, the representative parameter is total organic carbon (TOC), which is expressed as one third of the chemical oxygen demand (COD).

Wastewater is discharged in its entirety into the municipal wastewater treatment stations once it has been treated. Additionally, since our activity involves the use of chemical substances, groundwater is monitored at most production centres.



5.5.3 OTHER FORMS OF POLLUTION

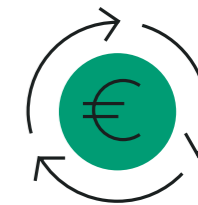
PREVENTION OF NOISE AND LIGHT POLLUTION

Noise monitoring is periodically carried out inside KCE's production centres to verify sound levels. The objective is to ensure these levels are within the legal limit or, on the contrary, to detect an increase in environmental noise and, consequently, adopt preventive or corrective measures as soon as possible. In general, emission levels – noise levels emitted outside – are common for these types of activities and the established limits are not exceeded.

In relation to light pollution, the regulatory requirements are met.



5.6 USE OF RESOURCES AND CIRCULAR ECONOMY



KCE is making progress in the development of an increasingly circular production model, thanks to the improvement of processes that directly reduce waste and the consumption of raw materials.

Likewise, we are advancing in the design of products that are more eco-friendly thanks to the consumption of less dangerous or recycled raw materials, the reuse of packaging and eco-design. Some new product developments shown in the innovation chapter (2.4), including the creative reuse of waste (upcycling), which provides improved properties and/or additional benefits, are worth highlighting.

In 2021, a team was created to implement lifecycle analysis and calculate the carbon footprint of KCE's products; in 2022, the carbon footprint of 25 products was calculated; and in 2023, the methodology was upgraded to the most widely accepted European standards in the chemical industry. External certification of the methodology has been obtained, which attests to its robustness based on current knowledge.

5.6.1 RESPONSIBLE CONSUMPTION AND PRODUCTION OF MATERIALS

Potential impacts to consider in the raw materials procurement process include destruction of the local environment and loss of biodiversity, human rights, health and safety management, and health risks in the supply chain.

The acquisition of materials takes into account the quantity, format and source of the supply. In 2023, a total of 237 thousand tonnes were consumed and 326 thousand tonnes were produced, resulting in a 10% reduction in the ratio of raw materials to final production (t/t), as shown in the table below.

RAW MATERIAL USAGE DATA

301-1			
KCE	2021	2022	2023
Raw materials (t) ⁽¹⁾	282,051	270,063	236,793
Production (t/t)	379,994	355,286	325,871
Raw materials / Production (t/t)	0.72	0.69	0.62

⁽¹⁾ The data for 2021 and 2022 have been modified by eliminating the accounting for semi-finished products at KCHI.

TRANSITION TO IMPROVE THE USE OF RESOURCES AND CIRCULAR ECONOMY

KCE's activity involves the use of resources that, to a greater or lesser extent, impact or may impact biodiversity and ecosystems, positively or negatively.

To reduce the environmental impact of our use of resources, KCE intends to develop a transition plan to improve this, while contributing to a circular economy. As a result, we will be able to gradually minimise the extraction of non-renewable resources, prevent waste generation, and reduce pollution.

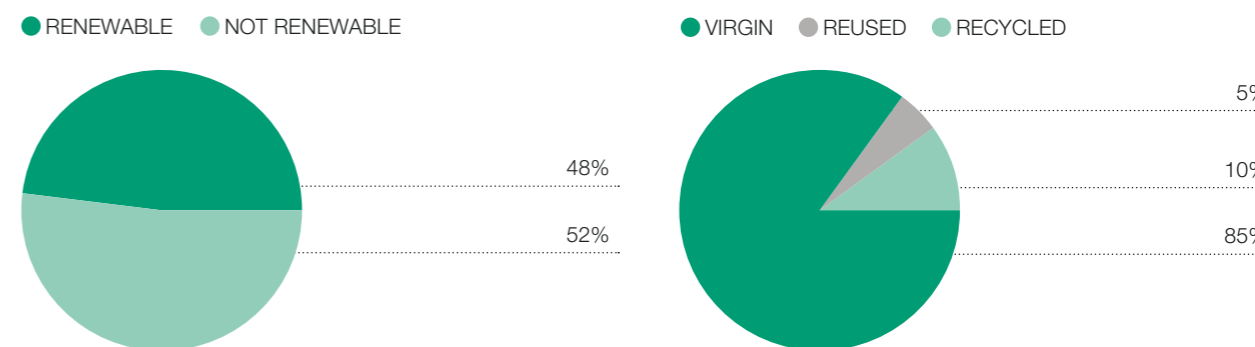
In 2023, a process began to identify material inflows and their classification, in an effort to learn more about biodiversity dependency and begin an analysis of risks and opportunities as the next step.

As a result, 71% of KCE's inflows have been classified: 48% are renewable and 52% are non-renewable. It has also been confirmed that 85% of the materials used are virgin, 10% recycled and 5% reused. Packaging materials have not been considered in this analysis. The table at the end of the document details the reference data more precisely.

Following this initial characterisation, we aim to consider how to analyse risks and opportunities in a way that examines current and potential impacts, dependencies, transitional, physical and systemic risks, and the possible existence of affected communities in the areas from which resources are extracted.

Kao is committed to reducing forest destruction and achieving zero deforestation by delivering two projects related to the consumption of sustainable materials: palm oil and wood derivatives, paper and pulp. In 2020, Kao established initiatives for the procurement and sourcing of sustainable palm oil⁶, implementing a series of priorities aimed at procuring 100% RSPO certified oil by 2025.

KCE is advancing in the development of technologies that use non-edible natural oil sources as alternatives to palm oil, and we use sustainable palm oil in the production of our products. All KCE companies have obtained RSPO certification, with the exception of KCHI, which does not use palm oil in its processes.



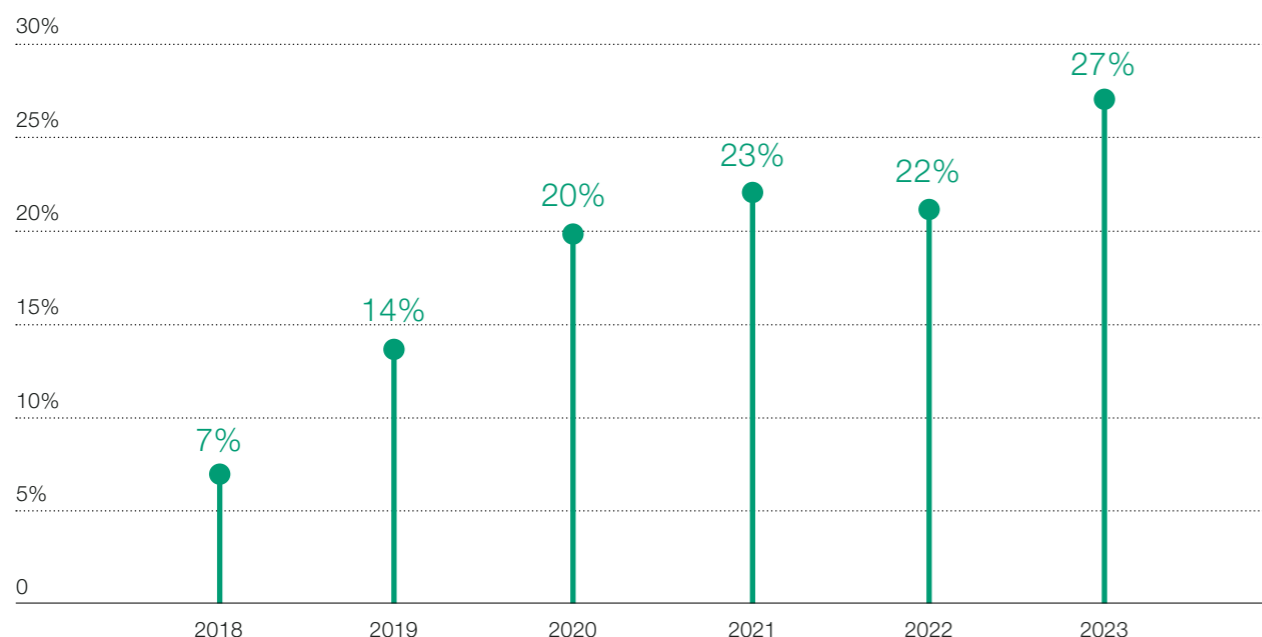
PERCENTAGE OF RSPO CERTIFIED PALM-DERIVED RAW MATERIALS IN THE PERIOD 2021-2023

	KCG	QK	KCSA	TOTAL KCE
2021	22.6%	0.3%	26.8%	22.5%
2022	20.8%	12.0% ⁽¹⁾	30.9%	21.6%
2023	25.3%	34.8%	31.9%	27.3%

⁽¹⁾ Data corrected compared to 2022 version.

⁶<https://www.kao.com/global/en/sustainability/we/procurement/progress-2022/>

EVOLUTION RSPO RAW MATERIAL CONSUMPTION



In 2023, there was an increase in the consumption of sustainable palm oil-based raw materials. The most significant uptick was at QK, due to demand from the cosmetics and household hygiene consumer markets. KCG recovered from the previous year's decline due to the global economic situation and KCSA saw a slight increase.

In terms of governance, Kao has set the objective of ensuring traceability of raw materials back to their source and making the supply chain visible, especially for palm oil. KCE is considering establishing the same objective for its own supply chain.

In relation to the EU Deforestation Regulation (EUDR) (2023/1115), KCE is identifying needs and possible actions to be taken.

KCE carries out a continuous study of renewable raw materials to replace petroleum derivatives, within the framework of decarbonisation measures, with the aim of meeting the established targets.

In 2023, KCE published a statement on conflict minerals through its web channel⁷. However, KCE is not a direct importer of these minerals and therefore has no obligations under the current EU Regulation 2017/821, although we believe we have a responsibility to verify the source of all our raw materials.

Due to the nature of KCE's business, exposure to conflict minerals is indirect and extremely limited. KCE may potentially be exposed to conflict minerals through the use of catalysts in the manufacture of some of its products. To this end, all suppliers must provide information on the use of conflict minerals through a CRC (Certificate of Regulatory Compliance) document and, where applicable, must submit evidence of the CMRT (Conflict Minerals Reporting Template) report in the supplier approval process, in accordance with established internal protocols. An updated CMRT report is requested annually to ensure that all products supplied to KCE are free of conflict minerals.

By 2023, 100% of the suppliers we work with do not use conflict minerals.

Kao will not engage with any supplier whose activity does not meet the requirements of the aforementioned regulation and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

⁷kce-conflict-mineral-statement-2023.pdf (kaochemicals-eu.com)

5.6.2 CHEMICAL SUBSTANCE MANAGEMENT

Kao has had a Comprehensive Management System for Chemical Substances in place since 2017, which applies to all its companies worldwide. KCE continually strengthens its functionality in response to increasingly stringent regulatory requirements, the growing diversity of chemicals handled, and expected business expansion into new countries and business areas.

Chemicals management processes at KCE:

CHEMICAL SUBSTANCES RISK ASSESSMENT:

- Detailed studies of all new products and raw materials developed and used by KCE.
- Risk reassessments of priority substances for KCE, in accordance with the regulatory requirements related to the registration, evaluation, authorisation and restriction of chemical substances and preparations (REACH).

GENERATION AND UPDATING OF SAFETY DATA SHEETS:

- Generate the safety data sheet (SDS) for all products produced by KCE. The function of the SDS is twofold: internally, to inform all members of the organisation of the hazardous nature of the products produced in our facilities and provide the information contained in the document to the recipients of our products. The SDS must include information about the chemical product, hazard identification, fire-fighting measures or, in case of accidental release, handling and storage, toxicological and ecological information, information related to transport and regulatory information, among others.
- In addition, whenever a chemical safety report is created for a substance, the relevant exposure scenarios will be appended to the SDS for the identified uses.

- SDS are promptly updated as soon as any information is available that may affect risk management measures or include new information on hazards. The new updated version will be provided to all customers, internal and external, who have been supplied with the product in the preceding 12 months. Any update will be duly recorded.

MANAGING PRODUCT SAFETY THROUGHOUT THE LIFECYCLE OF CHEMICALS:

- Ensure correct labelling of the products handled at our facilities based on the Global Harmonised System (GHS) from the moment they enter our facilities or are produced therein until their dispatch, either as products or waste. Likewise, ensure all employees are aware of the documentation related to classifying and labelling (SDS and labels) our products.

COMMUNICATING CHEMICAL SUBSTANCE RISKS TO STAKEHOLDERS:

- Through public disclosure of the results of international chemical stewardship promotion activities and stakeholder communication.

Every chemical substance that is used or manufactured at KCE follows an exhaustive verification programme of European regulations and the main regulations worldwide, to guarantee their safety and proper use.

Verification is not carried out only on the substance itself, but also includes all traces and known impurities that it may contain. This information is used to generate all the necessary documentation that includes both mandatory and voluntary documentation, which is also circulated internally to provide better information and transparency to our clients.

At KCE, we closely monitor new regulations or modifications that may affect our products and activities:



ACTIVE PARTICIPATION IN ASSOCIATIONS:

Our Product Safety team participates in 12 associations of different chemical products, on a national and European level.



DATABASES:

In addition to the public databases to which we subscribe (such as ECHA), we have two international private databases, RegDB (from Sphera) and Ariel (from 3E), which continually collect any news on substance safety, chemicals, and regulations.

In 2023, several substances were registered in ECHA and others were updated, while the volumes, applications, and requirements for the remaining substances that KCE has registered were monitored.

KCE's European team oversees the monitoring and obligations for the entire Kao Group, both for our products and for the raw materials we use. Specifically, information is requested from all suppliers on the REACH registration of raw materials through the CRC document (Certificate of Regulatory Compliance).

In addition to mandatory regulations, we also comply with other voluntary regulations linked to market trends or imposed by non-governmental organisations.

In this regard, in 2023, the compositions of fragrances were reviewed to adapt them to the 51st IFRA (International Fragrance Association) amendment. Several products were also registered in ECOCERT and the products with the possibility of obtaining Ecolabel certifications were updated.

Disclosure of product safety and regulatory concepts is critical to KCE. In 2023, the regulations department participated in internal disclosure sessions with the affected departments and in monthly disclosure sessions on regulatory developments affecting our products. The company also participates in national and European events related to the registration of chemical substances (European Notification Panel), the regulation of biocides, the REACH regulation and green schemes, among others.

5.6.3 ENERGY

KCE promotes initiatives to reduce energy consumption and advance in the improvement of efficiency at all its production centres and facilities.

ENERGY CONSUMPTION

302-1 / 302-3 / 302-4

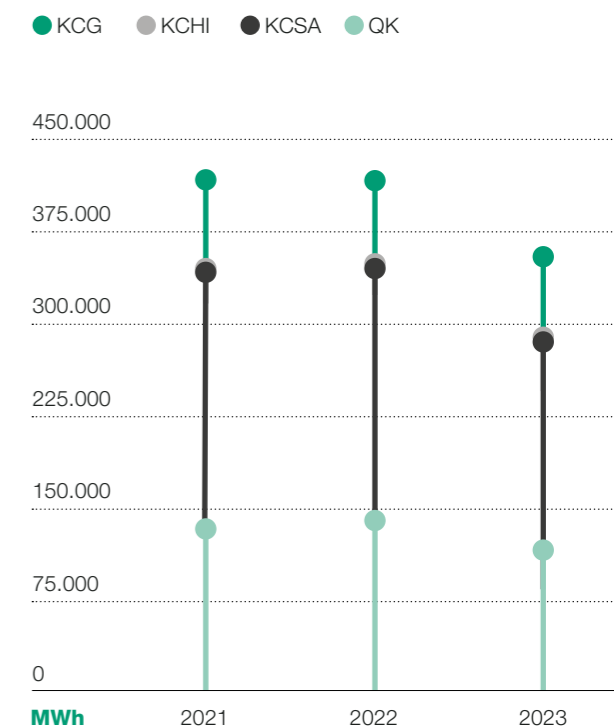
KCE	2021	2022	2023
Total energy consumption (MWh)	407,246	404,944	355,228
Total energy consumption / Production (MWh/t)	1.07	1.14	1.09
Electricity consumption (MWh)	85,239	82,645	79,649
Renewable electricity consumption (%)	75.36	63.28	77.84
Electricity consumption / Production (MWh/t)	0.22	0.23	0.24
Natural gas consumption (GJ)	1,276,190	1,278,508	1,057,192
Natural gas consumption / Production (GJ/t)	3.36	3.60	3.23
Thermal consumption (MWh)	317,895	314,588	273,753
Thermal consumption / Production (MWh/t)	0.84	0.89	0.84
Other energy consumption (MWh)	4,332	7,711	1,686

KCE's global energy consumption and the corresponding ratio fell relative to 2022 due to the definitive stoppage of the KCSA cogeneration plant and the fact that the QK plant has not been operational. At QK, energy related to the transportation of water from the government treatment plant decreased.

The percentage of electricity consumption from renewable sources increased by 23% with certification approval from QK's electricity supplier. The reduction of 'other energy consumption' is worth noting, which focuses on QK and is mainly due to a decrease in the use of vehicle fuel.

Compared to the previous year (the base year for this indicator), energy consumption decreased by 4%. In 2023, 100% of the electrical energy consumed by KCG, KCSA, and KCHI (excl. KCHI France) came from renewable sources.

ENERGY CONSUMPTION BY SUBSIDIARIES



5.6.4 WATER

KCE establishes measures to promote the sustainable use of water and devotes efforts to the search for modern technologies. The company focuses on reducing consumption; reducing, reusing and recycling wastewater; optimising maintenance work; and improving the management of wastewater treatment facilities.

KCE has established the goal of reducing water consumption by 45% by 2030, in line with the Kao Group's target.

WATER WITHDRAWAL

303-3

KCE gets its water from three different sources, the primary source being groundwater withdrawal. The company extracts the largest amount of groundwater for use at open circuit for cooling facilities, which is ultimately returned to the Rhine River. Some KCE

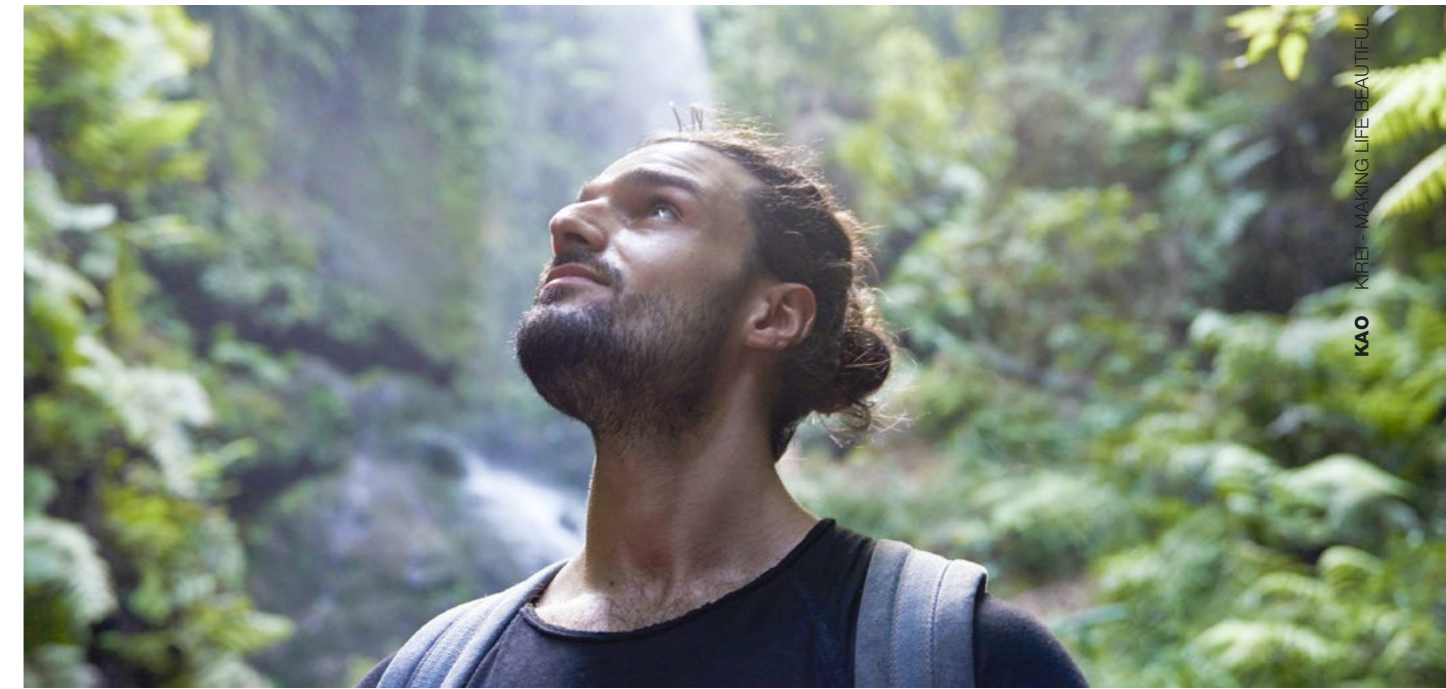
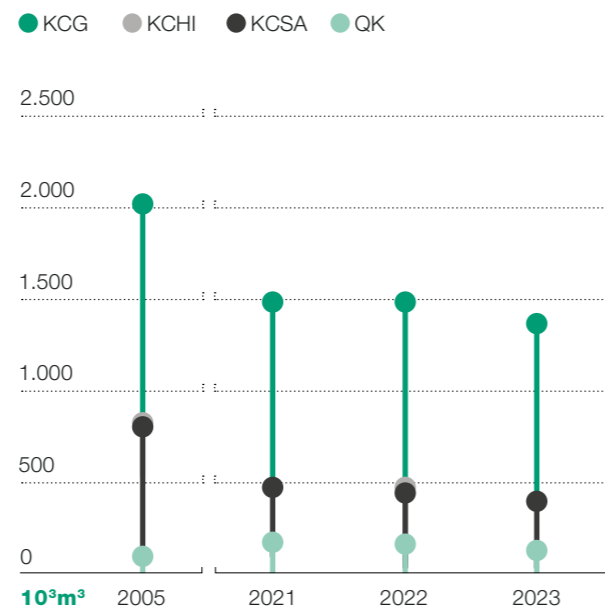
facilities have their own duly authorised and controlled wells for the withdrawal of water. QK uses water from a municipal treatment plant that is treated before use, as one of the measures established to improve circularity in water management.

KCE	2021	2022	2023
Total water withdrawal (m ³)	1,525,046	1,530,279	1,395,687
Withdrawal / Production (m ³ /t)	4.01	4.31	4.27
Groundwater	1,046,241	1,050,762	966,897
Third-party water	468,196	474,933	425,010
Wastewater from other organizations	10,609	4,584	3,780

Water extraction and the extraction rate per ton produced have decreased compared to the previous year (134,592 m³ and 1%, respectively).

Compared to 2005 (the base year for this indicator), the water extraction rate has decreased by 39%.

WATER WITHDRAWAL BY SUBSIDIARIES



KAO KIREI - MAKING LIFE BEAUTIFUL

WATER CONSUMPTION

303-5

Water consumption is calculated by the difference between its withdrawal and discharge.

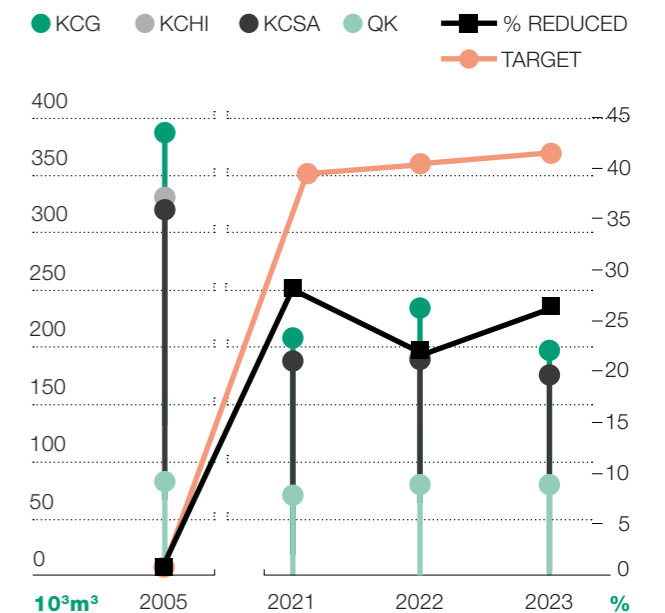
KCE	2021	2022	2023
Water consumption (m ³)	212,971	231,596	210,490
Water consumption / Production (m ³ /t)	0.56	0.65	0.64

Water consumption at KCE decreased relative to last year by 21,106 m³, as has the ratio, which fell 1%. All companies reduced their consumption, the most significant reduction being that of QK.

It is worth highlighting the consumption of water independent of production, for example, water destined for cooling/heating storage tanks or sanitary use. The lower the total consumption, the greater the influence of base consumption on the water consumption rate.

Compared to 2005 (the base year for this indicator), the water consumption rate has decreased by 52%.

WATER CONSUMPTION BY SUBSIDIARIES



5.6.5 WASTE



KCE implements measures aimed at more circular management. Among other actions, progress is being made to improve the performance of production processes, to reduce and reuse packaging, and to end the status of waste, thanks to the commercialisation of these substances as products.

In this sense, the 2030 target for waste of industrial origin destined for landfill or incineration is set as less than 1%.

GENERATED WASTE

306-3

KCE	2021	2022	2023
Total waste (t)	14,395	12,939	11,016
Total waste / Production (t/t)	0.04	0.04	0.03
Total hazardous waste (t)	11,878	10,717	8,844
Total hazardous waste / Production (t/t)	0.03	0.03	0.03
Valuation of total waste generated (%)	64.13	77.77	71.51

The amount of waste generated (indicated in the table above) excludes construction waste, as it is generated only occasionally.

The amount of waste generated decreased by 1,923 tons compared to the previous year, with KCSA being the greatest contributor to this reduction due to the decrease in production—specifically, the production of products that generate the most waste—and the multiple actions implemented.

The degree of waste recovery, including energy recovery, decreased compared to the previous year, but remains above 70%.

ACTIONS AGAINST FOOD WASTE

KCSA in Barberà del Vallès and QK have cafeterias at their facilities, where the quantities of food are adjusted to avoid food waste.

At KCSA, the food supplier has implemented the “Stop food waste programme”, which minimises food waste throughout the chain; the waste generated is measured daily and awareness actions (training of both kitchen staff and diners) regarding food waste prevention are offered.

The rate of waste generated per tonne of final production decreased by 7.5%.



5.7 BIODIVERSITY

The company defines the conservation of biodiversity as an area of environmental intervention within its Responsible Care® activities.

Kao has implemented a methodology based on the land use standard developed by *the Japan Business Initiative for Biodiversity (JBIB)* to better understand the biodiversity situation and assess conservation progress at all its centres globally.

To do this, a self-assessment questionnaire on biodiversity addresses the following concepts:

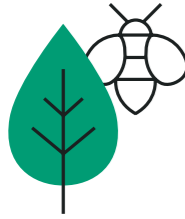
- Biodiversity management
- Response to exotic species
- Circulation of matter
- Circulation of water
- Biological monitoring
- Employee participation
- Cooperation with external parties
- Other

The score obtained by KCE in 2023 is as follows:

KCE	2021	2022	2023
KCG	236	236	236
QK	290	290	290
KCHI	365	405	385
KCSA			
Olesa	585	595	595
Mollet	376	386	391
Barberà	525	535	555

KCE production centres are located in industrial estates. Three of them are near areas of natural interest. Although current activity does not affect these areas, a catastrophe could lead to partial impact.

All KCE production centres are built in accordance with legal regulations, with due monitoring and control of all identified environmental aspects, particularly, those of greater significance. To respond to a possible catastrophic situation, all KCE centres have self-protection plans that include the different accident scenarios and establish the corresponding action procedures in each case, based on available means.



LOCATION OF THE CENTRES WITH INDICATIONS OF NEARBY AREAS OF NATURAL INTEREST AND PROXIMITY TO BODIES OF WATER

Company	Natural resource	Mass of water
KCG	DE4203401: Vogelschutzgebiet 'Unter niederrhein' - Protected bird sanctuary DE4103301: Dornicksche Ward - bird sanctuary DE4405301: Rhein-Fischschutzzonen zwischen Emmerich und Bad Honnef - protected fishing area	Rhine river (approx. 300 m)
QK	-	Santiago river (approx. 150)
KCHI	-	-
KCSA		
Olesa de Montserrat	ES5110012: Montserrat-Roques Blanques-Llobregat river	Llobregat river (approx. 70 m)
Mollet del Vallès	ES5110025: Congost river	Besòs river (approx. 200 m)

BIODIVERSITY INDICATORS AND THEIR EVOLUTION

KCE	2021	2022	2023
Soil occupancy (%)	42.06	42.06	42.00
Total land use (m ²)	187,793	188,664	184,922
Total sealed area (m ²)	254,834	261,265	257,523
Surface permeability (sealed surface / surface establishment) (%)	57.08	58.52	58.49
Total area in the centre oriented according to nature (m ²)	97,289	90,858	88,454
Internal occupation biodiversity (internal surface oriented to nature / surface establishment) (%)	21.79	20.35	20.09
Total area outside the centre oriented according to nature (m ²)	24,874	28,874	28,874
External occupation biodiversity (surface externa oriented to nature / surface establishment) (%)	5.57	5.57	5.65

INITIATIVES FOR THE PRESERVATION OF BIODIVERSITY

In 2023, the following actions were carried out:

- At KCSA, a campaign started in 2022 regarding invasive species and, in particular, *Cortaderia de la Pampa*, continued. To close the cycle, this species has been eradicated at the Barberà facility, where there was an infestation. The nest boxes and insect hotels installed in 2020 and 2021 were also monitored, and the exclusive use of organic fertilisers was certified.
- At KCHI, in recent years several actions have been implemented (i.e. including the concept of biodiversity in the company policy and company objectives, installing nest boxes, creating species catalogues, training sessions and bird-ringing, etc.), and we continue working to protect and promote biodiversity, especially in the environments of our work centres.
- Different vegetation was planted at KCE centres.

