Indicators and reporting

The table below summarizes Kering's reporting in response to the TCFD recommendations.

Thematic area	TCFD recommendations	Source of information in Kering reporting
GOVERNANCE		
Disclose the organization's governance around climate-related risks and opportunities.	**a)** Describe the Board's oversight of climate-related risks and opportunities.	URD 3-1.2, 3-1.6, 3-2.3.3, 3-4.1, 4-1.5 CDP C1.1
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	URD 3-1.2, 3-2.3.3, 3-4.1, 4-1.5 CDP C1.1
STRATEGY		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	**a)** Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	URD 5-2.6 CDP 2.2 and C2.2a
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	URD 5-2.6 CDP 2.3a, C2.4, C3.3 and C3.4
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	URD 4-5, 4-5.2.1.3, 4-5.2.2, 5-2.6 CDP C3.2a
RISK MANAGEMENT		
Disclose how the organization identifies, assesses, and manages climate-related risks.	**a)** Describe the organization's processes for identifying and assessing climate-related risks.	URD 5-1 CDP C2.1a, C2.1b and C2.2
	b) Describe the organization's processes for managing climate-related risks.	URD 5-1, 5-2.6 CDP C2.1b, C2.2, C2.3a and C2.4a
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	URD 5-1 CDP C2.3a and C2.4a
METRICS AND TARGETS		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	**a)** Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	URD 4-5.2, 4-4.1 CDP C6, C10
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	URD 4-5.2, 4-4.1 CDP C6, C10
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	URD 4.1.4 (progress table) CDP C4.1, C4.

5.2.2 Measuring and regulating the Group's carbon footprint

5.2.2.1 The Group's emissions by GHG Protocol category

Kering's carbon footprint is aligned with the data reported and made public by CDP (Carbon Disclosure Project), and established every year according to the GHG Protocol.

The carbon footprint of operations under Kering's direct control (Scopes 1 and 2) accounts for 1% of the Group's overall carbon footprint.

Scope 3, which covers greenhouse gas emissions related to Kering's value chain, accounts for 99% of the Group's overall carbon footprint. Of the three scopes, Scope 3 is by far the largest contributor to emissions. Although those emissions are not under Kering's direct control, the Group is adopting several initiatives to reduce them (see 5.2.2.3, 5.3 and 5.4).

Greenhouse gas emissions by scope defined by the *GHG Protocol (in metric tons of CO_2 equivalent)*

	2022	2021	2020	Change 2022/2021
Scope 1	21,660	19,281	14,256	12%
Scope 2 – *market-based*	7,598	11,227	11,271	-32%
Scope 3[1]	2,398,466	2,351,483	1,927,265	2%
TOTAL (METRIC TONS OF CO_2 EQUIVALENT)	2,427,724	2,381,991	1,952,792	2%

(1) Scope 3: see definition of Scope 3 categories covered by Kering's reporting in section 5.2.2.4.

All greenhouse gas emissions (Scopes 1, 2 and 3) are also captured in the EP&L and then monetized (see section 5.1.1.3 2022 EP&L results).

Scope 1, 2 and 3[1] emissions excluding use of sold products (Scope 3 - category 11) and the end-of-life of sold products (Scope 3 - category 12) amounted to 2,179,568 metric tons of CO_2 equivalent in 2022, as opposed to 2,143,465 metric tons of CO_2 equivalent in 2021.

Intensity of greenhouse gas emissions (*in metric tons of CO_2 equivalent per € million in gross margin*)

	2022
Scopes 1 and 2	1.93
Scope 3[1]	157.81
TOTAL	159.74

Scope 3[1] intensity excluding use of sold products (Scope 3 - category 11) and the end-of-life of sold products (Scope 3 - category 12) amounted to 141.49 metric tons of CO_2 equivalent per € million in gross margin in 2022, and the Group's total intensity in these categories was 143.41 metric tons of CO_2 equivalent per € million in gross margin.

The table below shows adjustments to Kering's greenhouse gas footprint in 2022 in order to ensure comparability with the 2021 emissions figure:

	2022	2021
Total (metric tons of CO_2 equivalent) as reported	**2,427,724**	**2,381,991**
Change in EP&L methodology *(EEIO – see note on methodology)* and update of LCA (Life Cycle Assessment) databases		-225,712
Total (metric tons of CO_2 equivalent) on a comparable basis	**2,427,724**	**2,156,279**

5.2.2.2 Measuring the carbon footprint of the Group's operations

In 2022, greenhouse gas emissions relating to the Group's operations amounted to 29,258 metric tons of CO_2 equivalent (1% of total emissions). In accordance with the *GHG Protocol*, greenhouse gas emissions due to operations under Kering's direct control (Scopes 1 and 2) relate to:

- direct emissions attributable to on-site fuel usage and the fuel consumed by Kering's directly owned vehicle and company car fleets (Scope 1), representing 21,660 metric tons of CO_2 equivalent in 2022.
- indirect emissions resulting from electricity and steam production (Scope 2), representing 7,598 metric tons of CO_2 equivalent (market-based[2]) in 2022.

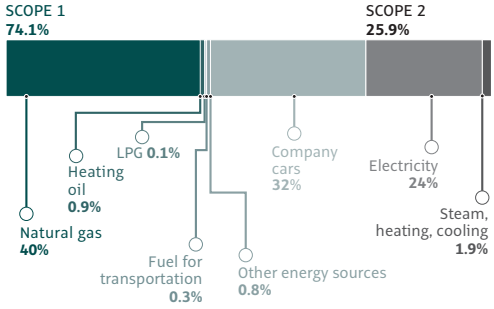
Details of the emission factors used are set out in the methodological note on environmental reporting for 2022.

Scope 1 and 2 greenhouse gas emissions (according to the *GHG Protocol*) (*in metric tons of CO_2 equivalent*)

	2022	2021	2020	Change 2022/2021
Scope 1	**21,660**	**19,281**	**14,256**	**12%**
Energy sources	12,168	13,776	10,527	-12%
Natural gas	*11,577*	*12,993*	*10,016*	*- 11%*
Heating oil	*273*	*488*	*459*	*- 44%*
LPG	*20*	*17*	*18*	*19%*
Fuel for transportation and on-site handling	*77*	*48*	*34*	*60%*
Other energy sources	*221*	*230*	-	*0%*
Company cars	9,492	5,505	3,729	72%
Scope 2 – *market-based*[2]	**7,598**	**11,227**	**11,271**	**- 32%**
Electricity	7,055	10,828	10,813	-35%
Steam, heating, cooling	543	399	458	36%
Scope 2 – *location-based*[2]	**98,360**	**89,641**	**79,750**	**10%**
Electricity	97,817	89,242	79,292	10%
Steam, heating, cooling	543	399	458	36%
TOTAL SCOPES 1 AND 2 MARKET-BASED (METRIC TONS OF CO_2 EQUIVALENT)	29,258	30,508	25,527	-4%

(1) Scope 3: see definition of Scope 3 categories covered by Kering's reporting in section 5.2.2.4.
(2) *Market-based*: method for calculating CO_2 emissions from electricity consumption reflecting the specific features of selected power purchase agreements, including the purchase of guarantees of origin. *Location-based*: method for calculating CO_2 emissions from electricity consumption using emission factors related to the average mix of fuels used to generate electricity in a given country.

Breakdown of CO_2 emissions for Scopes 1 and 2 in 2022 (%)



CO_2 emissions in Scopes 1 and 2 fell slightly in 2022, due in particular to a reduction in Scope 2 emissions caused by renewable electricity making up a higher proportion of the Group's energy consumption. Scope 2 accounted for 26% of emissions relating to the Group's operations, down 32% relative to 2021. Despite a reduction in natural gas consumption and in the related emissions, Scope 1 accounted for a larger proportion of emissions in 2022 than in 2021, because of greater use of company cars. After two years in which COVID-19 restrictions limited travel, car use rose in 2022.

5.2.2.3 Energy consumption indicators and programs to improve the energy efficiency of Kering's operations

The following indicators relate to the Group's energy consumption.

Energy consumption in 2022, 2021 and 2020 (*in MWh*)

	2022	2021	2020	Change 2022/2021
Electricity	285,056	254,325	226,280	12%
of which electricity from renewable sources	*270,026*	*234,262*	*205,869*	*15%*
Natural gas	56,493	63,403	49,029	-11%
Heating oil	1,026	1,834	1,728	-44%
Steam, heating, cooling	5,315	4,486	3,978	19%
LPG	86	72	75	19%
Fuel for transportation and on-site handling	309	190	133	63%
Biomass	754	860	618	-12%
Other energy sources	607	638	-	-5%
TOTAL	349,646	325,808	281,841	7%
Energy intensity excluding industrial sites (MWh/m²)	0.157	0.161	0.157	-2%
Total energy pro forma scope	*299,380*	*297,620*	*264,667*	*1%*
of which electricity	*239,393*	*231,285*	*212,500*	*4%*
of which electricity from renewable sources	*227,819*	*213,258*	*192,891*	*7%*
of which natural gas	*54,134*	*60,668*	*47,125*	*- 11%*

Pro forma figures are calculated taking into account open sites on a full-year basis for the three consecutive reporting years in question, i.e. 2022, 2021 and 2020.

76% of the Group's energy consumption corresponds to the heating, lighting and air conditioning of stores, warehouses and offices. Electricity is still the Group's main source of power, accounting for 82% of consumption, and 95% of electricity is from renewable sources.

In 2022, annual energy consumption increased by around 7% overall, mainly because of a 12% increase in electricity consumption. This resulted from the large number of site openings that took place in 2022, increasing the floorspace of the Group's sites by 12%.

Energy sobriety efforts led to a reduction in natural gas consumption, particularly at the Group's industrial sites and warehouses . In addition, the proportion of electricity coming from renewable sources has continued to increase since 2020, in line with Kering's RE100 target – which it achieved in 2022 – of using 100% renewable electricity in all countries where that is possible (see box below).

Managing stores' energy performance centrally

The Group-wide partnership with NUS Consulting since 2011 has enabled Kering and all of the Houses to manage their energy consumption at a granular level. All invoices, documents and data from sites where a Kering entity has signed an energy agreement are uploaded to an easy-to-access platform. The system covers Europe, the United States and Asia, and allows for:

- streamlining the energy procurement process by pooling and consolidating energy consumption;
- increasing the use of renewable energy;
- centralizing energy procurement management;
- improving analysis of energy consumption data;
- more effective communication with energy companies and the authorities.

The project has resulted in tangible energy savings and lower costs for the Houses and the Group. The system has gradually evolved, including data from smart meters for a growing number of sites and extending the scope of application to not just electricity and gas but also, since 2021, to urban heating, urban cooling and water. Because of energy issues arising in 2022 (see below), efforts were made to put all sites in Europe and North America on the platform.

Several Group sites have a submetering system. These systems are installed in most industrial sites and in almost all sites with LEED certification (or similar).

Minimizing energy use and measuring energy efficiency improvements

The Group takes two main types of measures to optimize the energy efficiency of its sites. Given the current energy crisis, a third initiative was adopted in 2022, consisting of a special energy-saving plan:

1) Systematically obtaining recognized, high-level certification for new sites renovated by Kering.

Kering and its Houses are increasingly implementing certification for their sites and stores. Certification is sought for new sites targeted by Kering's Real Estate teams from 2019. US-based LEED (Gold and Platinum level) is the preferred certification system selected by the Group, but other certifications, like HQE (France) and BREEAM (UK), are also sought for projects where they are particularly relevant. Optimized energy performance, the use of renewable energies and other energy conservation criteria are critical to obtaining green building certifications. In 2022, Kering also obtained WELL certification, which is based on the well-being of building users, for certain projects for the first time.

More than 130 LEED certifications had been obtained by Kering and its Houses for their sites and stores by the end of 2022. Around 50 further certifications – almost exclusively LEED – are in the process of being obtained.

- At the end of 2022, 105 Gucci stores and three offices were LEED-certified, a sharp increase relative to 2021. Gucci has developed an action plan to extend LEED certification to all its stores worldwide where applicable. Alexander McQueen is actively seeking to obtain LEED v4 Gold or Platinum certification for its new concept stores, with 30 stores certified by the end of 2022. Saint Laurent is also continuing work to reduce the environmental impact of its stores on the basis of its Golden Rules to make its stores more energy efficient. The House has 27 LEED-certified stores, of which 21 have achieved Platinum certification. Its Paris headquarters has BREEAM "excellent" and HQE "exceptional" certification. Balenciaga has 80 LEED-certified stores, which make up 50% of its eligible stores, and 12 of them have Platinum certification.
- Balenciaga has set up a specialist leather goods production site in Cerreto Guidi, Italy, which is currently undergoing renovation. This process falls within the framework of LEED certification for production facilities, meeting the same requirements as LEED certification for stores. The Sustainability team and the operational team are involved in monitoring this certification process, in particular by using materials obtained from recycling its own scraps or unsold items when refurbishing buildings, and particularly for sound insulation.

2) Establishing a Group-wide standard for stores.

Kering has been working since 2017 to develop a "Standard for Stores" that sets out expected performance levels in 11 key areas. These include energy management, lighting, renewable energy, water use and waste treatment. The Standards cover all phases in a building's lifecycle, namely site selection and relations with the lessor, design, construction or renovation, and operation. After a test phase at the Group's stores, the standard was officially published in 2020 to serve as a reference for new stores and store renovations where the use of LEED or equivalent certifications is not possible. In 2022, a second revision of the standard began, with the aim of making it more effective and aligned with both the LEED protocol and the European taxonomy.

The main technical changes related to the shift to LED lighting and continuing improvements in the efficiency of LED lighting, the adoption of systems for regulating light intensity, and the installation of building management systems (BMSs) in the most important sites.

Through these activities aimed at increasing energy efficiency, the Group's energy consumption has improved constantly since 2015 across all Group sites. Energy intensity has fallen by 17% for offices, 19% for industrial sites, 33% for stores and 42% for warehouses.

Lastly, LED lighting – which delivers energy savings of up to 90% – continued to be rolled out by all of the Group's Houses, with close to 100% deployment in store sales areas, where most of the light fittings are concentrated. In the last few years, efforts have been focused on introducing LED lighting into store backrooms, offices, warehouses and production plants. This practice is part of the Kering Standards and also a criterion for obtaining environmental certifications such as LEED, BREEAM and HQE. Some Houses are also gradually rolling out site energy consumption management tools (Building Management System for Gucci's main stores, dedicated system at Saint Laurent) at stores in order to monitor the main types of energy use and to make them more energy efficient (heating and air conditioning, ventilation, lighting, etc.).

Focus on: Energy sobriety, adjusting to current energy issues

Given the energy issues that arose in winter 2022/23, the Kering group has adopted an energy-saving strategy aimed at reducing energy demand by 15% worldwide (in October-March relative to winter 2021/22), in response to the French government's appeal to reduce consumption by 10% in France. This energy sobriety plan is based on energy-saving plans adopted by all the Group's Houses and head office, which include:

- regulating lighting, heating and air conditioning systems in order to reduce their use or turn them off when not required,
- carrying out extraordinary maintenance on heating, ventilation and air conditioning systems,
- reducing temperature settings for the heating of internal spaces and increasing temperature settings for cooling systems.

On a longer-term view, the Group is planning investment to continue improving energy efficiency at its production sites, as well as energy production, particularly by installing solar panels on its buildings.

Favoring renewable energy by producing it on-site or purchasing renewable energy certificates

For many years, Kering has encouraged the signing of agreements to purchase locally produced green electricity, for all sites that pay their energy bills directly and whenever the local electricity market allows. For regions where this practice is not possible, Kering purchases Energy Attribute Certificates. In addition, to speed up the energy transition in its host countries, the Group only purchases certificates from solar or wind power production facilities that are new or relatively recent (less than ten years old) wherever possible.

Focus on: 100% renewable electricity in 2022 – RE100 target achieved by Kering

In 2020, the Group joined the RE100 initiative led by the Climate Group and the Carbon Disclosure Project (CDP). As part of this initiative, Kering has pledged to use 100% renewable electricity by 2022.

The initiative, which was updated and made more stringent in October 2022, involves obtaining and checking the commitments of signatory companies by following strict guidelines on how they meet their energy needs: renewable electricity may be self-produced on-site, obtained through a physical or virtual power purchase agreement, or purchased from a local electricity supplier that provides adequate evidence of renewable claims; or bundled or unbundled *Energy Attribute Certificates* (EACs) can be purchased in an amount that corresponds to the consumption of electricity produced in the same market as the one in which it is used.

Kering's 2022 electricity consumption was fully covered by renewable energy in all countries where that was possible (representing 95% of the Group's total electricity consumption). In 2022, Kering either self-produced electricity, used renewable energy from local suppliers or purchased EACs corresponding to its consumption in accordance with the RE100 guidelines. The remaining 5% corresponds to consumption in markets where it was not possible to purchase renewable electricity; South Korea accounts for 79% of consumption in those countries.

As a result, Kering achieved the RE100 target of using 100% renewable energy in accordance with the RE100 organization's guidelines.

As regards the on-site production of solar energy, Kering reached an important milestone in July 2022 by completing the grid connection for the solar photovoltaic system of the Trecate distribution center, Italy's largest roof-mounted solar photovoltaic system (12.5 MW) and one of the largest in Europe. Self-produced solar electricity accounted for 2.4% of total energy consumption. At the end of 2022, Kering had solar photovoltaic systems on roofs and in car parks at around 20 sites.

The Houses are also increasing the proportion of their electricity coming from renewable energy generated and used on site. This is being achieved particularly by installing solar panels: for example at Bottega Veneta and also at Gucci, where 15% of the energy needs of its two Italian head offices are covered by solar PV panels installed on-site.

Aside from solar power, one site – Saint Laurent's production site in Angers, France – uses wood biomass to heat the premises. Heat production is the only area in which Kering still uses fossil fuels: it accounted for 17% of total energy consumption in 2022, less than in 2021 in line with the Group's efforts. Boilers are gradually being replaced by electric heat pumps powered by renewable electricity.

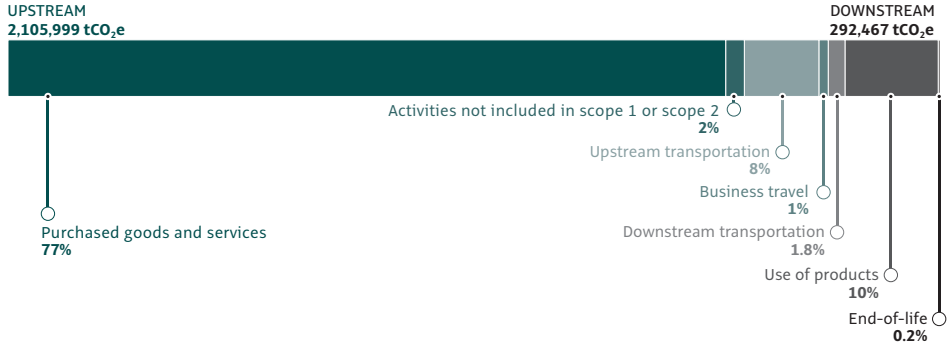
5.2.2.4 Measuring and regulating the carbon footprint outside our operations

Greenhouse gas emissions related to Kering's value chain and not under the Group's direct control (Scope 3) amounted to 2,398,466 metric tons of CO_2 equivalent in 2022, i.e. 99% of total emissions. The Scope 3 categories covered according to the *GHG Protocol* are summarized in the table below (see the 2022 Methodological Note relating to the EP&L, available on the Group's website).

Scope 3 by category according to the *GHG Protocol* (*in metric tons of CO_2 equivalent*)

	2022
Category 1 - Purchased goods and services	1,852,771
Category 3 - Fuel-and energy-related activities (not included in Scope 1 or Scope 2)	38,232
Category 4 - Upstream transportation and distribution	199,431
Category 6 - Business travel	15,565
Category 9 - Downstream transportation and distribution	44,311
Category 11 - Use of sold products	244,112
Category 12 - End-of-life treatment of sold products	4,044
TOTAL SCOPE 3	2,398,466

Scope 3 greenhouse gas emissions in 2022 (according to the *GHG Protocol*) (%)



Kering is committed to initiatives aimed at reducing its environmental impact in all *GHG Protocol* categories, as explained in the following sections.

1. Emissions related to purchased goods and services

Emissions related to Kering's purchases of goods and services are calculated by the EP&L tool and cover all production and processing of raw materials that are used for the products and packaging of Group Houses (Tiers 3 and 4), the production of components and the assembly of sold products (Tiers 1 and 2), and third-party distribution activities (wholesale - within Tier 0). They account for 77% of Scope 3 emissions, i.e. 1,852,771 metric tons of CO_2 equivalent.

Kering's aim is to minimize its impact on the Group's resources, not only as regards its carbon footprint but by taking into account all indicators measured in the EP&L (air pollution, waste, water use, water pollution and land use). These initiatives are presented in the following sections, in connection with the Group's Biodiversity Strategy (section 5.3) and its Circularity Ambition (section 5.4), from the raw materials sourcing phase onward (section 5.3.3).

1) Commitment and initiatives involving our direct suppliers

Kering contributes to the implementation of projects aiming to reduce the environmental footprint of its suppliers, as shown by the Clean By Design program. Spearheaded in 2013 by the NRDC (Natural Resources Defense Council), the Clean by Design program aims to reduce the environmental footprint of textile manufacturers through the organization of energy water audits reviewing ten key points of a production site's performance.

Clean by Design has been implemented at the premises of 41 historic and strategic Tier 1 and Tier 2 suppliers located in Italy (dyeing, printing and finishing factories, spinning and weaving mills, denim laundries), six in China (three wool cleaning factories and three silk reeling factories) and eight in Japan. Energy use has been reduced by 19% per site on average, with reductions mainly in the range of 10% to 20% but up to 40% in some cases. The program has compelling economic appeal, since the payback period of efficiency initiatives for suppliers is less than 2.5 years in Italy and less than one year in China.

In 2021, Kering announced the extension of Clean by Design in Italy with the Apparel Impact Institute (Aii), in partnership with Stella McCartney and Burberry, and with the Legambiente non-profit organization as a local partner. This multi-party partnership reflects Kering's desire to involve more suppliers and other brands in order to steer developments in the textile supply chain toward increasingly ambitious sustainability objectives. Eight of Brioni's suppliers and three of its production plants joined the program in 2021.

In 2022, Kering also initiated the development of a "zero emission" program in the leather and apparel industries, based on :

- continuous progress in energy efficiency (as an extension of the Clean By Design program);
- the gradual phase out of fossil fuels use in processes, replacing fuel-fired boilers with heat pumps or other electrical systems;
- maximizing the use of self-production of electricity on site.

Kering's logistics hub runs training sessions and awareness-raising meetings with suppliers and in particular with its logistics partners on (i) Kering's Climate Strategy, with most freight operators now providing the Group with CO_2 reports in accordance with the EN 16258 standard; (ii) expectations in terms of environmental performance in line with the Group's ambitions (reporting, circularity, single-use plastics, carbon footprint). ISO 14001 certification is also a contractual requirements for BtoB transportation providers.

Some Houses such as Gucci have also made a commitment to their suppliers to implement energy efficiency measures and use green energy. Use of energy from renewable sources amounted to 25% in Gucci's supply chain, and up to 50% in certain categories (leather production process, for example).

2. Energy-related emissions not included in Scopes 1 and 2

Energy-related emissions not included in Scopes 1 and 2 are those related to the extraction, production and transportation of the fuel and energy purchased by Kering.

In 2022, those emissions, which derive directly from the Group's energy consumption (see section 5.2.2), amounted to 38,232 metric tons of CO_2 equivalent, i.e. 2% of Scope 3 emissions. Efforts to reduce Scope 1 and 2 emissions have a direct impact on this category.

3. Transportation-related emissions

Categories 4, 6 and 9 of the GHG Protocol, which relate to transportation, can be divided as follows:

- upstream transportation (category 4 of the GHG Protocol): this includes all transportation of goods paid for by the Houses or the Group between suppliers and logistics platforms or industrial sites, between central logistics platforms and local distribution centers and between central logistics platforms or local distribution centers and points of sale. The transportation of goods between logistics centers also falls into this category. Upstream transportation includes road, rail, sea and air freight. In 2022, all last-mile transportation – i.e. between local distribution centers and points of sale – was included, which was not the case in 2021. Similarly inbound goods transportation between suppliers and logistics platforms or industrial sites, have been included.
- Downstream transportation (category 9 of the GHG Protocol): this covers all deliveries of finished products between logistics platforms or points of sale and customers. It excludes logistics flows (for Brioni, the Jewelry Houses and Kering Eyewear) that are not material at the Group level.
- Business travel (category 6 of the GHG Protocol): this covers air travel.

Outbound transportation between central logistics platforms and local distribution centers has been included in a monthly monitoring tool, which allows more detailed oversight during the year. Additional work was done in 2022 to review transportation flows and the related emissions. As a result, all outbound flows as far as points of sale were included, and monitoring was improved regarding flows between suppliers and logistics platform and industrial sites. Where source data were missing, the related emissions were estimated.

Details of the emission factors used are set out in the methodological note on environmental reporting for 2022.

Emissions related to transportation and travel in 2022, 2021 and 2020 (*in metric tons of CO_2 equivalent*)

	2022	2021	2020	Change 2022/2021
Upstream transportation	199,431	163,188	120,151	22%
Downstream transportation	44,311	73,078	4	-39%
Business travel	15,565	5,881	6,781	165%
TOTAL	259,307	242,147	126,936	7%

Upstream transportation

Upstream transportation accounts for 77% of transportation-related emissions. Kering uses road and air transportation to carry its finished products and merchandise between production centers and logistics platforms, and between logistics platforms and stores. Air transportation is only used for distant markets (Asia, Americas, Oceania).

Emissions related to upstream transportation by mode in 2022, 2021 and 2020 (*in metric tons of CO_2 equivalent*)

	2022	2021	2020	Change 2022/2021
Road freight	23,370	7,690	5,181	204%
Sea freight	1,232	1,018	300	21%
Air freight	174,802	154,405	114,664	13%
Rail freight	27	75	6	-64%
TOTAL	199,431	163,188	120,151	22%

The increase in 2022 relative to 2021 was mainly due to new logistics flows (last-mile and inbound road transportation, as described above) being included in the calculation of the Group's footprint. On a comparable basis, the increase in transportation volumes (because of the Group's business growth in 2022) mainly concerns road transportation, whereas air transportation was stable.

Downstream transportation

Following on from changes made in 2021, Kering included transportation to customers in relation to e-commerce sales. E-commerce transportation flows taken into account in the carbon impact of transportation in 2022 cover almost all flows (except for non-material flows at Brioni and those of the Jewelry Houses and Kering Eyewear).

Emissions related to downstream transportation by mode in 2022, 2021 and 2020 (*in metric tons of CO_2 equivalent*)

	2022	2021	2020	Change 2022/2021
Road freight	2,424	2,627	4	-8%
Air freight	41,887	70,451	-	-41%
TOTAL	44,311	73,078	4	-39%

The reduction in emissions from air freight between 2021 and 2022 was due to methodological adjustments in 2022 that made it possible to calculate emissions precisely, along with a 27% reduction in the volume of goods transported by air (in metric ton-km), whereas the volume transported by road (in metric ton-km) rose by 36%.

Optimizing logistics flows and switching to alternative means of transportation

Goods transportation accounts for a large proportion of the Group's CO_2 emissions, which is why Kering works closely with its logistics platforms, its Houses and its carriers to reduce the distances covered during supply and delivery, to optimize truck and aircraft load factors and the environmental and technical performance of truck fleets, and to develop alternative means of transportation aimed at reducing the Group's carbon footprint.

Since 2019, Kering's Logistics Division has focused on identifying potential areas of improvement in terms of measurement and monitoring and on initiatives to be implemented to reduce the environmental impact of transportation. Projects to adapt Kering's logistics organization have enabled it to put environmental concerns at the heart of what it does. For example, it gives preference to the most efficient vehicles and aircraft, with very ambitious CO_2 emissions standards (maximum of 600g of CO_2per metric ton-km for air freight, the EURO 6 standard for road freight) and is making increasing use of alternative modes of transport for last-mile logistics. Renewing contracts with freight operators has also provided the opportunity to share Kering's high reporting standards. Each month, Kering collects data on the carbon footprint of activities carried out for the Group by each of its main freight operators in accordance with the EN 16258 global standard. Finally, in line with its SBT 1.5°C target for reducing carbon emissions by 2030, Kering plans to define carbon reduction trajectories compatible with its SBT target in collaboration with its main freight operators.

In 2022, Gucci, Bottega Veneta and Kering Eyewear introduced measures to optimize BtoB transportation (itineraries, loads, functional design, reverse logistics) and various stages of the supply chain through to stores. Kering's logistics teams continued to work actively in partnership with the Houses to optimize packaging, which is another key driver of improvements in the Group's environmental footprint.

Business travel

CO_2 emissions related to business travel by air in 2022, 2021, 2020 and 2019 (in metric tons of CO_2 *equivalent*)

	2022	2021	2020	2019	Change 2019/2022
Business air travel	15,565	5,881	6,781	32,181	-52%

After two years of COVID-related restrictions, which particularly affected international air travel, business travel resumed in 2022. This led to an increase in associated CO_2 emissions relative to 2021 although they were still 52% lower than in 2019 because of remote working agreements and the widespread use of digital events.

In addition, the Group's Houses are also developing alternatives to reduce business travel and encouraging employees to use public transport and green modes of transport, as well as car pooling.

Since 2021, Gucci has been offering a car pooling service at some of its sites in Italy, which can also be used outside working hours. Balenciaga also has a car pooling service at its production site in Cerreto Guidi, Italy.

Use of bicycles is also encouraged, whether by creating bicycle parking facilities (Boucheron, Balenciaga and Kering Corporate) or by setting up a fleet of electric bicycles for employees at Saint Laurent's Paris head office to use free of charge, as well as for logistics teams.

The Group also applies environmental criteria when selecting company cars and is gradually increasing the number of electric vehicles in its fleet. As part of this effort, Pomellato, Dodo, Kering Eyewear, Saint Laurent and Kering Corporate are including hybrid and electric vehicles in their fleets. At the end of 2022, these vehicles accounted for 49% of the vehicle fleet at Gucci, 46% at Bottega Veneta and 65% at Balenciaga.

4. Emissions related to the use of sold products and their end-of-life treatment

Emissions related to the use of sold products and their end-of-life treatment together account for 10% of the Group's Scope 3 emissions according to the GHG Protocol, amounting to 244,112 and 4,044 metric tons of CO_2 equivalent respectively.

Sections 5.4-6.1 of this document contain a detailed description of Kering's initiatives to reduce the impact of these categories and influence consumers.

5.2.2.5 Contribution to climate change mitigation

Reducing greenhouse gas emissions is the first priority of the Group's climate strategy. In addition to the Group's reduction targets validated by the *Science Based Target initiative*, Kering has since 2012 been investing in nature-based carbon offsetting projects, thereby helping to protect essential ecosystems and carbon sinks around the world. These projects help to mitigate climate change beyond the Group's value chains and to preserve and restore sensitive ecosystems (forests, wetlands and coastal areas).

Each year, the volume of carbon credits corresponds to all of the direct and indirect emissions of the Group and its supply chain (Scopes 1, 2 and 3 as measured via the EP&L, excluding use and end-of-life of sold products). In 2022, with respect to 2021, Kering offset its entire carbon footprint of 2,143,465 metric tons of CO_2 via certified nature-based projects. 11% of credits came from projects that remove carbon dioxide from the atmosphere (commonly called "*removal projects*") and 89% came from projects that avoid greenhouse gas emission ("*avoidance projects*"). This includes REDD+ programs aimed at reducing emissions from deforestation and ecosystem degradation, which are certified and verified according to international standards such as the Verified Carbon Standard (VCS) or Gold Standard.

All projects supported by Kering help to mitigate climate change (by avoiding greenhouse gas emissions and/or capturing carbon) and include positive impacts on biodiversity and local communities, certified by the *Climate, Community and Biodiversity Alliance* (CCBA) and/or by SD VISta (*Sustainable Development Verified Impact Standard*). Kering plans to increase gradually its support for carbon removal projects relative to avoidance projects, as recommended by SBTi.

Kering is also continuing to diversify and step up its efforts to help mitigate climate change beyond its own supply chains, in two main areas:

- Support for targeted projects that use emerging techniques in key landscapes for the Group's activities, in areas where key raw materials to the fashion industry are produced. Since 2020, for example, Kering has invested in Low Carbon Label (*Label Bas Carbone*) certified projects, in partnership with IDELE (*Institut de l'Élevage*, the French Livestock Institute), which support French cattle breeders in developing more climate-friendly practices. In 2022, Kering also made a commitment to the linen industry in France with regenerative agriculture projects coordinated by Sysfarm.
- Climate Fund for Nature: this fund, announced during COP15 in late 2022, was initiated by Kering and is managed by Mirova, a Natixis subsidiary specializing in environmental and social impact investing. It invests in projects in key regions for the production of critical raw materials for the fashion and beauty industries. This fund is also supported by L'OCCITANE Group, and has already attracted €140 million of investments. It is open to other participants in the fashion and beauty industries, and has an investment target of €300 million. The fund is supporting new projects involving high-quality nature-based solutions that generate carbon credits for Kering and other co-investors. Around two thirds are removal projects and one third avoidance projects. The fund aims to reach a contribution of 10 million metric tons of CO_2 equivalent over 15 years and to deliver additional benefits for communities, with a particular emphasis on promoting women's rights and empowerment.

Focus on: Gucci's climate solutions portfolio

Since 2020, Gucci has been developing its positive approach for nature by directly transforming its own supply chain through the use of regenerative agriculture, and particularly via its Natural Climate Solutions Portfolio. In 2022, the House maintained its support programs to protect and restore nature through REDD+ offsetting projects. These projects help to combat climate change while also having a positive economic and social impact on local communities, as well as protecting flora and fauna. This includes protecting undisturbed land by means of "green carbon" offsetting projects and restoring forests and wetlands – mainly mangroves – through "blue carbon" projects, which are particularly effective for carbon sequestration and storage. Gucci supports a number of regenerative agriculture projects in Italy and worldwide, and the materials they produce will feature in Gucci's upcoming collections.