

4.1. KCE's approach to the environment

As a chemical company with industrial operations in Europe and Mexico, KCE integrates environmental protection into all its operational and strategic decisions. This commitment involves minimising the environmental impacts of our activities, anticipating regulatory requirements — including the Green Deal, REACH, the Seveso Directive on the prevention of major accidents and the Industrial Emissions Directive — and promoting innovation towards cleaner, more efficient and circular processes.

KCE's environmental management is directly aligned with the Kao Group's philosophy and strategies, which are based on programmes such as Responsible Care® (see the 'Alliances and commitments' section). Furthermore, each subsidiary incorporates into its management practices the legal requirements of its country, applicable regional agreements and programmes, and the commitments made to the communities in which it operates.

In addition, KCE companies incorporate the requirements arising from voluntary certifications such as ISO 14001, EMAS or ISO 50001, as appropriate (see the 'Certifications' section). This common framework enables environmental management to be applied across the entire value chain: from the inflows and production technologies to energy consumption, product marketing and the end-of-life phase.

This approach is reflected in the principles and mechanisms of environmental governance set out in the corporate policy approved by High Management, as well as in the incorporation of environmental criteria into strategic planning and investment assessment. Each subsidiary adapts these principles to its specific business and operational context.

4.2. Environmental commitments for 2030

KCE's environmental commitment is permanent, measurable and verifiable. It combines regulatory compliance, prevention and a commitment to reducing our environmental impact, whilst contributing to the sustainable transition of the chemical sector. Through clear objectives, investment in clean technologies, rigorous controls and transparency with stakeholders, we aim not only to minimise environmental risks, but also to create shared value for customers, employees and communities.

This commitment takes the form of specific targets set for defined periods, which are regularly updated and accompanied by performance indicators at both KCE and subsidiary level.

In 2020, the environmental ESG targets for the period 2020–2030¹ were set:

AREA	INDICATOR	TARGET VALUE ²	BASE YEAR
Decarbonisation	Reduction in CO ₂ emissions under Scopes 1 and 2 (absolute)	55%	2017
Energy	Purchased renewable electricity	100%	-
	Reduction in energy consumption	1%	Previous year
Zero waste	Landfill and incineration rates for industrial waste	<1%	-
Water conservation	Reduction in water consumption	45%	2005
Resources	RSPO-certified palm oil	100% ³	-

¹ In 2021, the decarbonisation target was revised to be more ambitious than the one originally set.

² The target value is the level to be achieved by 2030, using a specific year (the base year) set for each indicator as the starting point, with the exception of a few indicators for which no base year is specified.

³ Target to be achieved by 2025.

The following sections describe the main management approaches for each environmental area, as well as the indicators used to assess performance. There are two types of indicators:

- Absolute indicators, which reflect the total annual value of consumption, production, emissions or generation (e.g. m³ of water consumed). They are calculated as the sum of the absolute values for each subsidiary.
- Relative indicators, which relate the absolute value to production activity (for example, m³ of water per tonne produced), i.e. the ratio. They are calculated as the sum of each company's total annual absolute value and the annual reference value representing the activity (the sum of each company's production).

4.2. Environmental commitments for 2030

Key Corporate Policies

KCE's environmental management is based on a robust and coherent set of corporate policies, approved at both Kao Group and local levels, which set out the principles, commitments and guidelines that steer the actions of all subsidiaries. These policies form the framework for identifying and managing the material impacts, risks and opportunities associated with climate change, pollution, water, biodiversity, resource use and the circular economy.

In all its activities and planned investments, KCE applies the precautionary principle; in other words, where there is any doubt regarding a serious environmental impact, it selects the most conservative and safest course of action.

Globally, the Kao Group has policies in place that set out its environmental vision and commitment to sustainability, including:

- Basic Principles and Policies on the Environment and Safety, which set out the fundamental principles governing environmental and safety practices.
- The Kao Group Responsible Care Policy, which sets out the company's commitments to safety, health and environmental protection.
- The Kao Environmental Statement, which sets out the Group's environmental vision.
- Kao's Sustainable Product Development Policy, which incorporates sustainability criteria into product design and development.
- Action Policy on High-Risk Supply Chain Management and Sourcing, which sets out the principles for responsible supply chain management.

In line with this global framework, KCE has developed its own policies that adapt its corporate commitments to the European context and the specific characteristics of its operations:

- The KCE Sustainability Policy, which sets out the company's general sustainability principles.
- KCE Environmental Policy, which sets out the company's environmental commitments regarding climate change, pollution, water, biodiversity and resource use.
- The Chemical Product Safety Policy and the Responsible Management of Chemicals Policy, which set out the criteria for the safe and responsible management of chemicals.
- Policy on the Disclosure of Financial, Non-Financial and Corporate Information, which ensures transparency in the disclosure of information.
- Stakeholder Engagement Policy, which governs relations with stakeholders.

KCE's environmental policy is scheduled to be rolled out across KCE's subsidiaries throughout 2026. Each subsidiary will incorporate, as a minimum, the areas that have been identified as relevant to the policy.

- Climate change: this has been assessed as material across all subsidiaries
- Pollution: this has been assessed as a relevant topic in all subsidiaries except KCHI. Specifically, the sub-topic of air pollution has been assessed as relevant.
- Water: this issue has been assessed as non-material for KCE. Specifically, it has been assessed as material for QK and KCSA, and non-material for KCG and KCHI. Given that the score obtained using the methodology analysed is on the borderline of the threshold for being considered material, management agreed to report on this issue as if it were material.
- Biodiversity: material has been assessed at KCG and KCSA, but not at QK and KCHI.
- Circular economy and waste: this has been identified as a material issue for KCE (for all subsidiaries except KCHI). As regards the sub-issues, only 'waste' has been identified as material for KCE, although it is not considered material for KCHI.

This set of policies forms the basis of KCE's environmental management system and ensures that all the activities described in the following sections are carried out within a common framework, in line with international standards, the expectations of stakeholders and the strategic objectives of the Kao Group.

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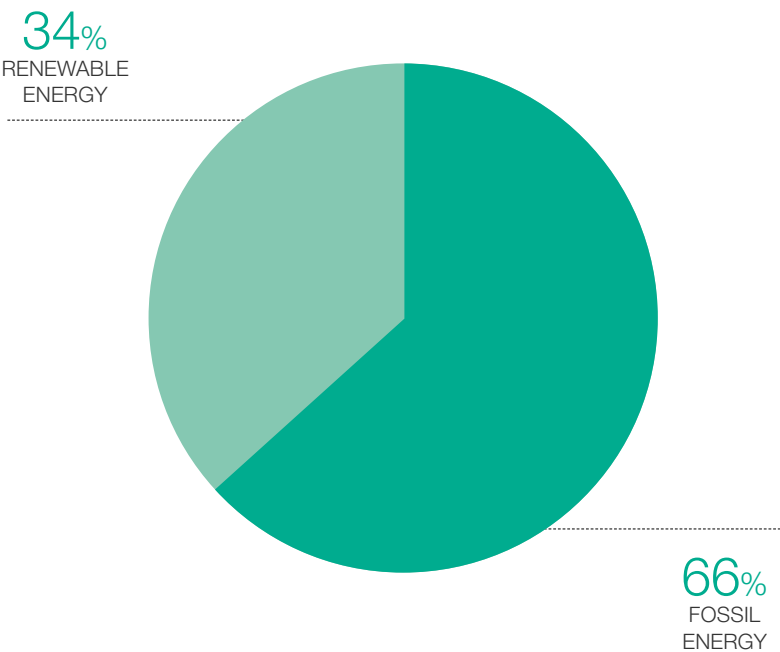
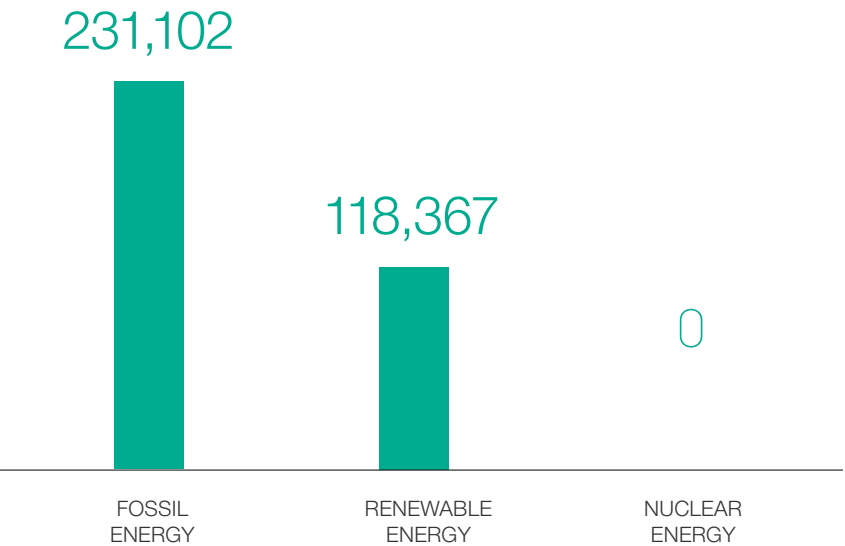
4.3. Main environmental risks affecting the organisation

Kao has identified the key environmental risks that could affect the Group's sustainable and profitable development. These risks include the growing challenges associated with decarbonisation, plastic waste management and the expansion of producer responsibility, which may lead to increased taxation and corporate burdens. It also considers risks arising from biodiversity loss, extreme weather events and potential supply chain disruptions, as well as the impacts associated with the closure of facilities due to environmental pollution.

Alongside these risks, the Group also identifies significant opportunities, such as improving efficiency, reducing regulatory and tax costs, and strengthening customer and consumer loyalty through greater environmental responsiveness. The corporate strategy is geared towards reducing CO₂ emissions throughout the product lifecycle, promoting the recycling of plastics and other resources, conserving water, and preventing air and water pollution both during production and when the products are in use.

KCE incorporates these risks and opportunities into its own analysis, tailoring them to the specific characteristics of each subsidiary, its operations and existing controls. The

identification of environmental risks is the result of combining the risks defined by the parent company, the double materiality analysis and the systematic risk management process. This approach enables KCE to gain a clear understanding of the environmental issues that require greater attention and prioritisation.



4.4. Climate Change

Climate change, caused by global warming over recent decades, is having a significant impact on ecosystems and people's lives. Retreating glaciers, rising sea levels, floods, droughts and other extreme weather events are affecting marine and terrestrial ecosystems, jeopardising food production and having a direct impact on human health.

KCE's key environmental commitments are closely linked to climate change mitigation, given that industrial activity generates both direct and indirect greenhouse gas emissions. The Kao Group, and by extension KCE, has set a target of [achieving net-zero CO₂ emissions by 2040 and becoming carbon negative by 2050](#).

To make progress towards these objectives, efforts to reduce direct emissions through the decarbonisation of production facilities are being stepped up, as are initiatives targeting the value chain. Furthermore, the product portfolio is being reviewed and adapted with a focus on its carbon footprint.

At the same time, KCE is working to strengthen the resilience of its facilities against the effects of climate change. As a first step, the physical and transition risks with the greatest potential impact have been identified, and action plans are being developed to manage them.

[Incorporating sustainability-related performance into incentive schemes.](#)

Sustainability-related incentive schemes are managed at each subsidiary in accordance with the Group's guidelines. In this regard, in 2025 KCSA introduced a new category called 'sustainability', through which ESG objectives will be incentivised.

4.4.1 Analysis of physical risks arising from climate change

In 2024, KCE carried out a process to identify and assess the physical and transition risks associated with climate change that affect each subsidiary. Physical risks stem from an increase in extreme weather events and changing climatic conditions, whilst transition risks are linked to regulatory, technological, reputational and market changes on the path towards a carbon-neutral economy.

The analysis was carried out in accordance with the TCFD recommendations, the adaptation criteria of the European Taxonomy, in collaboration with Marsh, and drawing on the technical expertise of each subsidiary. With regard to physical risks, climate change models predict how climate-related hazards will evolve over time and quantify the physical damage this is expected to cause to a specific asset or portfolio.

The findings of the physical risk analysis can be summarised as follows:

SHORT TERM (2026)

Physical risks arising from weather events are mitigated through insurance, whilst other chronic risks linked to droughts have a significant impact.

MEDIUM TERM (2030)

The most significant physical risks remain the same, but their likelihood and/or impact are increasing: droughts, water stress and changes in average temperatures.

LONG TERM (2050)

Droughts will be the key risk to the business, as water availability will be affected. Furthermore, water stress will increase, prompting the company to invest and change its operations. The costs associated with rising temperatures will continue to rise, but they will not be particularly significant.

With this analysis, KCE has completed the risk identification and assessment stages and has begun the phase of planning adaptation measures. This planning will incorporate the actions already underway and should lead to a gradual reduction in the identified risks.

At Kao Group level, a programme has been launched to address climate change adaptation, starting with the identification of facilities located in areas at risk of water scarcity or with a high probability of experiencing extreme natural events, and setting specific targets for these sites.

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4.4.2 Transition plan

To make structured progress towards our climate goals, KCE has drawn up a [plan for transitioning to net-zero emissions](#), which represents a key milestone in our environmental strategy. This plan sets out the roadmap that will guide the gradual reduction of greenhouse gas emissions across [Scopes 1, 2 and 3](#), with the exception of indirect emissions associated with the end consumer's use of our products. The roadmap is based on a fundamental principle: [prioritising the reduction of emissions](#) at source, through improved energy efficiency, the decarbonisation of processes and

the transformation of the value chain. Once all opportunities for reduction have been exhausted, the plan provides for the [offsetting of residual and unavoidable emissions](#) through carbon neutralisation or offset mechanisms, always in accordance with environmental integrity criteria.

This approach enables operational and investment decisions to be steered towards a low-carbon model, in line with the Kao Group's commitments and with regulatory and societal expectations regarding climate change.

KCE'S TRANSITION PLAN FOR CLIMATE CHANGE MITIGATION AND ADAPTATION

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1. Purpose	To comply with legal requirements, in particular: Royal Decree 214/2025, which establishes the obligation to calculate the carbon footprint and to draw up and publish GHG reduction plans (in the NFR). CSRD. E1-1 – Transition plan for climate change mitigation. AR1.
2. Scope	KCE [Kao Chemicals GmbH (KCG); QuimiKao, S.A. de C.V. (QK); Kao Chimigraf, S.L.U. (KCHI); Kao Corporation, S.A.U. (KCSA)].
3. Definitions	KAO, KCE
4. Background	KCE has a long history in energy management, dating back well before the base year (2017). Some notable milestones achieved prior to the base year include: — Environmental and energy management certifications [ISO 14001: KCG 2001, KCHI 2012, KCSA 2003, QK (in progress); EMAS: KCHI 2023, KCSA 2005; ISO 50001: KCG 2014, KCSA 2014, KCHI (in progress)]. — Electricity supply certified as 100% renewable at KCG 2016. After the base year: — All subsidiaries to be supplied with electricity certified as 100% renewable by the end of 2025. — Solar panels at KCHI 2021, KCSA 2022 and QK 2023. — Biomass boiler at KCSA, owned by ENGIE, 2025.
5. Strategy	Kao is implementing strategies that contribute to business growth and the resolution of social issues.
5.1. Social issues	Kao recognises the following social issues relating to this topic: — Deterioration of sanitary conditions due to climate change — Loss of biodiversity due to climate change — Depletion of resources and energy problems caused by dependence on fossil fuels

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5.2. Risks and opportunities	The group assessed the financial impacts under 1.5 °C and 4 °C warming scenarios. It identified transition risks (rising commodity prices, carbon taxes, supply shortages) which it plans to address through innovation, with the aim of mitigating risks and creating new business opportunities. It also assessed physical risks (water scarcity, flooding) and identified opportunities for mitigation (increased demand for water- and energy-saving products) and adaptation (improved business resilience).
5.3 Strategies	Kao aims to achieve sustainable development for society and businesses facing the challenge of climate change through the following strategies: 1. Promote innovative initiatives to achieve the goal of net-zero carbon emissions by 2040 and negative emissions by 2050. 2. Reduce CO₂ emissions throughout the product lifecycle. 3. Work with stakeholders on the procurement, distribution, use, disposal and recycling of raw materials. 4. Promote decarbonisation through domestic carbon pricing. 5. Promoting renewable energy and energy saving. 6. Develop and expand the range of water- and energy-saving products. 7. Develop and roll out climate change adaptation products. 8. To provide products and services that help reduce CO₂ emissions in society.
6. Medium and long-term objectives	Medium-term objectives (2030): — GHG emissions (absolute figures) across the entire product lifecycle for the Kao Group: a 22% reduction compared to 2017. — GHG emissions (absolute figures) across all Kao Group plants: 55% reduction compared with 2017. — Energy consumption (per unit sold) across all Kao Group plants: 1% annual reduction from 2021. — Electricity used across all Kao Group plants: 100% from renewable sources. Long-term goals: to reduce net carbon emissions to zero by 2040 and achieve carbon neutrality by 2025.
7. Policies	The Kao Group has announced various policies designed to support climate change mitigation and adaptation. KCE has incorporated the Group's commitments into its own set of policies, the most recent of which is the KCE Environmental Policy. Each local branch updates and disseminates policies that support the commitments set at a higher level, such as: — Energy Guidelines (2020), Guidelines on Biodiversity, Environmental Protection and Climate Action (2024) and the Sustainability Policy (2025) at KOG. — Comprehensive Management Policy (2024) in QK. — Integrated Management System Policy, covering issues relating to quality, the environment, health and safety, and biodiversity (2024) at KCHI. — General Policy on Sustainability and Risk Prevention (2023) at KCSA.

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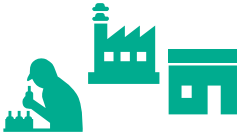
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8. Decarbonisation levers and key actions	Efforts are being made throughout the entire life cycle to decarbonise the operations of the subsidiaries:  Efforts in raw materials procurement.  Efforts in manufacturing (plants, offices, logistics centers).  Efforts in distribution.  Efforts during use.  Efforts in disposal and recycling. ← Scope 3 Scope 1 & 2 Scope 3 →
9. Manufacturing efforts (Scopes 1 and 2)	The manufacturing process for this product relies on multiple energy sources, some of which produce greenhouse gas emissions: — Natural gas (KCG, QK and KCSA). — Diesel (all subsidiaries). — Petrol (QK). — Refrigerant for chillers and air-conditioning equipment (all branches). In addition, KCE also utilises emission-free energy sources: — Certified electricity from renewable sources. — Photovoltaic panels (QK, KCHI and KCSA). — Biomass (KCSA, owned by ENGIE). KCE's main initiatives at its manufacturing sites to mitigate climate change stem from Strategy 6 and focus on: — Energy management (see the certifications obtained in section 4, Background) — Reducing energy consumption by: 1. The introduction of high-efficiency equipment and the efficient operation of such equipment. Examples of recent initiatives and future projects include: — KCG: Process optimisation based on energy consumption monitoring (cleaning procedures, monitoring of steam traps, etc.) and investment in high-efficiency technology (e.g. heat pumps, replacement of burners). — QK: Pumping strategies based on operational intensity, and the introduction of a new cooling unit and new interconnections to improve efficiency and reduce greenhouse gas emissions. — KCHI: Phasing out diesel fuel for heating at the Rubí site, replacing it with an air-to-air heat pump system and introducing energy monitoring software — KCSA: Installation of a new compressor, redesign of the compressed air generation system and reduction of electricity consumption by shutting down the absorption chiller and using a hire chiller (Olesa), as well as automation of temperature control in several tanks and installation of a new chiller for the pilling machine (Mollet).

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9. Manufacturing efforts (Scopes 1 and 2)	2. Reduce energy losses. For example, through the following projects: — KCG: Utilisation of waste heat (e.g. hot water production) and reduction of the set temperature of thermally insulated tanks, as well as shortening of certain operating times. — QK: Implementation of an insulation programme (natural gas savings) and flash steam recovery. — KCHI: Motion sensors in warehouses and low-traffic aisles, combined with reduced compressor load, enabling them to operate more efficiently. — KCSA: Monitoring and repair of air leaks at the Olesa, Mollet and Toner sites. — At all branches, work is currently underway to switch to LED lighting, monitor and inspect steam traps, etc. 3. Use cleaner energy: — Natural gas: the cleanest fossil fuel. Essentially, it serves as a source of the thermal energy required for our processes. — Electricity: 100% from renewable sources (see point 4, Background). — Solar energy: 781 kWp of installed photovoltaic capacity. — Biomass: 16 tonnes per hour, commissioned in 2024 (KCSA, owned by ENGIE) — Installation of electric car chargers at KCHI and KCSA. — Hydrogen: KCG is working to transition from fossil fuels to green hydrogen for its major consumers. — To reduce the volume of refrigerants and other greenhouse gases that escape. KCE is also taking steps at its manufacturing sites to adapt to climate change. Notable among these are the measures implemented at KCG: — Risk of heavy rain: following a detailed expert analysis, it has been determined that there is no risk of flooding of the factory's infrastructure or damage to the plant and infrastructure. — Wind and snow risks: Research carried out by external experts shows that no risks associated with snow and wind are currently anticipated in terms of plant safety. Furthermore, the indirect risks posed by wind to the plant and employees have been analysed, and preventive measures have been incorporated into our internal disaster prevention plans. Investments and financing: KCE has met its 2030 targets for reducing Scope 1 and 2 emissions. However, it is planning a number of investments to make further progress towards decarbonisation, for example: — At KCG, a new cooling unit, new compressors, etc. (KCG €1.04 million). In addition, the company is taking steps to facilitate the potential conversion of natural gas burners to hydrogen (H₂ pipeline from 2030). — A number of projects are currently being evaluated at QK. — At KCHI, a new heat pump to replace the diesel system (€60,000) and other related works, such as new solar panels (€135,000). — At KCSA, the most recent and significant investment is the construction of a biomass plant (owned by ENGIE) in Olesa (€15.3 million). KCE is tackling the next challenge (carbon neutrality by 2040) with the confidence needed to analyse current and future technologies, monitor market trends and define the best strategy without rushing into things.

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10 Efforts in the procurement of raw materials	Greenhouse gas emissions from raw materials are classified under Scope 3, Category 1, and currently account for the majority of Scope 3 emissions. The main measures KCE is implementing to mitigate these emissions stem from strategies 2 and 3, and focus on sourcing raw materials with low carbon emissions. At the same time, the calculation of emissions from raw materials is gradually improving, for example by increasing the use of primary data. All these measures require us to strengthen our collaborative relationships. With regard to adaptation, the following key measures are being implemented at KCG: — Introduction of climate-related risk analysis for raw material suppliers, for example, assessment of drought risk, flood risk and heat stress in regions of origin. — Development of a multi-source supply concept to mitigate weather-related supply disruptions. — Development of substitution strategies for critical raw materials. — Prioritising suppliers with proven climate adaptation strategies. — The use of supplier data not only to reduce emissions, but also to: — Assessment of climate risks in the supply chain — Identification of raw materials with high CO₂ content and a high transition risk — Establishment of strategic security reserves for climate-critical raw materials. — Incorporating potential CO₂ costs into the assessment of raw materials and the calculation of product costs.
11 Distribution efforts	GHG emissions from raw materials are classified under Scope 3, Category 9, and currently account for a third of Scope 3 emissions. KCE's logistical efforts to mitigate climate change stem from strategies 2, 3 and 5, and focus on: — Increase shipment volumes per shipment — Reducing delivery times — Use greener delivery methods — Improving load factors — Improve the visibility of energy consumption and CO₂ emissions associated with distribution — Innovation in distribution through the use of reusable packaging (KCG and KCSA are introducing new IBCs with a green layer; at KCG, pallets made from 100% recycled plastic and a layer of recycled plastic). From late 2025, sustainable three-layer technology (plastic drums and IBCs) has been introduced. The middle layer contains approximately 30% recycled plastic.

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12. Efforts during use	Greenhouse gas emissions from raw materials are classified under Scope 3, Category 11, and no calculations have been carried out to date. The wide variety of uses that our products can have makes calculation extremely difficult. Sectoral studies suggest that this could account for the second-largest share of Scope 3 emissions. The fact that no figures are yet available does not prevent measures from being taken to reduce emissions during product use, in line with strategies 1, 2, 6 and 8. Some examples include: — Akypo Sugar: an 'eco-friendly' Akypo without ethoxylate (KCG). — Mighty acts as a superplasticiser and enables the total amount of water added during concrete production to be reduced by approximately 5–10%. (KCG) — Asphalt additives that reduce the application temperature (QK). — Promotion of LED-curable inks: Through its products, Kao Chimigraf aims to facilitate and encourage the transition from UV lamps to LEDs, thereby minimising energy consumption during the curing process (printing and drying) (KCHI). — Development of additives for hot-mix asphalt, which enable the application temperature to be reduced (KCSA). — Production of a low-temperature-fusing toner, which reduces the photocopier's energy consumption (KCSA).																														
13. Efforts towards disposal and recycling	CO₂ emissions from waste disposal and recycling stem from two sources: 1. The carbon released when used materials (mainly packaging) are incinerated or when petroleum-derived substances in wastewater are treated. 2. The CO₂ associated with the energy required to operate incineration, recycling and wastewater treatment facilities. The main mitigation strategy involves reducing the volume of material that needs to be disposed of or recycled. Waste is recycled wherever possible; non-recyclable waste is managed using carbon-neutral approaches. Product packaging is closely monitored and prevention plans have been put in place. In terms of sustainability, measures such as the implementation of a more sustainable IBC and the introduction of pallets made from 100% recycled plastic reduce the environmental impact of packaging throughout its entire life cycle.																														
14. Results, metrics	The table below shows KCE's results over recent years, the reference year (baseline), as well as the target for the reporting year and the long-term target. <table><tr><th rowspan="2">STRATEGY</th><th rowspan="2">METRICS</th><th colspan="4">RESULTS (%)</th><th colspan="2">MID-TO-LONG TERM OBJECTIVES</th></tr><tr><th>2017</th><th>2023</th><th>2024</th><th>2025</th><th>TARGET</th><th>YEAR</th></tr><tr><td>(4) (5)</td><td>% CO₂ reduction (absolute quantity) scopes 1 & 2</td><td>0</td><td>35.02</td><td>40.88</td><td>57.19</td><td>55%</td><td>2030</td></tr><tr><td>(5)</td><td>% renewable sources in electricity used</td><td>-</td><td>78.03</td><td>92.80</td><td>99.97</td><td>100%</td><td>2030</td></tr></table>	STRATEGY	METRICS	RESULTS (%)				MID-TO-LONG TERM OBJECTIVES		2017	2023	2024	2025	TARGET	YEAR	(4) (5)	% CO ₂ reduction (absolute quantity) scopes 1 & 2	0	35.02	40.88	57.19	55%	2030	(5)	% renewable sources in electricity used	-	78.03	92.80	99.97	100%	2030
STRATEGY	METRICS			RESULTS (%)				MID-TO-LONG TERM OBJECTIVES																							
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(5)	% renewable sources in electricity used	-	78.03	92.80	99.97	100%	2030																								

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15. Internal communication	The NFR report is distributed annually to all affiliated members by the company. It is also available on the KCE website.
16 Role of administrative, management and supervisory bodies	Each subsidiary has its own transition plan for climate change mitigation and adaptation, which has been approved by the corresponding President following validation by STECOM. This KCE Transition Plan for Climate Change Mitigation and Adaptation has been drawn up by consolidating information from all subsidiaries.

4.4.3 Mitigation measures

To achieve this objective, KCE is promoting initiatives aimed at reducing energy consumption, improving efficiency and moving towards cleaner energy sources across all its facilities.

The main areas of focus are as follows:

1. Improved energy management

KCE promotes the implementation of energy management systems certified to the ISO 50001 standard.

- KCG was certified in 2013.
- KCSA in 2014.
- KCHI is in the final stages of the certification process.

2. Reduction in energy consumption

KCE is developing various actions to reduce energy consumption in its facilities.

2.1 Introduction of highly efficient equipment and optimised operation

As in previous years:

- Gradual replacement of refrigeration units, air conditioning systems and compressors with more efficient models that use refrigerants with a lower environmental impact.
- More efficient operation of equipment through optimised controls that adapt to demand (frequency converters for pumps and agitators, automation in distillation, etc.).
- Replacement of conventional lighting with LED technology at KCG, QK and KCSA; KCHI has already completed the transition.

2.2 Reducing energy losses and optimising energy use.

Measures are being implemented to eliminate losses and make use of the energy generated in other processes:

- Waste heat recovery systems and combined heat and power units.
- Improving steam efficiency by enhancing the maintenance of steam traps and increasing recovery.
- Installation of heat recovery systems, such as the heat-recovery thermal oxidiser at the MDJ-2 plant, which reduces VOC emissions and enables energy to be recovered for steam generation.
- Application of energy efficiency criteria in new facilities, such as KCSA's MDJ-2 plant.
- Improving thermal insulation in tanks and pipes.
- Condensate recovery.
- Optimisation of process parameters (times, temperatures, operating conditions).

The Kao Group has set ambitious climate targets: to reduce CO₂ emissions by 55% by 2030 (compared with 2017), to achieve net-zero emissions by 2040, and to become carbon-negative by 2050.

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3. Use of renewable energy and increased energy self-sufficiency

3.1 Gas natural

Natural gas remains KCE's primary energy source due to its lower environmental impact compared to other fossil fuels. It is used to generate electricity and process heat (steam). However, efforts are underway to reduce its use and gradually replace it with renewable energy.

3.2 Renewable energy

Purchase of renewable electricity

- KCG since 2016
- KCSA since 2019
- KCHI since 2020 (KCHI France since 2024)
- QK from 2025

Renewable energy generation

KCE is promoting the installation of photovoltaic systems. The current capacity stands at 781 kWp, distributed as follows:



QK 499 kWp



KCHI (Rubî) 185 kWp



KCSA (Olesa) 97 kWp

Biomass

At KCSA (Olesa), from 2025 onwards, steam will be supplied by a biomass boiler operated as part of a joint venture with Engie. This measure reduces fossil fuel consumption and lowers emissions intensity following the shutdown of the combined heat and power plant.

4. Reduction in emissions of refrigerant gases and other GHGs

Air conditioning and refrigeration systems contain fluorocarbons with a high global warming potential. To minimise leaks, routine inspections have been stepped up. At KCSA, the replacement of a refrigeration unit in Mollet enabled the refrigerant to be replaced with R-1233zdE, an HFO with a lower GWP.

5. Optimisation of process conditions

Improvements are being made to control systems to optimise equipment operation and reduce energy consumption, including:

- Optimisation of compressed air systems.
- Installation of variable frequency drives on pumps and mixers.
- Automation of distillation plants.

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4.4. Climate Change

4.4.4 Adaptation measures

Following the completion of the analysis of physical risks arising from climate change, KCE has prioritised its adaptation measures, particularly in relation to scenarios of water scarcity that could significantly affect the QK and KCSA sites. Water availability is a critical factor for business continuity, which is why the company has identified this risk as one of its most significant strategic priorities.

Globally, the Kao Group is working on a plan to reduce water use per unit of sales across the entire life cycle, with a particular focus on regions experiencing water stress and using 2017 as the baseline year (see the section on 'Water and Marine Resources').

In addition, both the Group and KCE are promoting the installation of photovoltaic systems for self-consumption. This measure helps to reduce dependence on the external electricity supply and strengthens operational resilience in the face of potential power cuts or grid instability.

4.4.5 Measures to reduce the carbon footprint of our products

Throughout 2025, KCE has continued to make progress in integrating the [Product Carbon Footprint \(PCF\)](#) as a key metric in the climate management of its portfolio. The work has focused on three areas: methodological improvement, strengthening internal capabilities, and cross-functional coordination of decarbonisation initiatives.

Improving the quality of PCF data: throughout the financial year, the accuracy, traceability and consistency of the data used in PCF calculations have been enhanced by:

- Analysis of variability and precision by product family.
- Securing a larger volume of primary emission factors from strategic suppliers.
- Implementation of more accurate internal systems for monitoring energy consumption, performance and direct emissions.

These improvements reinforce the robustness of the methodology and ensure it remains in line with national and European regulatory requirements.

Internal capacity building: in 2025, a training programme on sustainability and PCF methodologies was launched for the R&D department, with the aim of integrating climate impact variables into product and process design from the earliest stages of development.

Cross-functional Working Group on Portfolio Decarbonisation: a group has been set up comprising representatives from Innovation, R&D, Engineering and Maintenance, Product Safety and Business to coordinate portfolio decarbonisation initiatives. Its main areas of focus include:

- Analysis of the portfolio from a climate perspective.
- Ongoing review of methodological accuracy.
- Identification of key indicators associated with processes and raw materials.
- Development of a roadmap for reducing the portfolio's carbon footprint, in line with corporate objectives.

In 2026, progress will be made on expanding primary data, improving the governance of PCF data and designing the decarbonisation roadmap, thereby consolidating the PCF as a central element in technical, industrial and commercial decision-making.

The carbon footprint values for raw materials have been included in the Scope 3 calculation.

4.4.6 Objectives relating to climate change mitigation and adaptation

In 2020, the environmental ESG targets for the period 2020–2030⁴ were set:

AREA	INDICATOR	TARGET VALUE	BASE YEAR
Decarbonisation	Reduction in CO ₂ emissions under Scopes 1 and 2 (absolute)	55%	2017
Energy	Purchased renewable electricity	100%	-
	Reduction in energy consumption	1%	Previous year

⁴In 2021, the decarbonisation target was revised to be more ambitious than the one originally set.

4.4. Climate Change

4.4.6.1 Energy consumption and mix

The chemical industry is energy-intensive; energy is an essential resource for its operations and currently remains linked to the generation of greenhouse gas emissions. KCE's energy mix has evolved significantly, shifting from a predominant reliance on fossil fuels towards an increasing use of renewable sources.

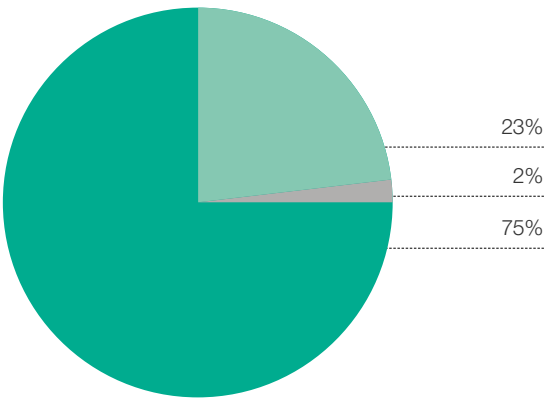
This transition process began in 1977 with the replacement of diesel with natural gas at KCSA and was consolidated in 2019, when all the electricity consumed by KCE came from renewable sources. The most recent milestone is the decommissioning of the KCSA cogeneration plant in 2023 and the installation, in 2024, of a biomass boiler at the same site (owned by ENGIE), the impact of which is reflected in the 2025 indicators. From 2025, QK also consumes 100% renewable electricity.

Environmental awareness and the need for decarbonisation remain the main drivers of this transition.

Breakdown of KCE's current energy mix:

DISTRIBUTION BY TYPE OF ENERGY USE

ELECTRICITY CONSUMPTION THERMAL CONSUMPTION OTHER ENERGY CONSUMPTION



ENERGY CONSUMPTION	2023	2024	2025
Total energy consumption (MWh)	358,229	356,620(*)	359,887
Total energy consumption / Final production (MWh/t)	1.10	1.03	1.10
Electricity consumption (MWh)	79,649	84,763(*)	82,104
Consumption of electricity from renewable sources (%)	78.03	92.80(*)	100
Electricity consumption / Final production (MWh/t)	0.24	0.24	0.25
Natural gas consumption (GJ)	1,057,192	919,475	808,813
Natural gas consumption / Final production (GJ/t)	3.23	2.66	2.48
Heat consumption (MWh)	276,828	270,274	271,379
Heat consumption / Final production (MWh/t)	0.85	0.78	0.83
Other energy consumption (MWh)	1,686	1,538(**)	6,405

(*) Figure corrected compared with the 2024 version (the KCSA figures have been amended because there is an additional invoice in June relating to the Mollet centre).
(**) Corrected figure; an error occurred when the data was transferred.

Overall energy consumption and the consumption ratio have increased compared with the previous financial year, mainly due to QK's operations, which saw a rise in thermal energy consumption and other forms of energy consumption. This is linked to the operation of the combined heat and power plant and the increased use of fuel for internal transport. The consumption of natural gas for hydrogen production has also been taken into account.

4.4. Climate Change

It is important to bear in mind that these indicators are influenced by the production mix. KCE has a highly diverse portfolio, which affects these indicators in different ways. Another factor to consider is that production has fallen, which has a negative impact on the indicators:

- There are fixed costs that are not directly linked to production (such as office costs).
- Each plant has a minimum operating consumption, regardless of the volume produced.
- A decline in production increases the relative ratios.

Finally, by 2025, QK was sourcing all its electricity from renewable sources. Of particular note is the fall in natural gas consumption at KCSA (3,015,950 Nm³, 31,408 MWh), due to the purchase of steam from a biomass plant rather than generating it on-site using natural gas.

ENERGY CONSUMPTION BY SUBSIDIARIES



4.4.6.2 Scope 1, 2 and 3 emissions

KCE closely monitors its greenhouse gas (GHG) emissions, which are categorised in accordance with the GHG Protocol into direct emissions (Scope 1) and indirect emissions (Scopes 2 and 3). This categorisation enables the company to understand the source of its emissions, identify the main areas of impact, and effectively target mitigation measures.

Classification of emissions

- **Scope 1:** direct emissions resulting from the combustion of fuels in stationary sources (boilers, turbines, pumps), from physical or chemical processes, from transport in vehicles owned or controlled by KCE (including leased vehicles), as well as fugitive emissions from leaks in equipment, particularly air-conditioning and refrigeration systems.
- **Scope 2:** indirect emissions associated with the purchase and consumption of electricity.
- **Scope 3:** indirect emissions generated off-site, linked to the value chain. These include the transport of raw materials and finished products, staff commuting, business travel and waste management.

The gases included in the inventory are CO₂, CH₄, N₂O, HFC, PFC and SF₆.

Calculation methods

Scope 1

- Emissions from combustion are calculated by applying the emission and oxidation factors set out in the regulations of each country in which KCE operates; this involves applying the emission and oxidation factors for the relevant fuels to fuel consumption.
- Emissions associated with refrigerant gases and fire suppression systems are determined on the basis of the refills carried out and the global warming potential (GWP) of each substance, in accordance with Regulation 517/2014.
- There is currently no data available on emissions associated with business travel and journeys made by KCG and QK staff in their own vehicles.

Scope 2

Indirect emissions associated with purchased electricity are calculated in accordance with the regulations in force in each country where KCE has operations. All subsidiaries hold certificates confirming the percentage of renewable energy purchased.

4.4. Climate Change

Scope 3

KCE calculates Scope 3 emissions in accordance with the Corporate Value Chain Accounting and Reporting Standard (Scope 3), which classifies emissions into 15 categories. This approach allows each category to be analysed individually and justifies its inclusion or exclusion from the inventory.

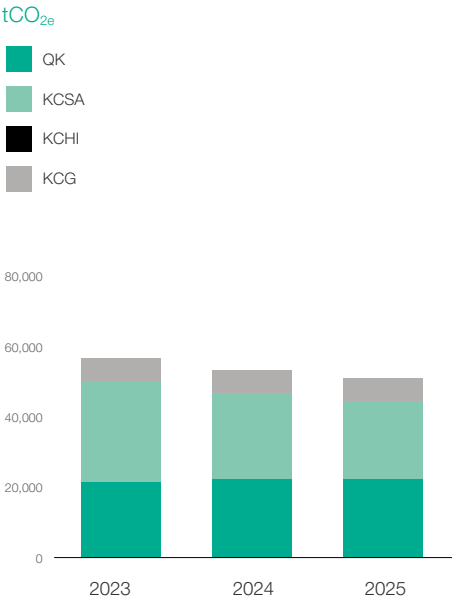
Trends in emissions.
KCE monitors its Scope 1, 2 and 3 CO₂ emissions, as shown below:

KCE	2023	2024	2025
Total direct GHG emissions (Scope 1) (t CO _{2e})	57,729	54,913	48,740
Scope 1 emissions / final product (kg CO _{2e} /t)	176.66	158.71	149.22
Total indirect GHG emissions (Scope 2) (t CO _{2e})	3,974	1,255	0
Scope 2 emissions / final product (kg CO _{2e} /t)	12.16	3.63	0
Other GHG emissions (Scope 3) (t CO _{2e})	21,630	842,718	1,023,502
Scope 3 emissions / final product (kg CO _{2e} /t)	66.16	2,435.68	3,133.55
Total GHG emissions (t CO _{2e})	83,364	898,886	1,072,242
Total GHG emissions per unit of final product (kg CO _{2e} /t)	254.97	2,598.02	3,282.78

Overall, Scope 1 and 2 emissions have fallen by 30.4% (21,274 tonnes) compared with 2017, the base year for this indicator. In contrast, Scope 3 emissions show a significant increase due to the inclusion of categories that had not been quantified in previous years.

SCOPE 1 EMISSIONS

Direct emissions have fallen compared with the previous financial year, mainly due to the purchase of steam from a biomass plant, which has led to a reduction in steam production through the combustion of natural gas at KCSA's Olesa de Monserrat site and, consequently, a reduction in CO₂ emissions.



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SCOPE 2 EMISSIONS

Scope 2 emissions will be completely eliminated by 2025, as QK completes its transition to sourcing 100% renewable electricity. The other subsidiaries were already using 100% renewable electricity.

Furthermore, the supply of steam from biomass at KCSA helps to reduce the indirect emissions associated with energy consumption.

SCOPE 3 EMISSIONS

Scope 3 emissions have risen significantly compared with the previous year, mainly because this report includes emissions associated with categories for which calculations have now begun.

KCE	2023	2024	2025
1. Goods and services purchased	683,121	808,539	988,777
3. Activities relating to fuel and energy (not included in Scope 1 or Scope 2)			1,201
4. Transport and distribution upstream	4,872	11,575	12,846
5. Waste generated during operations	114	1.832	2.496
6. Business travel	291	238	290
7. Employees' commutes to work	853	864	1.219
9. Transport and distribution downstream	15,500	19,669	16,673

These emissions are expected to continue rising in the coming years, as new indirect sources that are not currently quantified are taken into account.

Coverage by branch.

The following table shows which subsidiaries report each Scope 3 category in each financial year, reflecting the gradual expansion of the scope of the inventory.

KCE	2023	2024	2025
1. Goods and services purchased	KCG, QK, KCSA	Todas	Todas
3. Activities relating to fuel and energy (not included in Scope 1 or Scope 2)			KCSA
4. Transport and distribution upstream	KCSA	QK, KCSA	KCG, QK, KCSA
5. Waste generated during operations	KCSA	KCHI, KCSA	KCG, KCHI, KCSA
6. Business travel	KCSA	KCHI, KCSA	KCG, KCHI, KCSA
7. Employees' commutes to work	KCSA	KCSA	KCG, KCHI, KCSA
9. Transport and distribution downstream	KCG, QK, KCHI, KCSA	KCG, QK, KCHI ⁵ , KCSA	Todas

⁵ KCHI reports only the emissions associated with a shuttle.

4.4. Climate Change

Specific methodologies by category

SCOPE 3 CATEGORY	CALCULATION METHODOLOGY
1. Goods and services purchased	Primary product carbon footprint (PCF) data is collected from all suppliers of the selected raw materials, based on their purchase volume over the course of the year. The primary data received from suppliers has been assessed internally against minimum criteria to determine whether it was obtained in accordance with ISO standards and/or the TfS standard. Data deemed acceptable has been weighted according to purchase volumes and added to the secondary values for raw materials for which no response was received from suppliers. The secondary data, also weighted by volume, comes from the Ecoinvent and Sphera databases, and is the same data that has been deemed suitable for calculating the LCA of products manufactured at KCE. Transport is not included (this is covered in category 4).
3. Activities relating to fuel and energy	Emissions relating to purchased electricity are calculated as the product of the amount of electricity purchased and the emission factor provided by the Catalan Climate Change Office.
4. Transport and distribution upstream 9. Transport and distribution downstream	To calculate these figures, the group uses its own methodology, which combines distances travelled, modes of transport and emission factors.
5. Waste generated during operations	In 2023, KCSA only quantified emissions associated with waste transport, calculated using the methodology set out in categories 4 and 9. In 2024, KCSA also quantifies emissions associated with waste treatment. Furthermore, KCHI has included emissions associated with transport.
6. Business travel	They are calculated using an own methodology.
7. Workers' commutes	They are calculated using an own methodology that combines data from the workforce and from the applications used to record work-related travel, with official statistical data and factors. The calculation method has been documented and the various assumptions made have been set out in detail.



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4.5. Pollution prevention

Due to the nature of its processes and materials, the chemical industry inherently has the potential to cause environmental impacts. For this reason, pollution prevention is a central pillar of KCE's environmental management. From the design phase of each project, technical and operational criteria are incorporated to prevent—and, where this is not possible, to minimise as far as possible—any form of air, soil or water pollution.

KCE has a set of environmental policies that have been approved at both Kao Group and local levels. Among these, the KCE Environmental Policy sets out the fundamental commitments regarding the management of material impacts, risks and opportunities associated with pollution, with a particular focus on air pollution.

This policy serves as a framework for all affiliated companies. Those subsidiaries for which pollution has been identified as a material issue—all except KCHI—plan to incorporate these commitments into their local policies throughout 2026.

4.5.1 Measures and remedies relating to pollution

KCE implements a range of measures to prevent air, soil and water pollution in the areas where it operates, as well as to reduce the pollutant load in the wastewater generated by its processes.

These initiatives are structured around three main areas:

- Reducing pollutant generation at source through process improvements, cleaner technologies and the appropriate selection of raw materials.
- Good operational practices, including preventive maintenance, environmental monitoring and staff training.
- Application of best available techniques (BAT), progressively incorporating technological solutions that minimise emissions and discharges.

All these measures are aimed at strict compliance with applicable legislation and the implementation of the principle of pollution prevention. This involves the gradual introduction of new technologies, the modification of processes to reduce emissions, and the thorough monitoring of environmental parameters.

KCE publishes emissions data for KCG, QK and KCSA as part of the PRTR (Pollutant Release and Transfer Registers) scheme. -For KCSA, this includes data relating to the Olesa de Montserrat and Mollet del Vallès sites-.

4.5.2 Pollution-related targets and metrics

The Kao Group has set a target to publish the volatile organic compound (VOC) emissions of each subsidiary by 2025. KCE companies have been disclosing this information for several years, with the exception of KCG, which began publishing its in 2024.

4.5.2.1 Air, water and soil pollution

AIR POLLUTION

The main atmospheric emissions associated with KCE's operations are combustion gases (NOx and CO), volatile organic compounds (VOCs) and, to a lesser extent, particulate matter.

Since its inception, KCE has implemented measures to prevent and minimise the impact of its atmospheric emissions, including:

- 1— Replacing diesel with natural gas in boilers.
- 2— Installation of condensers to recover volatile substances.
- 3— Design of high-integrity systems.
- 4— Localised extraction systems and filters to reduce particulate emissions.
- 5— Installation of condensers whose gases are fed into scrubbers to reduce VOCs.
- 6— Installation of thermal oxidisers.
- 7— Programmes for the regular monitoring of emissions and ambient air quality.

KCSA is currently developing a leak detection and repair (LDAR) programme in line with best available techniques.

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4.5. Pollution prevention

KCE carries out a quantitative monitoring of emissions of CO, NOx, CH₄, HFC, PFC, NF₃, SF₆, PM and VOC.

In 2025, the following is observed:

1— Reduction in combustion emissions (CO, NOx, SO₂) due to lower natural gas consumption, particularly as KCSA has started purchasing steam this year.

2— HFC emissions are concentrated in KCSA and QK, with the latter accounting for 89%, and are linked to leaks in air-conditioning equipment.

All subsidiaries report VOC emissions, although only KCHI reports fugitive emissions, which are significant due to the handling of volatile solvents involved in its operations. The others report only channelled VOC emissions, which are minimal compared to those reported by KCHI.

KCHI has continued to implement measures relating to its emissions. The increase of 18,5 tonnes compared with the previous year is mainly due to two factors:

1— Increase in solvent production

2— The need for smaller-scale production leads to more cleaning operations in open processes, which in turn results in higher levels of fugitive emissions.

The aggregate emissions of HFCs and PM do not include data from KCG. Emissions of the pollutants PFCs and NF₃ are not included as they are not generated at KCE.

KCE	2023	2024	2025
CO emissions (kg)	19,916	18,567	18,234
CO emissions / Final production (kg CO/t)	0.06	0.05	0.06
NOx emissions (kg)	42,617	37,009	29,878
NOx emissions / Final production (kg/t)	0.13	0.11	0.09
CH ₄ emissions (kg)	1,306	1,169	1,036
CH ₄ emissions / Final production (kg/t)	0.00	0.00	0.00
HFC emissions (kg)	137	228	439
HFC emissions / Final production (kg/t)	0.00	0.00	0.00
SF ₆ emissions (kg)	0	0	0
SF ₆ emissions / Final production (kg/t)	0.00	0.00	0.00
SO ₂ emissions (kg)	390	400(*)	335
SO ₂ emissions / Final production (kg/t)	0.00	0.00	0.00
PM emissions (kg)	921	1,057	1,015
PM emissions / Final production (kg/t)	0.00	0.00	0.00
VOC emissions (kg)	65,206	79,776	98,252
VOC emissions / Final production (kg/t)	0.20	0.23	0.3

(*) Data corrected due to an input error

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PREVENTION OF NOISE AND LIGHT POLLUTION

KCE carries out regular noise monitoring outside its facilities to ensure compliance with legal limits and to identify any increases that may require corrective action. The levels recorded remain within the typical ranges for industrial activities.

With regard to light pollution, all centres comply with the relevant regulatory requirements.

WATER POLLUTION

- KCE has wastewater treatment facilities at all its production sites, except at:
- [KCG](#), whose wastewater is treated off-site at the local treatment plant, as it meets the relevant requirements.
 - [KCSA](#) Barberà, whose wastewater is comparable to urban wastewater and which has a homogenisation tank.
 - [KCHI](#), whose waters are also comparable to urban waters.

KCE's wastewater treatment plants utilise physicochemical and biological technologies, after which the treated water is discharged into municipal treatment plants. Water quality is monitored several times a day to ensure compliance with limit values.

The levels of pollutants in wastewater have varied in recent years due to changes in the operations of manufacturing plants, and a number of measures have been taken to reduce these levels. Furthermore, the quantities of pollutants that may be discharged into water are regulated in each country.

In 2025, work began on the modernisation of the water treatment plant in the centre of Mollet del Vallès, with the aim of increasing its capacity and facilitating future developments aimed at a more efficient use of water resources.

KCE	2023	2024	2025
Wastewater discharge (m³)	379,639	421,367	416,215
Discharge / Final production (m³/t)	1.16	1.22	1.27
COT (kg)	213,436	243,275	211,251
COT / Final production (kg/t)	0.65	0.70	0.65
WE (kg)	21,284	15,813	24,828
MONTH / Final production (kg/t)	0.07	0.05	0.08
N (kg)	36,695	40,589	46,628
N / Final production (kg/t)	0.11	0.12	0.14
P (kg)	970	473	1,798
P / Producción final (kg/t)	0.003	0.001	0.01

The total volume of water discharged fell slightly in 2025, although the ratio per tonne produced increased due to the production mix and the fact that some of the discharge, such as sanitary water, is not dependent on the level of activity. KCG and KCSA managed to reduce their discharge volumes, in the latter case as a result of the consumption restrictions imposed by the government during the drought.

The discharge parameters show a general increase due to reduced water usage, with the exception of TOC, which has decreased.

The treated wastewater is discharged into the municipal sewer system. Furthermore, given the chemical nature of the operations, groundwater is monitored regularly at most production sites.

The possible presence of nanomaterials, PFAS, SoCs and microcontaminants is currently being studied and considered.

SOIL POLLUTION

Preventing soil contamination is a top priority for KCE at all its sites, given that its operations are inherently prone to causing pollution. For this reason, before any new facility is built, a specific assessment is carried out to identify potential risks and plan the necessary mitigation measures. From the design stage onwards, consideration is given to the presence of sensitive aquifers, areas vulnerable to contamination, and the materials and equipment required to ensure maximum integrity.

Storage facilities and handling areas are constructed with watertight sump pits and containment systems that are subject to regular inspections and maintenance. In addition, leak- and corrosion-resistant tanks, containers and vessels are used, thereby reducing the risk of contamination seeping into the ground.

KCG and KCSA operate networks of piezometers that enable regular analysis of groundwater and the surrounding soil to detect potential contaminants. At KCSA, Monitoring and Control Plans (PSC) are also implemented at the frequency stipulated by regulations. The Olesa de Montserrat and Mollet del Vallès sites have environmental impact assessments that are updated in line with changes made at each site.

All subsidiaries maintain emergency and spill response protocols, which are kept up to date and tested through regular drills, in order to ensure a swift and effective response. Should a situation arise where access is restricted, preventing the recovery of materials, any liquid or solid waste generated is managed appropriately prior to disposal, in full compliance with regulations.

Staff training is a key element: regular sessions are held on safe working practices, spill management and emergency procedures, with the aim of safeguarding groundwater quality and soil health at all sites.

SUBSTANCES OF CONCERN AND SUBSTANCES OF HIGH CONCERN

KCE has carried out a comprehensive analysis of its raw materials and products in relation to the official list of substances of very high concern (SVHC) published by ECHA, in accordance with Article 59(10) of the REACH Regulation.

- The results show that:
- KCE does not manufacture any products that could be classified as substances of very high concern.
 - Four raw materials included on the SVHC list are procured, along with a further seven that contain a minor component classified as such.

- Of the four raw materials listed:
- Three are used as reagents; they are completely consumed during the process and do not remain in the final product.
 - The fourth is incorporated into specific formulations, always intended for uses permitted under current legislation.

All these raw materials are handled in strict accordance with the safety standards derived from their hazard classifications, ensuring that they are handled safely and in compliance with the relevant regulations.

4.6. Water and marine resources

The Kao Group considers the sustainable use of water to be one of the fundamental pillars of its environmental management. The company drives initiatives across all its subsidiaries to promote the conservation of water resources, with the aim of ensuring that this limited resource can be passed on to future generations. The Group’s vision focuses on creating sustainable value that enables a safe and comfortable life, in harmony with all living things on the planet.

In this context, KCE is implementing measures to ensure a more efficient and responsible use of water, focusing its efforts on the development of new technologies and prioritising:

- Reducing consumption.
- The reduction, reuse and recycling of wastewater.
- The optimisation and improvement of wastewater treatment facilities.

The aim is to use only the water required to carry out the activity without compromising the availability of the resource, whilst ensuring compliance with legal requirements regarding abstraction, consumption and discharge.

WATER WITHDRAWAL

WATER WITHDRAWAL

KCE obtains water from three main sources:

- Groundwater, which constitutes the main source (KCG, QK and KCSA).
- Water sourced from third parties, used across all subsidiaries.
- Water from the municipal treatment plant, pre-treated for use (QK).

KCG, QK and KCSA have their own properly authorised and monitored wells. In the case of KCG, groundwater is used in an open-loop system for cooling and is subsequently returned to the River Rhine. QK is taking steps to increase the use of reclaimed water and reduce groundwater withdrawal and third-party water consumption.

Water has been assessed as a non-material issue for KCE as a whole, although it is considered material for QK and KCSA. As the score obtained falls on the materiality threshold, management has decided to continue reporting on this issue as if it were material.

The Kao Group recognises a number of social issues related to water, including:

- The spread of areas experiencing water scarcity, exacerbated by climate change.
- A decline in the quality of water for human consumption due to pollution.
- Localised overconsumption and an increase in droughts linked to industrial activities.
- Rising demand for water due to urban development.
- Inadequate water infrastructure in certain regions.

Based on these risks and opportunities, the Group has developed its own water strategy, aimed at enhancing the availability and quality of water resources, improving water use efficiency, and ensuring the resilience of operations in a context of increasing water stress. This strategy combines responsible water management across all facilities with the development of technologies and products that promote more sustainable use, whilst fostering collaboration with stakeholders and ensuring strict compliance with applicable regulations.

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4.6. Water and marine resources

4.6.1 Measures and resources relating to water and marine resources

KCE has identified various levers for water efficiency and key actions throughout the life cycle of its products, with a particular focus on the manufacturing phase. The management of water-related risks and opportunities is structured around processes of planning, implementation, evaluation and continuous improvement.

MANUFACTURING EFFORTS

The main initiatives at production sites stem from corporate strategies and focus on:

- Water management under ISO 14001.
- Improving understanding of water usage at each facility, with a greater level of detail in line with the Best Available Techniques (BREF WGC).
- Tracking and monitoring consumption, increasing the number of meters installed to assess water usage.
- Reducing consumption through: more efficient equipment and closed-loop systems, eliminating leaks, optimising washing procedures, recovering condensate, and using cooling systems with lower energy consumption (e.g. reverse osmosis to treat reject water).
- Recirculation and reuse, using recirculation technologies for cooling and washing.
- Treatment and reuse of greywater for cleaning or irrigation.
- Preventive maintenance and real-time monitoring to detect leaks.
- Efficient use of reagents and improvement of their environmental impact.

The subsidiaries are drawing up an investment roadmap to meet water efficiency targets.

EFFORTS IN THE ACQUISITION OF RAW MATERIALS

These initiatives focus on efficiency, supply security and technological innovation, prioritising suppliers and materials with a lower water footprint.

EFFORTS IN PRODUCT DISTRIBUTION

The measures are aimed at improving logistical efficiency, digitalisation and reducing energy consumption and, by extension, the water consumption associated with energy production. Key initiatives include:

- Route optimisation using specialist software.
- Consolidation of freight and the use of more efficient modes of transport (e.g. rail).
Dry cleaning systems or high-efficiency equipment in logistics centres.
- Improving energy efficiency in warehouses.
- Reducing the use of packaging materials that consume large amounts of water, and prioritising recycled or reusable materials.
- Use of sensors and real-time monitoring technologies.

EFFORTS DURING PRODUCT USE PHASE

These initiatives focus on innovative design, technological efficiency and raising awareness among customers and consumers to promote responsible water use.

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EFFORTS TO DISPOSE OF AND RECYCLE

KCE focuses its efforts on minimising the use of fresh water in waste management processes, reusing industrial wastewater and reducing water pollution – the so-called grey water footprint. When selecting waste management providers, priority is given to those that incorporate technologies capable of recycling water on-site, treating and reusing it in operations such as cleaning, cooling or rinsing, thereby reducing the need for fresh water.

KCE also implements specific measures to prevent and reduce the pollutant load of its discharges, through internal self-monitoring and external inspections carried out at intervals tailored to each parameter. These measures ensure compliance with the established limits and enable a gradual improvement in the quality of the discharged water.

Other key strategies include water conservation through material recycling and the application of circular economy principles in product design and end-of-life management. Reducing waste decreases the amount of water required for its final treatment, thereby enhancing overall water efficiency.

ADAPTATION MEASURES

The Kao Group has conducted a study to identify each site's exposure to water-related risks, such as droughts or floods. The results show that the QK, KCHI and KCSA sites are affected by these risks. As a next step, the Group has set a specific target aimed at mitigating and managing these risks, which is to be implemented by each subsidiary.

4.6.2 Objectives and metrics

With regard to water, KCE has set the following objectives for the period 2020–2030:

STRATEGY	INDICATOR	TARGET VALUE	BASE YEAR
(2)	Reduction in water consumption	45%	2005

KCE is thus aligning itself with the Kao Group's corporate target of reducing water consumption by 45% by 2030 compared with 2005.

Furthermore, in line with strategies 2, 5 and 6, the group has set a new target: all plants located in areas experiencing water stress must define and achieve an individual water management target, focusing on water extraction. These targets must be defined by 2026.

The regions of Mexico and Spain where KCE's subsidiaries operate are classified as areas at risk of water scarcity. Consequently, stricter measures have been introduced at QK, KCHI and KCSA.

In this context, in 2025 KCSA carried out its first water audit, which serves as the starting point for a structured assessment of water management at its sites. This audit will help identify opportunities for savings, investment needs and the elements required to define internal water governance and key performance indicators (KPIs). The lessons learnt will be shared with the other subsidiaries.

KCSA has set itself the goal of achieving AWS (Alliance for Water Stewardship) certification by 2030.

For its part, KCHI, although less water-intensive, has set a target of reducing water consumption by 10% by 2028 compared with 2025 at its Madrid site, through measures to contain domestic water consumption.

4.6. Water and marine resources

WATER WITHDRAWAL

KCE keeps a detailed record of water usage at each site.

KCE	2023	2024	2025
Water withdrawal (m³)	1,395,687	1,399,998	1,283,450
Withdrawal / Final production (m³/t)	4.27	4.05	3.93
Groundwater	966,897	958,336	830,293
Water from third parties	425,010	373,435(*)	336,983
Water recovered from other organisations	3,780	68,227	116,264

(*) Data corrected due to an input error

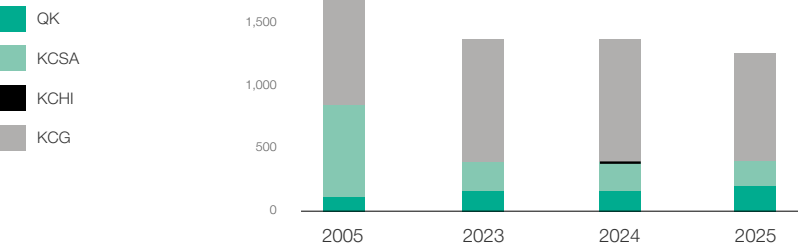
In 2025, total withdrawal fell by 116.458 m³ compared with 2024, and the ratio per tonne produced fell by 3%, indicating greater efficiency in the use of the resource. This improvement has been achieved despite the fact that some subsidiaries expanded their production facilities.

At KCSA, a number of measures were implemented, including adjustments to operating conditions, improvements to the control loops of cooling towers, condensate recovery, and the installation of flow restrictors on showers and taps.

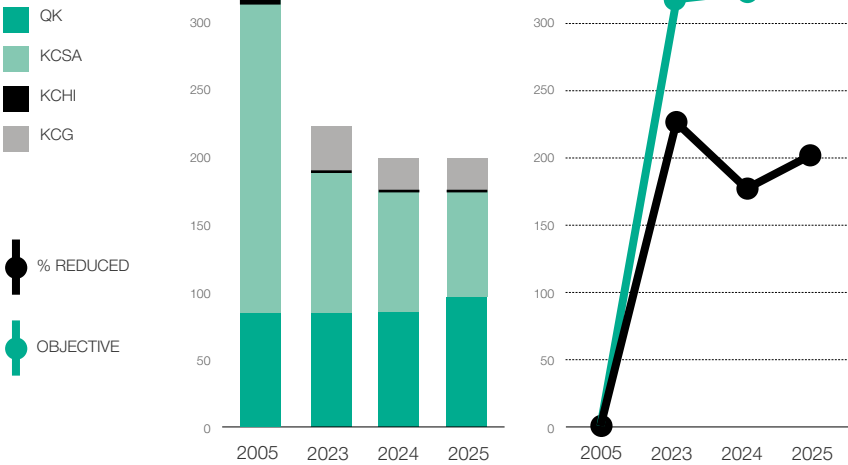
At QK, an increase has been observed due to the greater use of reclaimed water, the quality of which results in a higher rejection rate at the reverse osmosis plants.

Compared with the base year of 2005, the extraction rate has fallen by 44%.

WATER WITHDRAWAL BY SUBSIDIARY



WATER CONSUMPTION BY SUBSIDIARY



WATER CONSUMPTION

Water consumption is calculated as the difference between the amount of water withdrawal and the amount of water discharged.

KCE	2023	2024	2025
Total water consumption (m³)	210,490	184,528	185,572
Consumption / Final production (m³/t)	0.64	0.53	0.57

Total consumption remains stable compared with the previous year, although the ratio has risen by 7%. This trend can be explained by:

- The drought affecting the KCSA since 2023, which has necessitated the introduction of strict water-saving measures.
- The existence of consumption that is independent of production (cooling, tank heating, domestic use).
- The influence of weather conditions, particularly extreme temperatures.

Compared with 2005, water consumption has fallen by 58%.

4.7. Biodiversity and ecosystems

As part of the Kao Long-Term Plan (KLP), the Kao Group has identified a number of strategic issues that are particularly closely linked to biodiversity:

- 1— Decarbonisation.
- 2— Zero waste.
- 3— Water conservation.
- 4— Prevention of air and water pollution.
- 5— Responsible management of chemicals.
- 6— Responsibly sourced raw materials.

KCE's commitments in these areas are set out in the preceding and following chapters, with the exception of the [responsible management of chemicals](#), which is addressed in this chapter due to its direct link to biodiversity and ecosystems.

Responsible management of chemicals covers all stages of the process:

- Supply of raw materials (upstream)
- Operation of the sites
- Application and use of the products (downstream)

Biodiversity has been assessed as a material issue for KCE, and was found to be material for KCG and KCSA, but non-material for QK and KCHI. In this analysis, the aspects considered material for KCE focus on factors that directly contribute to biodiversity loss and those that affect the extent, condition and functionality of ecosystems and ecosystem services. Dependencies on these services, however, have been assessed as non-material. For the material sub-issues, impacts and opportunities have been identified relating to the sourcing of raw materials and the application of products. Although the operation of the facilities has not been found to be material, the Group considers this area equally relevant and has implemented measures to minimise the impact of production on people and the environment.

KCE is developing a biodiversity transition plan that integrates ecosystem protection into its business strategy. This plan will enable the identification of impacts and dependencies—risks and opportunities—and contribute to the long-term sustainability of the business.

The approach is aligned with global goals, such as the Global Biodiversity Framework, and incorporates principles of nature restoration and the circular economy, ensuring that the business model evolves towards practices that preserve ecosystems.

KCE has a number of environmental policies in place, approved at both Group and local level. Specific commitments regarding biodiversity are mainly set out in:

- The policies on sustainability, chemical safety and responsible management of chemicals, which set out the commitments regarding the management of chemicals.

- The Environmental Policy, which sets out the company's commitments regarding the management of material impacts, risks and opportunities associated with the protection of biodiversity and ecosystems.

This policy serves as a framework for subsidiaries. KCG and KCSA plan to incorporate these commitments into their local policies throughout 2026, including aspects such as:

- Factors that have a direct impact on biodiversity loss, particularly those related to the cultivation and harvesting of species used as raw materials, sustainable agricultural practices and—in the case of KCG—the use of pesticides and other substances.
- Impacts on the extent and condition of ecosystems resulting from soil sealing, habitat fragmentation and pollution associated with the use of manufactured products (such as asphalt) and—in the case of KCG alone—the construction of roads to link plantations.

Since 2024, KCSA has had a Biodiversity Policy in place, which includes an explicit commitment to halt and reverse biodiversity loss, in line with SDG 15 “Life on Land”, and involves identifying and assessing the impacts and dependencies of its activities.

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4.7. Biodiversity and ecosystems

4.7.1 Actions and resources relating to biodiversity and ecosystems

The following section outlines the main actions undertaken by KCE to implement the aforementioned policies, organised according to the different stages of the process.

SOURCING OF RAW MATERIALS

The Kao Group promotes the adoption of green purchasing criteria, prioritising the procurement of sustainable raw materials and encouraging business activities that take local biodiversity into account. It also drives the shift towards raw materials sourced sustainably and with a lower environmental impact, such as those certified by the RSPO.

Deforestation and the RSPO

Kao remains committed to helping reduce deforestation and achieving zero deforestation through two key initiatives:

- Sustainable use of palm oil.
- Sustainable use of wood, paper and pulp products.

In terms of governance, the Group has set itself the objective of ensuring full traceability of raw materials right back to their source, particularly in the case of palm oil. KCE is currently assessing the possibility of adopting this same objective within its supply chain. In relation to the European Deforestation Regulation (EUDR, 2023/1115), KCE is identifying requirements and potential measures to ensure compliance.

ISCC and the bio-content of products

KCE is conducting ongoing research into renewable raw materials to replace petroleum derivatives, in line with the Group’s decarbonisation measures. One of the most relevant initiatives is the offering of products with higher bio content, supported by ISCC certification, which allows products to be marketed under the mass balance scheme.

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- To minimise the impact on biodiversity associated with the operation of its facilities, KCE is pursuing two complementary strategies:
- Measures aimed at modifying processes in order to reduce the use of raw materials and gradually replace them with less hazardous alternatives.
 - Measures aimed at protecting and promoting biodiversity in the immediate vicinity of the centres and on their own premises.

KCE’s production sites are located in industrial estates, and three of them are situated near areas of natural interest. Although day-to-day operations do not affect these areas, a serious incident could have a limited impact. For this reason, all sites have been built in accordance with current regulations and are equipped with systems to monitor and control significant environmental aspects. Each facility has a self-protection plan in place, which identifies potential accident scenarios and sets out the procedures to be followed based on the resources available.

COMPANY	NATURAL ENVIRONMENT	MASS OF WATER
KCG	DE4203401: ‘Unter Niederrhein’ Special Protection Area (SPA) DE4103301: Dornicksche Ward (designated as a bird sanctuary) DE4405301: Fisheries protection zones on the Rhine between Emmerich and Bad Honnef (fisheries protection zone)	River Rhine (approx. 300 m)
QK	-	River Santiago (approx. 150 m)
KCHI	-	-
KCSA	-	-
Olesa de Montserrat	ES5110012: Montserrat - Rocas Blancas - River Llobregat	River Llobregat (approx. 70 m)
Mollet del Vallès	ES5110025: River Congost	Besòs River (approx. 200 m)

4.7. Biodiversity and ecosystems

The growing knowledge and environmental awareness has broadened the scope of actions to conserve and promote biodiversity. In this regard, the Kao Group has developed a methodology based on the land use standard of the Japan Business Initiative for Biodiversity (JBIB), which enables the assessment of the state of biodiversity and progress in its conservation across all the Group's sites.

In 2017, a self-assessment form was provided to all subsidiaries, which they all completed in 2018 (KCHI completed it in 2019).

Other outsanting initiatives

- Environmental impact assessments prior to the construction of new facilities.
- Management of changes in land use and alterations to the extent or condition of ecosystems.
- Biodiversity awareness campaigns, such as KCSA's annual 'Species of the Year' initiative, which in 2025 will focus on the wolf.
- Planting of trees, shrubs and aromatic plants at the centres in Barberà, Mollet and Olesa.
- Monitoring of nest boxes and insect hotels at the three centres.
- Measures to prevent, reduce and mitigate fires associated with the operation of facilities.

KCE markets products that strictly comply with the relevant regulatory requirements. Furthermore, the company works proactively to progressively reduce the hazards posed by the substances it uses, both to people and to the environment. The company is developing a methodology to assess its product portfolio from various perspectives, including hazard potential and biodegradability, which will enable it to monitor the impact of its products on biodiversity and ecosystems.

4.7.2 Objectives and metrics

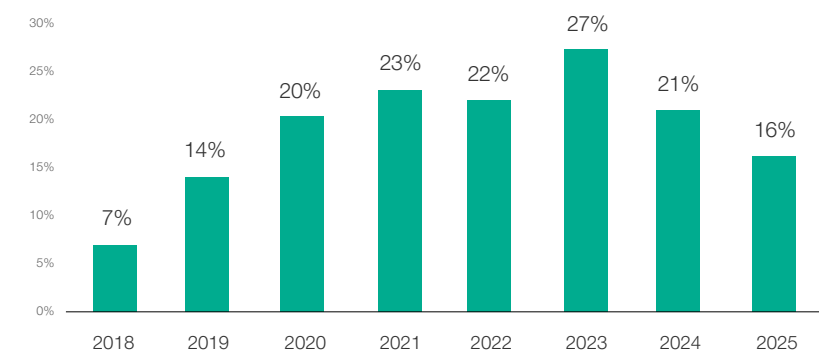
KCE has established targets and metrics to monitor the impact on biodiversity at every stage of its operations.

SUPPLY OF RAW MATERIALS

Kao remains firmly committed to reducing deforestation and achieving zero deforestation, particularly through its sustainable palm oil and wood-based materials programmes. The aim is to position the company as a leader in responsible sourcing, ecosystem protection and supply chain transparency.

	KCG	QK	KCSA	TOTAL KCE
2023	25.3%	34.8%	31.9%	27.3%
2024	17.3%	89.8%	16.2%	21.1%
2025	10.8%	86.4%	30.1%	16.5%

TRENDS IN THE CONSUMPTION OF RSPO-CERTIFIED RAW MATERIALS



KCE continues to develop technologies based on non-edible natural sources as alternatives to palm oil, and uses sustainable palm oil when requested by the customer. It also offers products based on NDPE (No Deforestation, No Peat, No Exploitation) raw materials.

4.7. Biodiversity and ecosystems

The entry into force of the European Deforestation Regulation (EUDR) has been postponed until January 2027. Although certain aspects, such as geolocation, are still under discussion, Kao is closely monitoring regulatory developments to ensure compliance.

In 2025, the downward trend in the consumption of sustainable palm oil-based raw materials continues, standing at 16%. This decline is linked to the global economic situation and the adoption of the [Book & Claim](#) model by some customers.

Performance by subsidiary

- [KCSA](#): shows a significant improvement on 2024, returning to stable levels of around 30%.
- [KCG](#): as it is the plant with the highest purchase volume (75–80% of the total), its decline in 2025 has had a direct impact on the overall percentage.
- [QK](#): most notable trend; after starting at 0% in 2018–2020, it reached 89.8% in 2024 and remains at similar levels in 2025.

KCE continues to explore synergies with other European divisions to improve value chain management.

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To monitor the state of local biodiversity, Kao uses the JBIB methodology, which is based on a self-assessment questionnaire that analyses:

- Biodiversity management.
- Response to invasive alien species.
- The circulation of matter.
- Water circulation.
- Biological monitoring.
- Employee participation.
- External partnerships.
- Other relevant points.

Biodiversity indicators and their trends:

KCE	2023	2024	2025
Land use (%)	42.00	42.93	42.93
Total floor area (m²)	184,922	189,856	189,856
Total sealed area (m²)	257,523	263,577	263,577
Surface permeability (sealed surface / total surface area) (%)	58.49	59.59	59.59
Total area in the centre allocated to nature (m²)	88,454	88,348	88,348
Internal biodiversity coverage (nature-oriented area on site / total site area) (%)	20.09	19.98	19.98
Total nature-oriented area off site, classified by land use (m²)	24,874	24,874	24,874
Total nature-oriented area off site/ site area) (%)	5.65	5.62	5.62

In 2025, KCSA dedicated its annual campaign to the wolf, organising outreach activities and monitoring local wildlife. Tree-planting initiatives were also carried out at the centres, and the new edition of the Biodiversity Policy (December 2024) was disseminated.

4.8. Resource use and circular economy

KCE's operations involve the inflow of resources into its facilities and the generation of products and waste (outflows), both of which have the potential to have a positive or negative impact on biodiversity and ecosystems. In order to reduce these impacts and move towards a more sustainable model, KCE has begun developing a transition plan aimed at reducing the environmental footprint associated with resource use and promoting circularity in all phases of its operations.

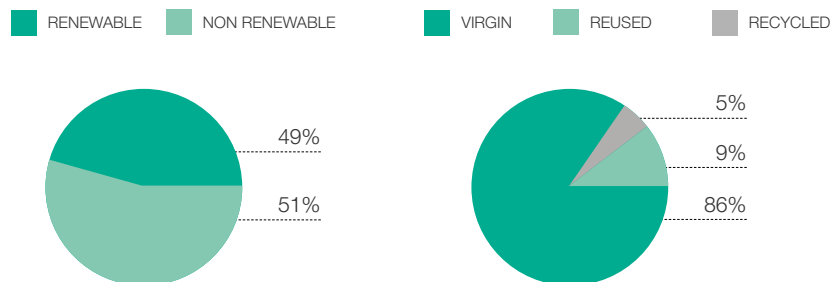
This approach will enable us to gradually minimise the extraction of non-renewable resources, strengthen waste prevention measures and reduce pollution associated with production processes.

Inflows

In 2023, a process was launched to identify and classify the raw materials used by KCE, with the aim of gaining a better understanding of its dependencies on biodiversity and moving towards an analysis of risks and opportunities. This study was updated in 2025, yielding the following results:

- 76% of the supplies have been classified.
- Of these, 51% are renewable and 49% are non-renewable.
- As for the origin: 86% is virgin material, 9% is recycled and 5% is reused.

The changes compared with the previous financial year are minimal.



This analysis does not include packaging materials, which are managed separately under the Extended Producer Responsibility (EPR) framework established by the European Union. KCE continues to improve the quantification of the materials contained in packaging placed on the market and focuses on compliance with legal requirements in the various European countries.

In the coming financial years, it is expected that specific data will be available on:

- The percentage of recycled material in the packaging.
- The packaging prevention plans.
- An analysis of the risks and opportunities associated with resource use, taking into account current and potential impacts, dependencies, transition and physical risks, systemic risks, and the communities likely to be affected in the extraction areas.

Outflows

KCE's outflows consist mainly of **products** and **waste**.

Products

All products manufactured by KCE undergo a thorough verification process to ensure compliance with European standards and key international regulations, thereby guaranteeing their safety and proper use. This verification covers not only the main substance but also all known traces and impurities.

The resulting information is used to prepare mandatory and voluntary documentation, promoting transparency and providing clients with comprehensive information.

The packaging used varies depending on the type of business:

- KCG, QK and KCSA supply exclusively to industry, so they use industrial packaging.
- KCHI also uses commercial packaging and, in some cases, packaging intended for the end consumer.

The formats include IBCs, metal or plastic drums, steel or aluminium cans, aluminium or plastic bottles, big bags, sacks and pallets, mostly made of wood.

Waste

In 2025, KCE generated 12,980 tonnes of waste, 82% of which was classified as hazardous. All waste was managed by authorised waste management operators, ensuring it was treated appropriately. Resource use and the circular economy have been assessed as material topics for KCE, with the exception of KCHI.

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4.8. Resource use and circular economy

KCE also has a number of environmental policies in place, approved at both Group and local level. Specific commitments regarding resource use and the circular economy are set out primarily in:

- The policies on sustainability, chemical safety and responsible management of chemicals, which set out the commitments regarding the management of chemicals.
- The Group's procurement policies, which have a direct impact in this area.
- The Environmental Policy, which sets out the company's commitments regarding the management of material impacts, risks and opportunities associated with resource use and the circular economy, particularly in relation to waste.

This policy serves as the framework for all subsidiaries. All of them (KCHI is not obligated since it is not material for the company) plan to incorporate specific commitments relating to waste management, in particular the promotion of reuse and recovery through authorised waste management operators.

4.8.1 Measures and initiatives relating to resource use and the circular economy

Inflows

KCE is moving towards an increasingly circular production model, driving forward a range of initiatives aimed at reducing resource consumption, minimising environmental impacts and improving efficiency in the use of materials. Key initiatives include:

- Reducing material consumption by optimising production processes.
- Replacing hazardous substances with safer alternatives, whilst incorporating eco-design criteria into KCSA's Innovation and Development departments.
- Reducing the generation or toxicity of hazardous substances by incorporating health and safety criteria into eco-design.
- Use of recycled materials in both manufacturing and packaging.
- Prioritising the use of recycled materials, such as paper.
- Incorporation of eco-friendly or bio-based materials.
- Environmental emergency measures, incorporated into each establishment's self-protection plans, to manage incidents with a potential environmental impact.
- Safe management of hazardous substances, including labelling, storage, handling and transport in accordance with applicable regulations.
- Regular staff training in the safe handling of hazardous substances.

At a corporate level, the Kao Group has had a Comprehensive Chemical Management System in place since 2017, which is applied across all its companies worldwide.

KCE is continually strengthening this system to meet increasingly stringent regulatory requirements, the growing diversity of substances handled, and commercial expansion into new markets.

Outflows

Products

KCE is promoting measures aimed at a more circular approach to the management of its products. Key initiatives include:

- Improving the efficiency of production processes.
- Reducing and reusing packaging.
- Upcycling of materials that are no longer classified as waste when sold as products.

Waste

Continuous improvement in waste management is an ongoing priority for KCE. In addition to preventing waste generation and ensuring it is properly treated, the company is exploring new management approaches that will help it move towards a circular economy. Key areas of focus include:

- Mapping of waste streams, with detailed identification and classification of each stream and its final destination.
- Reducing internal waste through the reuse, recovery or recycling of materials. Some innovative developments include upcycling initiatives that transform waste into products with improved properties.
- Waste recovery, by identifying companies that use waste as raw materials or a source of energy. As a result, KCE has maintained recovery rates of over 60% since 2018.
- Restriction on the cross-border movement of hazardous waste, limiting it to cases where there are no recovery facilities in the country or where such facilities are not technically or economically viable.
- Staff training in waste reduction and proper waste sorting.

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4.8. Resource use and circular economy

4.8.2 Objectives and metrics

The Kao Group has set two main objectives relating to resource use:

- Increase the procurement of RSPO-certified palm oil.
- Reduce waste generation.

KCE aligns itself with these objectives and updates the metrics and indicators used to assess its level of compliance on an annual basis. It also employs additional metrics to analyse the implementation of circular economy policies.

Tickets

When it comes to palm oil, Kao remains firmly committed to reducing forest destruction and achieving zero deforestation, particularly through its sustainable palm oil and wood-based materials programmes. The aim is to position the company as a leader in responsible sourcing, ecosystem protection and supply chain transparency.

When it comes to the procurement of materials in general, the quantities, format and source of supply are taken into account.

In 2025, KCE consumed 239,000 tonnes of raw materials and produced 327,000 tonnes of finished goods, representing a 5% reduction in the raw materials-to-finished goods ratio compared with the previous year.

RAW MATERIAL USAGE DATA:

KCE	2023	2024	2025
Raw materials (t)	236,793	272,246	240,371
Production (year-on-year)	326,951	345,989	326,627
Raw materials / (t/t)	0.62	0.77	0.74

CLASSIFICATION OF KCE'S MATERIAL INFLOWS

KCE	2023	2024	2025
Significant raw materials (t)	181,189	204,433	183,512
Significant raw materials / Final production (t/t)	0.48	0.58	0.56
Significant renewable raw materials (t)	81,107	90,628	93,748
Significant renewable raw materials (t) / Final production (t/t)	44.76	44.33	51.09
Reused (t)	8,237	9,299	8,706
Reused / Significant renewable sources (%)	10.16	10.26	9.29
Recycled (t)	16,861	11,399	14,169
Recycled / Significant renewable sources (%)	20.79	12.58	15.11
Virgin (t)	56,009	45,236	70,873
Virgin / Significant renewables (%)	69.06	49.91	75.60
Significant non-renewable raw materials (t)	88,109	103,489	89,764
Significant non-renewable raw materials (t) / Final production (t/t)	48.63	50.62	48.91
Reused (t)	0	0	0
Reused / Significant non-renewable resources (%)	0	0	0
Recycled (t)	0	4,804	2,739
Recycled / Non-renewable (%)	0	4.64	3.05
Virgin (t)	88,108	91,577	87,025
Virgin / Non-renewable (%)	100	88.49	96.95

Departures

Products

KCE systematically tracks the products it manufactures in relation to the raw materials used, enabling it to assess the efficiency of production processes and identify opportunities for improvement in resource use. This analysis helps to strengthen circularity and optimise the balance between material inputs and outputs.

Waste

With regard to waste, the Kao Group set the following target in 2020 for the period 2020–2030:

AREA	INDICATOR	TARGET VALUE	BASE YEAR
Zero waste	Landfill and incineration rates for industrial waste	<1%	-

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The amount of waste generated excludes construction waste, as this is a one-off occurrence. In 2025, KCSA generated 3,587 tonnes of construction waste as a result of the refurbishment of the wastewater treatment plant in the centre of Mollet del Vallès

KCE	2023	2024	2025
Waste generated (t)	11,016	13,329	12,980
Waste generated / Final production (t/t)	0.03	0.04	0.04
Hazardous waste (t)	8,844	11,345	10,613
Hazardous waste / Final production (t/t)	0.03	0.03	0.03
Recovery rate of waste generated (%)	71.51	75.25	76.55

In 2025, the total amount of waste generated fell by 349 tonnes compared with the previous year. An analysis by subsidiary shows:

- KCG: reduces both waste generation and its waste ratio.
- KCSA: Total generation is down, but the ratio remains unchanged due to the product mix, which has had the greatest impact in this area.
- QK and KCHI: both generation and the ratio are increasing.

KCSA remains the subsidiary generating the highest volume of waste. At QK, the increase is mainly due to the rise in sludge resulting from the greater use of reclaimed water. The recycling rate, including energy recovery, has increased compared with the previous year and, for the fourth consecutive year, remains above 70%, reaching 76.55% in 2025.

Food waste

KCSA (Barberà del Vallès) and QK have canteens on their premises, where meal portions are adjusted to prevent food waste.

At KCSA, the company responsible for the service runs the “Stop Food Waste Programme”, which includes:

- Minimising wastage throughout the entire supply chain.
- Daily measurement of waste generated.
- Awareness-raising and training initiatives aimed at kitchen staff and diners.

Packaging

Over the past two years, KCE’s subsidiaries based in the European Union have implemented numerous measures to comply with legal requirements regarding packaging and packaging waste (such as Regulation 40/2025 or Royal Decree 1055/2022, which applies in Spain).

The main measures include:

- Compilation of specifications for packaging and packaging waste.
- Participation in collective extended producer responsibility schemes (e.g. GENCI in KCG, IMPLICA in KCHI, ENVALORA in KCSA).
- Declarations regarding packaging submitted to the competent authorities.
- Coverage of the costs associated with the management of final waste.

4.7.3 Investment and costs allocated to environmental activities by KCE

KCE	2023	2024	2025
Investment (thousands of euros)	2,081	13,569	2,350
Environmental costs (thousands of euros)	12,071	12,281	15,196

4.9. Legal compliance

KCE strictly complies with all its legal obligations regarding environmental matters. However, in 2025, a fine was imposed on the Barberà del Vallès site for exceeding the limit value for nitrate concentration in wastewater. The associated fine amounted to €1,234.