MANAGEMENT REPORT OF THE BOARD OF DIRECTORS: THE GROUP

Environment and sustainability

1. GENERAL ENVIRONMENTAL POLICY

In 2022, which again saw record-breaking heatwaves leading to droughts, floods and fires, the expectations of civil society worldwide with respect to the protection of biodiversity and the fight against global warming were communicated more clearly and strongly than ever before. With a fourth value of commitment (to inclusiveness and solidarity and to the environment) now added to the Group's three enduring values of creativity, excellence and entrepreneurial spirit, the Group unveiled its new environmental roadmap, LIFE 360 (LVMH Initiatives for the Environment 360), at its Shareholders' Meeting on April 21, 2021. This new phase in the Group's environmental policy, which itself dates back as far as 1992, follows on from LIFE 2020, LVMH's program of commitments covering the period 2016-2020. To speed up progress, LIFE 360 includes 2023, 2026 and 2030 targets for all the Group's Maisons, with the aim of nurturing the emergence of a new vision for luxury as a balanced combination of nature on the one hand and creativity and artisanal excellence on the other.

1.1 Organization of the Group's environmental approach

1.1.1 Governance

Reporting directly to Antoine Arnault, a member of LVMH's Board of Directors, the 10-member Environmental Development Department has the following objectives:

- implement the four action plans (circular design, traceability, biodiversity and climate) of the LIFE (LVMH Initiatives for the Environment) program across all Maisons;
- guide Group companies' environmental policies, in compliance with the LVMH Environmental Charter;
- report on the Group's environmental strategy through a dedicated report and specific impact indicators;
- identify world-class environmental analyses, tools and methodologies and share them with the Maisons;
- build the environment into design processes and nurture innovation;
- carry out forward-looking analysis to help the Maisons safeguard against risks and seize opportunities in each main business group (Wines and Spirits, Fashion and Leather Goods, Perfumes and Cosmetics, Watches and Jewelry, and Selective Retailing), and in hotel activities;
- train employees and raise environmental awareness at every level of the organization;
- share LVMH's environmental experience at international summits and build proactive partnerships;
- uphold the Group's reputation and contribute to its non-financial performance.

Each Maison also draws on its own in-house expertise in environmental matters. These experts make up a network of nearly 200 Environment Officers from Maisons, known as the Environment Committee, which meets several times a year, in particular to share and discuss best practices.

In 2003, the Group joined the United Nations Global Compact, which aims to promote responsible corporate citizenship through business practices and policies based on ten universal principles, including the following three relating to the environment:

- adopt a precautionary approach to environmental challenges;
- promote greater environmental responsibility;
- encourage the development and widespread adoption of environmentally friendly technologies.

In addition, LVMH's ability to drive continuous improvement is closely tied to the Group's success at making sure that its 196,006 employees understand their role as active participants in its approach to environmental matters. The Environment Department thus works to inform, train and raise awareness among employees with regard to the conservation of natural resources and biodiversity, as well as climate change. Since 2016, the Group's in-house Environment Academy has served this role and its actions are continually being adapted to meet new requirements. The Academy designs training programs based on the major objectives of the LIFE program, using a range of learning materials – including face-to-face training sessions, e-learning modules and virtual classes.

In 2022, almost all of the Maisons continued with their employee environmental training and awareness programs. Numerous courses and modules to facilitate the transformation of certain business lines were rolled out, particularly relating to sustainable design of products and stores. For example, Parfums Christian Dior delivered a classroom training course on this subject for all teams involved, a total of 200 individuals, as did Louis Vuitton as part of its Sustainable Design Day. With respect to the environmental performance of its stores, LVMH runs a program of webinars for the Store Planning and Environment community mainly focusing on sustainable building design in accordance with Group and LIFE 360 guidelines. The Group also stepped up the deployment of the Climate Fresk in 2022, with training sessions for in-house trainers and more awareness days. A growing number of Maisons now include an environmental training target in their incentive agreements.

These training programs totaled 31,238 hours in 2022, a significant increase relative to 2021 (20,106 hours).

In 2022, the Group was included in the main indices based on responsible investment criteria: FTSE4Good Global 100, Moody's ESG (68/100) and S&P Global ESG (70/100). In addition, LVMH was awarded a Triple A by CDP for its leadership, transparency and action relating to climate change, forests and water security.

1.1.2 Risk identification

In 2022, LVMH further refined its materiality analysis of the most important issues for the Group:

- for the Group's climate impacts, the ongoing analysis of physical and transition risks relating to climate change was continually updated by applying the scenario analysis method and studying the related financial consequences;
- for water and biodiversity impacts, the Group tested and rolled out methodologies currently under development by SBT for Nature and the TNFD.

The main environmental risks identified at the Group level relate to the following topics:

1. impacts on ecosystems;
2. depletion of natural resources;
3. setting up and maintaining responsible supply chains;
4. climate change risks.

While the Group is exposed to climate-related risks, it may also benefit from opportunities related to climate change.

The policies implemented and their results are set out in the following sections.

The full materiality matrix of risks and opportunities provides detailed information on the following environmental issues relating to the Group's business activities:

	Wines and Spirits	Fashion and Leather Goods	Perfumes and Cosmetics	Watches and Jewelry	Selective Retailing

State of energy resources and climate change	- Grape growing and yield
	- Packaging production
	- Distillation
	- Transportation of products
	- Soil erosion
		- Store lighting, air conditioning and location
		- Transportation of products and carbon taxes
		- Production of resources needed to manufacture products:
		  - Plant fibers used for textiles (cotton, etc.)
		  - Leather, including exotic leather
		  - Fur
		  - Wool
		- Customer expectations in relation to more sustainable products
		- Renewable energy costs
			- Packaging production
			- Store lighting, air conditioning and location
			- Transportation of products and carbon taxes
			- Customer expectations in relation to more sustainable products
			- Renewable energy costs
				- Store lighting, air conditioning and location
				- Renewable energy costs
					- Store lighting, air conditioning and location
					- Transportation of products
					- Renewable energy costs

Impact on water resources	- Water consumption (vineyard irrigation in Australia, New Zealand, Argentina and California) - Production of effluents containing organic matter during winemaking and distillation	- Water consumption (crocodilian farms and tanneries) - Production of effluents containing organic matter	- Water consumption (production and transformation of raw materials)	- Water consumption during the extraction of mineral resources needed to manufacture products - Production of effluents containing mineral matter	

Impact on ecosystems (including deforestation and desertification) and depletion of natural resources	- Production of plant resources needed for other production processes (grape vines, barley, rye, etc.)
	- Protecting biodiversity
		- Production of resources needed to manufacture products:
		  - Plant fibers used for textiles (cotton, etc.)
		  - Leather, including exotic leather
		  - Fur
		  - Wool
		  - Eider down
		- Farming and trapping practices concerning raw materials of animal origin
		- Protecting biodiversity
			- Production of plant resources needed to manufacture products (rose, jasmine, etc.)
			- Protecting biodiversity
				- Extraction of resources needed to manufacture products:
				  - Gems and precious metals
				  - Exotic leather
				- Farming and trapping practices concerning raw materials of animal origin
				- Protecting biodiversity	

Waste production	- Production of residues from winemaking or distillation processes and packaging waste - Circular economy	- Unused raw materials, obsolete and unsold products, window displays and events - Customer expectations in relation to more sustainable products - Circular economy	- Point-of-sale advertising, packaging waste, and obsolete and unsold products - Circular economy	- Scrap metal - Circular economy	- Point-of-sale advertising, packaging waste, and obsolete and unsold products - Circular economy

1.1.3 Environmental expenses

Environmental expenses are recognized in accordance with the recommendations of the Autorité des Normes Comptables, France's accounting standards authority. Operating expenses and capital expenditure are recognized against each of the following items:

- air and climate protection;
- wastewater management;
- waste management;
- soil protection and purification;
- noise and vibration reduction;
- conservation of biodiversity and other environmental protection measures;
- research and development.

In 2022, expenses related to environmental protection broke down as follows:

- operating expenses: 42.5 million euros (2021: 32 million euros);
- capital expenditure: 17.3 million euros (2021: 16.6 million euros).

Provisions for environmental risks amounted to 12.4 million euros as of December 31, 2022. This amount corresponds to the financial guarantees required by law for Seveso upper-tier establishments.

Furthermore, in accordance with Regulation (EU) 2020/852 establishing criteria for determining whether an economic activity qualifies as environmentally sustainable, LVMH has identified those of its activities that qualify as contributing to climate change adaptation and mitigation objectives (see Chapter 6, "Environmental taxonomy").

1.2 The LIFE program

Signed in 2001 by the Group's Chairman, the Environmental Charter is the founding document for LVMH's five main aims with regard to the environment:

- striving for high environmental performance;
- encouraging collective commitment;
- managing environmental risks;
- designing products that factor in innovation and environmental creativity;
- making a commitment that goes beyond the Company.

The Environmental Charter also encourages all Maison Presidents to become directly involved in the approach through concrete actions, and requires each Maison to set up an effective environmental management system, create think tanks to assess the environmental impacts of its products, manage risks, and adopt environmental best practices. The Environmental Charter has guided LVMH's environmental commitments and its program of actions.

1.2.1 Overview of the LIFE program

Launched in 2011, the LIFE (LVMH Initiatives for the Environment) program is designed to reinforce the incorporation of environmental concerns into brand strategy, facilitate the development of new coordination tools, and take into account developments and improvements arising from innovative practices at Maisons.

The Maisons have incorporated the LIFE program into their strategic plans since 2014. The LIFE program was implemented by a Steering Committee at each Maison and is based on nine key aspects of environmental performance:

- taking account of the environment in product design;
- securing access to strategic raw materials and supply chains;
- traceability and compliance of materials;
- suppliers' environmental and social responsibility;
- preserving critical expertise;
- reducing greenhouse gas emissions;
- environmental excellence in manufacturing processes;
- product life span and reparability;
- keeping customers and key stakeholders informed.

1.2.2 The LIFE 360 program

Preparations for the new program

LIFE 2020, the first roadmap resulting from the LIFE program and risk mapping, which in 2016 set out four targets common to all the Maisons, was completed in 2020. Preparations for the Group's new program of commitments, drawn up from November 2020 with the intention – shared by the Maisons – of making even faster progress, included analyzing the results of LIFE 2020.

Other work was involved in preparing the new program:

- priorities set jointly with the Maisons and via the various consultative bodies: the LVMH Science Committee; the Future of Luxury Commission (established in July 2020 and made up of leading outside figures from various disciplines); and work sessions with students and young employees;

- updates to the analysis of risk factors;
- analysis of the Sustainable Development commitments made by certain LVMH Maisons. This is the case for Louis Vuitton, which has committed to achieve the following by 2025: set up or maintain responsible supply chains for 100% of its raw materials; map out a climate trajectory approved by the Science Based Targets initiative; and promote circular design by committing to sustainable design for all its products. At the end of 2020, Moët Hennessy had made all of its own vineyards in the Champagne region herbicide-free as part of its Living Soils program and plans to do the same by 2028 for its independent grape suppliers;
- the 2020 LVMH Climate Week offered a week-long program of discussions and meetings with experts on climate and biodiversity-related topics for the Group's employees;
- the calculation of the Group's environmental footprint for its entire value chain, including Scope 1, 2 and 3 emissions, covering issues relating to climate change, biodiversity and water;
- analyzing the extent to which LVMH's environmental policy has contributed to the achievement of the United Nations Sustainable Development Goals (SDGs), in particular SDG 3 ("Good health and well-being"), SDG 6 ("Clean water and sanitation"), SDG 9 ("Industry, innovation and infrastructure"), SDG 12 ("Responsible consumption and production"), SDG 15 ("Life on land") and SDG 17 ("Partnerships for the goals");
- securing approval for the prioritization of objectives and their terms of implementation at presentations to members of the Executive Committee and the Ethics & Sustainable Development Committee.

LIFE 360 objectives

LVMH's new LIFE 360 roadmap, the fruit of this work, was unveiled at the 2021 Shareholders' Meeting and the results for fiscal year 2021 were presented at the Shareholders' Meeting of April 21, 2022. It sets out 2023, 2026 and 2030 targets and charts a course for creating products that embody the Group's environmental ambitions: products that exist in harmony with nature, do not damage biodiversity or the climate, and mobilize stakeholders. It is structured around four strategic action plans:

- **Circular design:** Harnessing the circular economy (sustainable design, repair, reuse and upcycling) and innovation (research into new materials) to fuel creativity, with a target of all new products being sustainably designed by 2030 and having a managed environmental footprint from extraction of materials through to their transformation. Packaging strategy will follow this same trajectory, with a target of zero fossil-based virgin plastics by 2026.
- **Biodiversity:** The Group's activities are intimately linked to nature. The targets laid down in this action plan are designed to limit impacts and restore to the environment whatever is taken from it: zero deforestation and conversion of ecosystems within its operations and supply chains by 2025 (target updated in 2022 to include certain requirements established as part of the Science Based Targets for Nature initiative); all strategic supply chains to be subject to the most rigorous standards by 2026; a regenerative agriculture plan to restore 5 million hectares of flora and fauna habitats between now and 2030. The Group continues to roll out its Animal Welfare Charter published in 2019 and is in the process of drawing up a dedicated policy to protect water resources which will be published in summer 2023.
- **Climate:** LVMH's new carbon trajectory, in line with the Paris Agreement. was approved by the Science Based Targets initiative (SBTi) in December 2021. It aims to achieve a 50% reduction in energy-related greenhouse gas emissions by 2026 (baseline: 2019) and a 55% reduction in Scope 3 emissions per unit of added value by 2030. Actions to achieve these targets are concentrated in four key areas: exclusive use of renewable or low-carbon energy by production sites and stores, an action plan dedicated to green e-commerce, increase in the share of maritime transportation for freight, and a supplier carbon footprint plan.
- **Traceability and Transparency:** The action plan aims to roll out dedicated traceability initiatives covering all strategic raw materials by 2030 and tools for sharing environmental and/or social information at product level (see Section 5.2.2).

These four strategic action plans are broken down to business segment and individual Maison level. They are accompanied by targets designed to mobilize stakeholders around the LIFE 360 priorities, in particular:

- **employees**, with the aim of designing environmental training programs tailored to the **specific characteristics of the Group's businesses**;
- **customers**, with a target of all new products having a dedicated information system by 2026;
- **strategic suppliers**, with CSR clauses to be included in all contracts and subject to verification by 2030, Targets have been set for the certification of purchased raw materials and production sites, the environmental management of water and hazardous substances (see §3.2.3), and the energy transition;
- **researchers**, with a dedicated sustainable luxury research and innovation program for 2023.

1.3 2022 reporting scope

The environmental indicator reporting process covered the following scope in 2022:

Production sites, warehouses, hotels and administrative sites *(number)*	**2022**
Sites covered[(a)]	327
Sites not covered[(b)(c)]	150
Total number of sites	**477**

(a) Includes certain sites of Belmond, Bulgari, Celine, Christian Dior Couture, DFS, Guerlain, Louis Vuitton and Tiffany.
(b) Main components: certain regional administrative sites of Louis Vuitton and Moët Hennessy as well as administrative sites with fewer than 20 employees.
(c) Belmond is included in reporting for indicators relating to energy and associated greenhouse gas emissions.

93% of production sites are covered. The manufacturing, logistics and administrative sites that are not covered by environmental reporting are essentially excluded for operational reasons and their environmental impact is not material. A plan to gradually include them is underway.

The guidelines for the addition or exclusion of entities or sites joining or leaving the Group are as follows:

- new entities and new sites are added to the reporting scope one year after their integration;
- entities and sites sold during the fiscal year (between January 1 and December 31) are excluded from the reporting scope.

The total store floor space used to calculate energy consumption and greenhouse gas emissions is as follows, expressed as a percentage of the Group's total store floor space:

	% of Group's total store floor space taken into account in calculating energy consumption and greenhouse gas emissions[(a)]	
	2022	**2021**
Group total	**73**	**74**

(a) The reporting scope does not cover the stores operated under franchise by Fashion and Leather Goods, Perfumes and Cosmetics, and Watches and Jewelry.

Calculations of energy consumption and greenhouse gas emissions also include certain stores operated by all Maisons in the Fashion and Leather Goods, Perfumes and Cosmetics, Watches and Jewelry, and Selective Retailing business groups.

Sephora South East Asia, Rimowa, Parfums Francis Kurkdjian, Pucci and Parfums Givenchy stores have been excluded.

For waste production and water consumption, only certain stores operated by DFS and stores operated by the Le Bon Marché group are included.

For the 27% of stores not taken into account in calculating energy consumption and greenhouse gas emissions, data is estimated and presented separately.

2. LIFE 360 – CIRCULAR DESIGN

2.1 Overview of the Circular Design policy

LVMH's Maisons work to limit the impact of their products on the natural environment by taking each product's entire life cycle into account. Through its LIFE 360 strategy, LVMH is bringing together all its Maisons around the concept of circular design, based on four convictions:

- inventiveness: selecting innovative new materials such as those that are recycled, bio-sourced, certified and/or derived from regenerative agriculture (see §2.1.1 and 3.1);
- simplicity: selecting the most demanding transformation and manufacturing processes at Maisons' and suppliers' sites to reduce environmental impacts (climate, water, waste, biodiversity) (see §2.1.4);
- eternity: guaranteeing long product life by ensuring high quality thanks to expertise in repairs and the art of patina, new technologies such as product recharges, refills and refurbishment, and the promotion of new services (see §2.1.3);
- rebirth: helping give materials and products a new lease of life through reuse, recovery, recycling and upcycling (see §2.2.2).

These convictions are translated into action plans with tangible targets:

- all new products sustainably designed by 2030;
- zero fossil-based virgin plastics to be used in packaging by 2026;

- new circular services to be rolled out;
- as key drivers of circular design, Maisons' production sites are also subject to specific targets, for example to roll out certified environmental management systems across all production and logistics sites by 2026. Ambitious policies are also in place covering water consumption, wastewater and general waste.

2.1.1 All products to be covered by a sustainable design process

To meet this sustainable design challenge, the Group and its Maisons have together identified criteria encompassing at least the following:

- use of raw materials that are certified, recycled or derived from regenerative agriculture;
- traceability: knowing the supplier and country of origin for each primary material;
- product life span and end-of-life treatment.

Each business group has tailored these sustainable design criteria to its own specific environmental challenges; tools are currently being rolled out to monitor performance against these criteria and assess each product's environmental footprint.

- Perfumes and Cosmetics: The Maisons have implemented the EFI (Eco-Formulation Index) and the EPI (Environmental Performance Index for packaging). The EFI score spans six dimensions: traceability, clean beauty (with certain substances banned from use), naturally occurring materials, smart formulation to reduce the number of substances used, sustainability, and overall environmental impact. The EPI score takes into account a number of criteria including packaging weight and volume, recycled and bio-sourced content, recyclability and refill capability.
- Fashion and Leather Goods: Maisons in the Fashion and Leather Goods business group apply the traceability criteria identified by the Group, a requirement for a minimum of 50% raw materials to be certified, recycled or derived from regenerative agriculture, and a reparability index. Following successful tests, a sector-based tool for tracking indicators and calculating the environmental footprint of products is currently being rolled out. It has been designed to meet the requirements of France's new anti-waste law for a circular economy, known as the AGEC law, and specifically its Article 13 relating to the sharing of environmental and traceability information at the time of purchase.
- Wines and Spirits and Watches and Jewelry: After being defined, sustainable design criteria are tested by the Maisons. The Wines and Spirits business group has set up an indicator for the environmental performance of packaging and is testing a tool to assess the environmental footprint of packaging.

2.1.2 Zero fossil-based virgin plastics in customer packaging by 2026

LVMH aims to have stopped using fossil-based virgin plastics in packaging that reaches customers by 2026. To achieve this target, the Maisons are working to:

- use recycled plastics;
- use bio-sourced plastics;
- replace plastics with other materials.

LVMH has also set the following targets for 2030: 70% of packaging materials used by the Maisons (in packaging that reaches customers) is to be recycled, and all packaging that reaches customers is to be recyclable, compostable or reusable.

2.1.3 Results for new circular services

LVMH's 75 Maisons offer a vast range of opportunities to explore potential new cross-sector circular design practices, a priority action of LIFE 360. They have given rise to new services, which were implemented at a faster pace in 2022:

- to make products more sustainable through repairs and refills;
- to donate unsold products to nonprofits, reuse (i.e. use a product for the same purpose for which it was originally designed), recover (i.e. use products and materials now considered as waste) and recycle (i.e. reintroduce waste directly into the production cycle that produced it to completely or partially replace a new raw material);
- to exchange raw and other materials between Maisons through innovative projects (See §3.2.3).

2.1.4 All manufacturing and logistics sites to have certified environmental management systems by 2026

The Maisons' products are mainly manufactured at 250 production sites and distribution hubs. Reducing their environmental impact and fostering a circular approach also helps shrink products' environmental footprint.

The Group has set a target of having all its sites covered by environmental certification by 2026; this kind of certification is a dynamic, unifying and motivating approach for continuously improving performance in building use. This approach to certification is not new for the Maisons: the LVMH Environmental Charter already requires that they put in place an environmental management system reporting to Executive Management. Hennessy has played a pioneering role in this regard, becoming the world's first wines and spirits company to obtain ISO 14001 certification in 1998.

2.2 Key achievements in 2022: Circular Design

2.2.1 Sustainably designed packaging

The Maisons are working on sustainable packaging design to reduce the amount of raw materials used, facilitate recycling and help put a stop to the use of fossil-based virgin plastics. For example, Parfums Christian Dior is working with Eastman to develop packaging using materials like copolyester produced with molecular recycling technologies.

The quantities of packaging consolidated by the Maisons concern the following items:

- Wines and Spirits: bottles, boxes, caps, etc.
- Fashion and Leather Goods: boutique bags, pouches, cases, etc.
- Perfumes and Cosmetics: bottles, cases, etc.
- Watches and Jewelry: cases, boxes, etc.
- Selective Retailing: boutique bags, pouches, cases, etc.

Packaging used for transport is not included in this breakdown.

The amount of packaging used Group-wide was higher than in 2021 but 3.4% lower than in 2019. Sustainable packaging design efforts have resulted in a reduction in the proportion of plastic and an increase in the proportion of glass and paper, as shown by the change in the EPI (Environmental Performance Index) for packaging used by Maisons in the Perfumes and Cosmetics business group (see §2.1.1).

Perfumes and Cosmetics and Wines and Spirits business groups: EPI scores over time

Indicators	Baseline	Performance in 2022	Performance in 2021	Change
EPI score for Perfumes and Cosmetics packaging	8.32	13[a]	10.71	+21.4%
EPI score for Wines and Spirits packaging	Champagne: 16.03	16.5	16.5	-
	Cognac: 10.60	12.1	13.4	-9.7%

(a) Maisons included: Guerlain, Parfums Christian Dior and LVMH Fragrance Brands.

The weight of packaging that reaches customers changed as follows between 2021 and 2022:

(in metric tons)	2022	2021	2022 pro forma[a]	Change[b] *(as %)*
Wines and Spirits	171,156	170,166	171,121	1
Fashion and Leather Goods	23,145	19,149	23,145	21
Perfumes and Cosmetics	25,966	26,890	25,966	(3)
Watches and Jewelry	4,761	3,390	3,959	17
Selective Retailing	3,425	4,053	3,425	(15)
Other activities	-	1	-	-
Total	**228,453**	**223,649**	**227,616**	**2**

(a) Value and change at constant scope.
(b) This change was a result of the upturn in business.

The total weight of packaging that reaches customers, by type of material, broke down as follows in 2022:

(in metric tons)	Glass	Paper/ Cardboard	Plastic	Metal	Fabric	Other packaging materials
Wines and Spirits	155,340	12,589	924	1,430	27	846
Fashion and Leather Goods	359	19,238	453	122	2,968	5
Perfumes and Cosmetics	13,688	5,515	5,344	1,407	12	-
Watches and Jewelry	1,721	1,792	864	223	97	64
Selective Retailing	235	2,227	920	40	1	2
Other activities						-
Total	**171,343**	**41,361**	**8,505**	**3,222**	**3,105**	**917**

2.2.2 Reducing and recovering waste

The weight of waste generated changed as follows between 2021 and 2022:

(in metric tons)	Waste produced in 2022	*Of which: Hazardous waste produced in 2022*[(a)]	Waste produced in 2021	Waste produced in 2022 pro forma[(a)]	Change in waste produced[(a)] *(as %)*
Wines and Spirits	83,629	*290*	78,881	86,679	9
Fashion and Leather Goods	17,171	*3,812*	19,422	17,260	(12)
Perfumes and Cosmetics	10,856	*2,208*	10,297	10,785	4
Watches and Jewelry	1,408	*541*	985	1,396	29
Selective Retailing	3,077	*10*	2,373	2,863	17
Other activities	2,191	*32*	1,625	2,190	26
Total	**118,332**	***6,893***	**113,584**	**121,173**	**6**

(a) Waste that must be sorted and processed separately from non-hazardous waste (such as cardboard, plastic and paper).

Waste was recovered as follows in 2022:

(as % of waste produced)	Re-used	Recovery of materials	Waste-to-energy recovery	Total recovery
Wines and Spirits	7	88	3	99
Fashion and Leather Goods	3	45	40	87
Perfumes and Cosmetics	1	79	14	94
Watches and Jewelry		40	29	69
Selective Retailing	4	37	32	73
Other activities	23	47	16	86
Total	**6**	**79**	**11**	**95**

The Maisons are working to reduce and recycle production waste. As regards circular waste management, in 2022, 95% of waste was recovered (91% in 2021). Recovered waste is waste for which the final use corresponds to, listed in descending order of interest in accordance with European and French laws: reuse, recovery of materials (i.e. recycling, composting or land treatment) or incineration for energy production.

As another example, LVMH has set a target of ensuring that all site waste from store construction and renovation is locally recycled or reused by 2026. To achieve this, the Maisons complete the store construction process by implementing a recycling indicator for construction waste.

2.2.3 Results for new circular services

Annual reporting tracks the number of new projects at each Maison as well as the proportion of total sales accounted for by new circular offerings. In France, the Perfumes and Cosmetics Maisons, as well as Sephora, have used the CEDRE (Centre Environnemental de Déconditionnement, Recyclage Écologique) recovery and recycling facility to handle all the waste generated by the manufacturing, packaging, distribution and sale of perfumes and cosmetic products. CEDRE accepts several types of articles: obsolete packaging, obsolete alcohol-based products, advertising materials, store testers, and empty packaging returned to stores by customers. In 2022, around 3,144 metric tons of waste were processed (3,717 metric tons in 2021). The various materials (glass, cardboard, wood, metal, plastic, alcohol and cellophane) are resold to a network of specialized recyclers.

In addition, CEDRE now handles textile waste from the fashion Maisons, for which it has become the core of a new ecosystem of closed- or open-loop recycling facilities able to received unsold items that cannot be donated or reused. LVMH is working to develop a textile recycling system for all of the Maisons with the aim of offering an end of life with the lowest possible environmental impact for production offcuts, unsold textiles and unused fabric rolls. In line with developments in technology, this system will involve new partners to handle larger volumes of material and to be able to use the upcycled and recycled materials to create new products.

In 2022, Nona Source, the platform developed by the Group to facilitate the resale of unused textiles by its Maisons, confirmed its status as a circularity accelerator in the fashion industry and as an effective means to support young designers by offering high-quality fabrics at very competitive prices. Over 190,000 meters of fabric (versus 60,000 meters in 2021) from more than 10 of the Group's fashion Maisons was upcycled in this way in 2022. In 2022, Christian Dior Couture and Louis Vuitton launched recycling projects with WeTurn, the first dedicated service for recycling unsold textiles, fabric rolls and production offcuts from prestigious Maisons protected by intellectual property rights by transforming them into new, fully traceable high-quality European thread. Louis Vuitton launched its first closed-loop recycling project for more than 4 metric tons of textiles to reuse the resulting materials in its own ecosystem.

In the spring of 2022, Christian Dior Couture launched a men's collection in collaboration with the NGO Parley for the Oceans. Resulting from several years of joint research, the entire collection is developed using high-performance textiles created from upcycled marine plastic debris and fishing gear recovered at islands around the world, particularly the Maldives, the Dominican Republic and Sri Lanka.

At the end of 2022, LVMH inaugurated Heristoria, a luxury e-shop for items from the archives of the Group's Maisons, all emblematic of their heritage and expertise. Each unique piece offered has its own special story, which Heristoria shares on the site, and is sold along with an exclusive customer experience. To help combat food waste and promote food donations, La Grande Épicerie de Paris put in place a process to accurately monitor sales so that production can be adjusted accordingly. The French Red Cross collects any unsold products each day. In 2018, a partnership was launched with Too Good To Go, an app that lets stores give their unsold items to its users. In light of the Group's business activities, food insecurity and actions promoting responsible, fair and sustainable food use do not constitute key risks.

2.2.4 Environmental management

In 2022, the Group continued to roll out certified environmental management systems across its 477 sites. By the end of 2022, 74% of its industrial sites will be ISO 14001 certified. Biodiversity protection is a key part of these environmental management systems. As an example, Veuve Clicquot's Comète production facility launched a biodiversity audit in 2022, carried out by an ecology consultant, which has already given rise to various improvements at the site.

Sustainable design and environmental management are also relevant to the Group's stores. For instance, the Sustainable Store Planning working group is encouraging all the Maisons to use the LIFE in Stores in-house rating system for environmental performance criteria, which has been rolled out to date at Christian Dior, Chaumet and Bulgari. Today the Stores community has 600 members around the world. It is coordinated by the Sustainable Store Planning Ambassadors selected by each of the Maisons. Steering committees meet each month to assess the level of achievement of LIFE 360 targets and to explore the best ways to disseminate tools. At the end of 2022, the central team sent Version 5 of the rating system to the Ambassadors for their comments and approval. Topical workshops were organized in order to lay down the new rating guidelines to enter into effect from January 2023. The guidelines include a chapter on water management and can now apply to hotels and offices.

The fourth edition of the LIFE in Stores Awards was held on October 25, 2022 at the Avenue Montaigne headquarters to recognize the best stores in each category of environmental performance covered by the rating system. Audited by external experts, the 21 stores applying for the awards presented their achievements in relation to the 36 criteria. The winners of the 2022 edition were:

- "Envelope Design": Hublot, Geneva, Switzerland;
- "Lighting": Children's Department, Le Bon Marché, Paris, France;
- "Indoor Air Quality": Fendi, Galleria Vittorio Emanuele II, Milan, Italy;
- "Energy and Water": DFS, Galaxy Galleria, Macao, China;
- "Interior Design": Berluti, via Monte Napoleone, Milan, Italy;
- "Maintenance": Loewe, Casa Loewe, Barcelona, Spain.

2.2.5 Summary of LIFE 360 "Circular Design" achievements in 2022

Objectives	Performance in 2022	Performance in 2021	Target
Zero fossil-based virgin plastics in packaging that reaches customers			
Quantity of fossil-based virgin plastics in packaging that reaches customers *(in metric tons)*	7,942	8,632	0 (2026)
70% recycled materials in packaging that reaches customers			
Percentage of recycled materials in customer packaging for glass and plastic (by weight)[a]	39%	38%[b]	70% (2030)
Presence of ISO 14001-compliant environmental management systems (at manufacturing sites and distribution hubs)	74%	70%	100% (2026)

(a) Data from a report currently under development.
(b) Data recalculated for 2021 as a result of an improvement in the calculation process at Domaine Chandon Argentina.

3. LIFE 360 – BIODIVERSITY

3.1 Overview of the Biodiversity policy

Protecting natural ecosystems is of vital importance to LVMH, whose business is heavily dependent on natural raw materials (such as flowers, grapes, cotton, leather and gems). This concern is part and parcel of a long-term view that places a priority on preserving nature, from which the exceptional quality of its Maisons' products is ultimately derived.

The first step in the process is to measure impacts. This can serve as a powerful lever for identifying priorities, targets and actions. However, measuring impacts on biodiversity is a complex matter. LVMH undertakes to update and improve its measurement of impacts on a yearly basis, and to take part in the improvement of methods. To this end, LVMH rolled out two methods: the Global Biodiversity Score and an environmental footprint for its entire value chain calculated using the Impact World+ method, including Scope 1, 2 and 3 emissions, covering issues relating to climate change, biodiversity and water. Some biodiversity impact indicators are geolocalized to allow for analysis at a more granular level and the implementation of specific action plans for some regions. Biodiversity impact indicators are updated each year and shared with the scientific community in order to contribute to the refinement of methods.

LVMH's commitments and actions are in keeping with the reference framework drawn up by Science Based Targets for Nature, which is currently under development. The framework aims to align companies' actions with international biodiversity protection goals. In this context, LVMH updated its biodiversity commitments in 2022 to include certain requirements defined under this framework.

Taking into account the results of these measurements, LVMH is taking action and making protecting and regenerating biodiversity a major focus of its LIFE 360 environmental strategy, whose three targets aim to reduce impacts and regenerate biodiversity:

- zero deforestation and conversion of natural ecosystems within its operations and supply chains by 2025 (using the baseline provided by Science Based Targets for Nature for the definition of natural ecosystems in 2020);
- all strategic raw materials to be certified by 2026;
- 5 million hectares of flora and fauna habitat to be preserved, regenerated or restored by 2030.

3.1.1 Avoiding and reducing impacts on biodiversity

Zero deforestation and conversion of natural ecosystems within operations and supply chains by 2025

In 2022, LVMH updated its deforestation target, raising its goal and aligning with the future requirements of the Science Based Targets for Nature framework. Among the raw materials considered at risk in terms of deforestation, LVMH makes use of wood and wood derivatives (paper, cardboard and viscose), palm oil derivatives and leather. These materials have been identified with the help of environmental footprints from LVMH's value chain. In 2022, LVMH quantified the potential deforestation intensity of its supply chains for these three materials in relation to countries of origin and production practices: it amounts to 70 hectares per year (including animal feed). By calculating this intensity, the Group is able to establish priorities for action and measure the progress made.

In addition, LVMH continues to take proactive steps:

- in spring 2021, LVMH entered into a partnership with Canopy, an NGO whose program aims to avoid deforestation in the wood, cardboard and viscose sectors;
- like many of the Group's Maisons, LVMH is a member of FSC France, whose strategy is aimed at certifying sustainably managed forests, transforming markets and acting as a catalyst for change;
- the Group's Maisons ask their partner tanneries not to accept any hides sourced from the Amazon basin;
- LVMH has kicked off agroforestry projects in the Indonesian palm oil sector.

All strategic raw materials to be certified by 2026

The LVMH group has put in place a strategy for sourcing and preserving raw materials, covered by LIFE 360 targets for 2026, that commits the Maisons to ensuring that all strategic raw materials they purchase and produce are certified as complying with the most stringent environmental standards covering both the materials themselves and production sites, and that guarantees that ecosystems and water resources are properly protected. At the close of the LIFE 2020 environmental program, the list of strategic raw materials was expanded. This list now includes the following:

- grapes, rye and barley;
- leathers, raw lamb and calf skins, exotic leathers and furs;
- cotton;
- wool;
- down and feathers;
- viscose;
- silk;
- wood, paper and cardboard;
- gems and precious metals;
- palm oil and its derivatives;
- soya and its derivatives for cosmetic use;
- alcohol;
- iconic ingredients used by Maisons in the Perfumes and Cosmetics business group;
- regulated chemicals. All the Maisons have incorporated the requirements of international regulations, including REACH, into their contractual documents so as to engage all suppliers in this undertaking.

Furthermore, the Maisons have implemented procedures to ensure that all of their products comply with CITES, a convention on international trade in endangered species. Through a system of import-export permits, this convention was set up to prevent overexploitation of certain species of endangered fauna and flora. In keeping with the Animal-Based Raw Materials Sourcing Charter published in 2019, the Maisons committed not to source any supplies of materials listed in Appendix 1 of CITES or identified as under threat by the International Union for Conservation of Nature (IUCN) with effect from 2020.

The Group proactively supports certification programs not only by purchasing certified materials but also by sitting on expert committees, in partnership with other stakeholders, to ensure that the aims of the required standards are both neutral and sufficiently stringent.

Wines and Spirits

The Wines and Spirits business group is actively committed to sustainable, organic and/or regenerative winegrowing, both of which are helping to considerably reduce its environmental impact, in particular by limiting the use of plant protection products.

Stepping up the roll-out of sustainable, organic and/or regenerative winegrowing at the Maisons' vineyards and among independent grape suppliers has thus been adopted as a LIFE 360 target. Various certification systems have been established across winegrowing regions: Viticulture Durable en Champagne for champagne houses, environmental certification for cognac (Haute Valeur Environnementale), organic farming for certain vineyards, Napa Green in California, etc. LIFE 360 targets are as follows:

- for vineyards owned by the Group: all grapes to be from sustainable, organic or regenerative winegrowing by 2026;
- for partner/supplier vineyards (champagne, cognac, wines): 80% of grapes to be from sustainable, organic or regenerative winegrowing by 2026.

Fashion and Leather Goods

The Fashion and Leather Goods business group has adopted nine major targets for 2026:

- 90% by volume of supplies of cow, sheep and exotic leathers to be purchased from Tier 1 LWG-certified tanneries, with 50% to be purchased from Tier 2 and above LWG- or ISO 14001-certified tanneries. LWG certification is a standard created by the Leather Working Group to improve the environmental performance of tanneries (energy, water, waste, traceability);
- supplies of exotic leather to be purchased from abattoirs and/or farms certified in accordance with standards covering animal and human welfare and care for the environment, such as the LVMH Standard for Responsible Crocodilian Production, the International Crocodilian Farmers Association (ICFA), the South African Business Chamber of Ostriches (SAOBC) and the forthcoming standard to be issued by the South East Asian Reptile Conservation Alliance (SARCA). The Group is also seeking certification for all crocodile farms supplying the Group's tannery;
- all supplies of pelts to be purchased from certified fur farms, notably by rolling out certifications recognized under the FurMark program;
- all supplies of cotton to be purchased from sustainable cotton sources. Organic, regenerative and recycled cottons are preferred;
- all supplies of wool to be purchased from sustainable sources. Sustainable wool is either recycled or sourced from farms certified as complying with animal welfare and environmental protection standards such as the Responsible Wool Standard (RWS), the Responsible Mohair Standard (RMS), the Code of Practice of the Sustainable Fibre Alliance (SFA) and the Global Recycle Standard (GRS);
- all supplies of viscose to be sustainable, whether recycled or purchased from suppliers with a Canopy "green shirt" rating;
- all supplies of silk to be purchased from sustainable sources (certified GOTS or a mix of GOTS and GRS);
- all supplies of feathers and down to be either recycled or purchased from suppliers certified in accordance with the Responsible Down Standard (RDS);
- Animal-Based Raw Materials Sourcing Charter to be incorporated into supplier relationships. LVMH shares civil society's aim of improving animal welfare, as reflected in the charter unveiled by the Group in 2019. It is supported by a consultative Science Committee that helps support scientific research. This work is the result of a long process of research and collaboration between LVMH's environmental experts, its Maisons and its suppliers. Taking a comprehensive approach, the charter addresses the full range of issues involved in the sourcing of fur, leather, exotic leather, wool and feathers, with commitments to achieving progress in three areas: full traceability in supply chains; animal farming and trapping conditions; and respect for local communities, the environment and biodiversity.

Perfumes and Cosmetics

The Perfumes and Cosmetics business group has set itself three key LIFE 360 targets in relation to its supply chain to be achieved by 2026:

- all supplies of palm oil to be purchased from sustainable sources, including RSPO-certified palm oil and palm oil from regenerative agriculture;
- all supplies of alcohol to be purchased from sustainable sources, including organic beet and regenerative agriculture as well as alternative and innovative solutions;
- all iconic ingredients used by the Maisons to be EUBT-certified.

The business group also takes part in specific initiatives related to the sourcing of mica (RMI). The Group's Research & Development Department and Maisons have been carrying out ethnobotanical studies for a number of years. They seek to identify plant species with a particular interest as components of cosmetic products while contributing to the preservation of these species and to local economic development. This partnership can take a variety of forms such as financial support, technical or scientific assistance, or skills sponsorship, sharing the expertise of LVMH's staff with its partners. As part of this initiative, Parfums Christian Dior's Dior Gardens are plots dedicated to cultivating plant species chosen for their exceptional properties. Guerlain has also launched a number of partnerships focused on orchids in China, vetiver in India, honey in Ouessant in France, sandalwood in Asia and lavender from the south of France.

Watches and Jewelry

The Watches and Jewelry business group has set itself three key LIFE 360 targets in relation to its supply chain to be achieved by 2026:

- all supplies of gold to be purchased from sustainable sources, including Responsible Jewellery Council Chain-of-Custody (RJC CoC) or equivalent certification for recycled gold and RJC CoC or equivalent certification for mines for new gold. The Group is currently working to recognize other standards for future adoption such as the Initiative for Responsible Mining Assurance (IRMA), Fairmined, Fairtrade and the CRAFT and Swiss Better Gold Association (SBGA) initiatives;
- all supplies of diamonds to be purchased from RJC CoP-certified suppliers;
- all supplies of colored gemstones to be purchased from suppliers certified RJC CoP or equivalent or verified via the Gemstones and Jewellery Community Platform (GJCP).

All of the Watches and Jewelry Maisons have received certification under the Responsible Jewellery Council's Code of Practices standard, known as RJC CoP. As part of the LIFE 2020 and LIFE 360 targets, and in line with this certification, which applies to their gold and diamond supply chains, they expanded their responsible sourcing efforts. Bulgari is particularly active in this area, and has become the first company in its market to obtain the Chain of Custody (CoC) certification for its jewelry business. The Group and its Maisons are also involved in the Coloured Gemstones Working Group (CGWG) run by The Dragonfly Initiative. The CGWG aims to roll out environmental and social best practice across the colored gemstone sector by making all tools developed by the initiative available to the industry on an open-source basis and allowing industry players to assess the maturity of their practices.

All business groups

Wood and wood derivatives: Given its strong commitment to combating deforestation, the Group has set an additional target applicable to all business groups: all supplies of wood, paper and cardboard to be FSC-certified (including FSC Mix and FSC Recycled) by 2026. For example, all wood for use in store fittings and decorations will be FSC-certified by 2026.

Chemicals: LVMH has also implemented many tools to improve and monitor the use of chemicals in products:

- in relation to the finished products and raw materials supplied to the Maisons, by maintaining its Product Restricted Substances List (PRSL), which details the chemical restrictions applicable to these products and materials (updated at least twice a year);
- in relation to supply chains, by monitoring the compliance of chemical formulations with the Manufacturer Restricted Substances List (MRSL) maintained by the multi-stakeholder organization ZDHC of which LVMH is a member.

Further information is provided in §5.3.

3.1.2 Protecting and restoring biodiversity

The Group is committed to regenerating the equivalent of 5 million hectares of flora and fauna habitat by 2030, either within its supply chains by rolling out regenerative agriculture programs for strategic agricultural commodities like grapes, cotton, wool and leather, or by contributing to collective efforts to regenerate and preserve ecosystems and protect particularly endangered plants and animals.

Regenerative agriculture

Regenerative agriculture is defined as agriculture that can regenerate soil health and ecosystem function (biodiversity/water cycle) while ensuring socioeconomic stability for stakeholders (farmers and communities) and yielding high-quality raw materials. LVMH has selected a number of raw materials for which the Group is keen to roll out regenerative agriculture practices. These include grapes for Wines and Spirits, cotton, wool and leather for Fashion and Leather Goods, and palm, beet and iconic ingredients for Perfumes and Cosmetics. In 2022, LVMH joined One Planet Business for Biodiversity (OP2B), a business coalition focused on scaling up regenerative agriculture and protecting high-value ecosystems.

Preserving and restoring ecosystems

As responsible corporate citizens keen to make a net positive contribution to biodiversity, LVMH and its Maisons are committed to funding projects that help preserve or restore ecosystems that fall outside their supply chains. In this context, LVMH and UNESCO have launched a program with 5 million euros of funding over five years to combat causes of deforestation in the Amazon. The program aims to attack the root causes of deforestation and water pollution in the Amazon basin by working with eight biosphere reserves in Bolivia (Pilón-Lajas and Beni), Ecuador (Yasuní, Sumaco and Podocarpus-El Cóndor), Brazil (Central Amazon) and Peru (Manu and Oxapampa-Asháninka-Yanesha).

3.2 Key achievements in 2022: Biodiversity

LVMH has been active for more than 10 years alongside many partners working to conserve biodiversity. The Group was the first private-sector entity to join the eight public research bodies on the Board of Directors of the French Foundation for Research on Biodiversity (FRB). In 2019, LVMH stepped up its involvement by signing a five-year partnership with UNESCO to support its intergovernmental scientific program, "Man and the Biosphere". This tool for international cooperation is aimed at protecting global biodiversity. For example, the Group's Maisons draw on UNESCO's scientific expertise and its network of 686 biosphere reserves to develop their sustainable sourcing policies. LVMH is actively involved in the Act4Nature International initiative. In June 2022, LVMH shared its biodiversity commitments at the Future Fabrics Expo in London. LVMH also took part in the Stockholm+50 international meeting and gave a presentation at the Transformers event organized by the United Nations Environment Programme (UNEP). In December 2022, LVMH attended COP15 in Montreal along with Guerlain, Moet Hennessy and Parfums Christian Dior, taking the floor to share its best practices at several parallel events, including the Nature and Culture Summit and the Business and Biodiversity Forum.

In November 2022, LVMH was named as an active member of the TNFD Forum of the Taskforce on Nature-related Financial Disclosures (TNFD), a grouping of over 900 partners, including a broad range of institutions. Its mission is to develop a specific risk management framework to be used by its members to better map positive and negative actions relating to nature to help guide their strategic planning and asset allocation decisions. As a member of the TNFD Forum, LVMH will be taking part in the development of standards, in particular the one for the "Consumer Goods" category, with a focus on textiles.

LVMH also partnered with the French magazine and online community *Usbek & Rica* to host the latter's most recent Tribunal for Future Generations event, held at France's National Museum of National History in May 2022, taking as its theme "Can we give back to the living world what we've taken from it?" Featuring expert witnesses and a jury of leading figures from the Group and advocacy groups, the aim was to raise awareness of the interdependency of the Group's businesses and nature, while debating ways to ensure that human activities can coexist with biodiversity.

3.2.1 Certification of strategic supply chains

In 2022, the level of certification increased significantly in some supply chains, for example sheep and cow leather (up from 81% in 2021 to 91% in 2022) and cotton (up from 61% in 2021 to 71% in 2022). As part of the LIFE 360 program, the Group has set certification targets for supply chains in which standards may have yet to stabilize. This is the case, for example, of the wool and cashmere supply chains. Against this backdrop, the Group's Maisons are working in partnership with their suppliers to ensure that wool and cashmere is purchased from farms certified as complying with animal welfare and environmental protection standards.

In the fur sector, the Group and its Maisons are actively involved in drawing up new certification standards under the FurMark program (which follows the ISEAL rules [1]).

As regards exotic leather, all hides purchased by the Heng Long tannery now come from farms certified as complying with the standard developed by LVMH in 2018 and reviewed in 2021 to take into account the latest research findings on the welfare of farm-reared crocodilians so as to align with the International Crocodilian Farmers Association (ICFA) standard.

Along with other luxury brands, LVMH is taking part in the Responsible French Calfskin initiative, which aims to pool and roll out verification audits on animal welfare across the entire production chain for French calfskin, in collaboration with stakeholders (breeders, integrators, slaughterhouses) in France.

In 2022, a shared audit protocol jointly created by all those having signed on to the initiative, along with veterinary experts and the Institut de l'Élevage (Idele), was validated and pilot audits were carried out by an external party at 50 farms.

This audit protocol is built on the widely adopted Five Freedoms outlining five aspects of animal welfare under human control – freedom from discomfort; freedom from hunger or thirst; freedom from pain, injury or disease; freedom from fear and distress; freedom to express normal behavior – and includes 63 items to be verified, relating in particular to the observation of calves.

The initiative aims to roll out its audit program nationally at 1,200 farms by 2025. Apart from assessing the animal welfare performance of farms, this approach will help identify measures to be put in place to improve performance in this area, by way of financial and technical assistance provided to breeders by the initiative.

(1) Source: "Chain of custody models and definitions", ISEAL Alliance, V 1.0, September 2016 (page 2).

Certification of strategic supply chains: LIFE 360 achievements in 2022

Indicators	Performance in 2022	Performance in 2021	Target for 2026
Wines and Spirits			
Grapes – Sustainable winegrowing certification *(% certified grapes by weight; figures include still wines and eaux-de-vie)*	LVMH vineyards: 94% French vineyards: 100% Rest of the world: 87% Independent grape suppliers: 20%	LVMH vineyards: 92% French vineyards: 100% Rest of the world: 86% Independent grape suppliers: 16%	LVMH vineyards: 100% Independent grape suppliers: 50%
Fashion and Leather Goods			
LWG certification of tanneries for bovine and ovine leather *(leather from certified tanneries by weight, as %)*	91%	81%	100%
LWG certification of tanneries for crocodilian skin leather *(crocodilian skin leather from certified tanneries by weight, as %)*	86%	70%	100%
Certified cotton *(% GOTS, Better Cotton, GRC, OCS and Supima certified cotton by weight)*	71%	61%	100%
Certified paper, cardboard and wood[(a)] *(% FSC- and PEFC-certified paper, cardboard and wood by weight)*	82%	77%	100%
Certified fur (mink and fox) *(% fur from farms certified as complying with one of the standards recognized by the FurMark program)*	98%	92%	100%
Certified sheep's wool (merino and other species) *(wool from farms certified RWS, ZQ, Authentico, New Merino, SustainaWOOL, Nativa or SFA, as %)*	29%	24%	100%
Certification for all crocodilian farms supplying the Group's tannery *(crocodilian skin from farms certified as complying with LVMH's crocodilian standard, as %)*	100%	100%	
Perfumes and Cosmetics			
Palm oil derivatives *(RSPO-certified Mass Balance or Segregated palm oil derivatives by weight, as %)*	94%	95%	100%
Watches and Jewelry			
Diamonds: RJC COP certification *(carats of diamonds from COP-certified direct suppliers, as %)*	99.5%	99.9%	100%
Gold: RJC COP certification	96%	98%	100%
RJC CoC certification *For Maisons without CoC certification, gold is included within the reported indicator if it is sourced from CoC-certified precious metal refiners, regardless of any intermediate subcontractors between the precious metal refiner and the Maison.* *Note: in 2022, the Maisons reported exclusively on their Watches and Jewelry business units.* *Not including Tiffany data.*	81%	93%	100%

(a) It should be noted that, since the reporting process is currently under development, data reported by the Maisons is subject to a high degree of uncertainty.

3.2.2 Regenerative agriculture and preserving ecosystems

LVMH developed practical guides on how to put regenerative agriculture into practice and surrounded itself with a network of experts such as Biosphères, Renature, Earthworm, Circular Bioeconomy Alliance, Pour une Agriculture du Vivant and Savory. The overall approach and individual projects are signed off by a Science Committee, which meets annually. Practice and performance indicators have been put in place for each raw material. In 2022, LVMH joined One Planet Business for Biodiversity (OP2B), a business coalition focused on scaling up regenerative agriculture and protecting high-value ecosystems.

The Maisons are continuing the roll out of projects in Turkey for cotton, in Uruguay and Australia for merino wool, in South Africa for mohair, in Indonesia for palm oil, and in France

for some iconic perfume ingredients. For example, Parfums Christian Dior has set itself a target of implementing regenerative agriculture practices for each of the essences in its Dior Gardens program: nine essences for skincare (such as Granville rose, longoza from Madagascar and red hibiscus from Koro) and four for perfumes (such as rose, jasmine and neroli from Grasse). The Maison is also partnering with the Hectar project, which runs a center for dedicated research into horticulture and regenerative practices. LVMH and its Maisons are working closely with a Turkish cotton producer to implement regenerative agriculture practices. Positive results have already been noted in 2022, with a significant increase in concentrations of soil carbon and nitrogen. LVMH has teamed up with the French startup Genesis to measure soil environmental quality. Projects have been launched by Fashion and Wine businesses. Lastly, all Moët Hennessy vineyards have also launched regenerative agriculture programs to expand the practice of cover cropping, for example. Having partnered with the non-profit organization Pour une Agriculture du Vivant, some wines Maisons are testing its regeneration indicator, designed to measure soil regeneration and biodiversity and guide the development of actions.

Outside these supply chains, LVMH and its Maisons are committed to financing projects that help preserve or restore ecosystems, such as the joint LVMH and UNESCO program to combat the causes of deforestation in the Amazon and Moët Hennessy's partnership with Reforest'Action to launch reforestation programs in Kenya, China, the United States and South Africa as well as on its own vineyards.

Now a partner of the Circular Bioeconomy Alliance, established in 2020 by His Majesty King Charles III when he was Prince of Wales, LVMH unveiled two new action plans in 2022:

- In the Amazon region, LVMH is working to strengthen efforts to combat deforestation in the Amazon basin and restore forest cover in the southern part of the Ecuadorian Amazon and the northern part of the Peruvian Amazon, while also supporting and reinforcing the development of a regenerative economy among the Amazon's indigenous communities. The main aims of the project, in collaboration with Reforest'Action, are to restore forest ecosystems, promote natural medicine, and ensure food security for populations.
- In Chad, LVMH is pursuing a project unveiled at COP27 taking up one of the major challenges facing Africa today, the fight against desertification. This large-scale agroforestry initiative in the Lake Chad region is being carried out as part of the Great Green Wall project. Under the initiative, farmers in the Lake Chad region receive assistance to implement new sustainable and regenerative cotton production methods that restore biodiversity and create economic opportunities for the local population.

In 2022, the joint Amazon Biospheres Reserves Project launched with UNESCO in 2019 made significant headway, with the introduction of about a dozen agroforestry training courses; the launch with local populations of economic activities that do not contribute to deforestation such as the production of essential oils; the creation of forest nurseries, especially in Bolivia, to accelerate reforestation; and the collection of field data across 11 categories and 48 indicators to improve scientific knowledge relating to the protection and regeneration of ecosystems.

A total of 1.37 million hectares was preserved or restored in 2022 (LIFE 360 target).

3.2.3 Protecting water resources

Water consumption is broken down into the following requirements:

- Process requirements: Use of water for cleaning purposes (tanks, products, equipment, floors), air conditioning, employees, product manufacturing, etc. Such water consumption generates wastewater.
- Agricultural requirements: Use of water for vineyard irrigation, for the most part outside France. Water is taken directly from the natural environment for irrigation purposes, with water use from year to year closely linked to changes in weather conditions. However, it should be noted that water consumption for agricultural requirements is assessed by sites with a higher level of uncertainty than water consumption for process requirements.

Water consumption changed as follows between 2021 and 2022:

(in m³)	2022	2021	2022 pro forma[a]	Change[a] *(as %)*
Process requirements	3,992,223	3,406,813	3,571,580	5
Agricultural requirements (vineyard irrigation)	7,158,488	5,131,434	7,158,488	39[b]

(a) Value and change at constant scope.
(b) Increase due to a drought year for the Group's Argentine vineyards as well as the transition to cover cropping, which raises water requirements.

Water consumption for process requirements broke down as follows by business group:

Process requirements *(in m³)*	**2022**	**2021**	**2022 pro forma[a]**	**Change[a]** *(as %)*
Wines and Spirits	1,286,010	1,314,226	1,286,360	(2)
Fashion and Leather Goods	1,956,057	1,494,457	1,565,028	5
Perfumes and Cosmetics	211,961	184,933	206,912	12
Watches and Jewelry	63,752	73,397	59,774	(19)
Selective Retailing	265,602	188,727	244,664	30
Other activities	208,842	151,073	208,842	38
Total	**3,992,223**	**3,406,813**	**3,571,580**	**5**

(a) Value and change at constant scope.

LVMH calculated its environmental footprint for its entire value chain, including Scope 1, 2 and 3 emissions, covering issues relating to climate change, biodiversity and water use. As part of this exercise, an in-depth analysis of sensitivity to local constraints was carried out at each of the Group's Maisons using the AWARE method. This analysis was based on measurements of each geographic area's sensitivity, obtained by comparing water consumption to available resources at the local level. Water consumption related to the Group's Scope 3 activities was measured at 126 million cubic meters of water, more than 95% of which was used for the production of raw materials, mainly luxury wool fibers (47%), cotton (17%), and grapes, wines and spirits (15%). In 2022, LVMH launched the update of its water footprint and tested the first phases of the SBT for Nature guidance for water issues. LVMH plans to set new targets and draw up a program of related actions, which will be announced in the summer of 2023.

Four vineyards whose water consumption is significant relative to the Group as a whole are located in areas where water stress is close to 100%, meaning that water requirements in these areas are close to the level of available resources:

- the Domaine Chandon Argentina vineyards (Agrelo and Terrazas), which represent 79% of the Group's agricultural water requirements;
- the Domaine Chandon California and Newton vineyards, which represent 8% of the Group's agricultural water requirements.

Vineyard irrigation requires authorization and is regulated in California and Argentina due to the climate. Such irrigation is necessary for winegrowing. Nevertheless, the Group has taken the following measures to limit water consumption: harvesting rainwater; implementing protocols to measure and specify water requirements; standardizing drip irrigation practices in California; using weather forecasts to optimize irrigation; and adopting the "regulated deficit irrigation" technique, which reduces water consumption and improves grape quality and grapevine size, yielding an enhanced concentration of aroma and color.

Preventing pollution

The only significant, relevant indicator related to preventing water pollution is the release of substances into water by Wines and Spirits, Fashion and Leather Goods, and Perfumes and Cosmetics operations contributing to eutrophication. The Group's other activities have only a very limited impact on water quality. Eutrophication is the excessive buildup of algae and aquatic plants caused by excess nutrients in the water (particularly phosphorus), which reduces water oxygenation and adversely affects the environment. The parameter used is the Chemical Oxygen Demand (COD) calculated after treatment of effluents from the Group's own plants or external plants with which the Group has agreements. The following operations are considered treatment: city and county wastewater collection and treatment, independent collection and treatment (aeration basin), and land application.

COD after treatment changed as follows between 2021 and 2022:

COD after treatment *(metric tons/year)*	**2022**	**2021**	**2022 pro forma[a]**	**Change[a]** *(as %)*
Wines and Spirits	1,768	1,354	1,768	31
Fashion and Leather Goods	30	19	30	58
Perfumes and Cosmetics	23	21	23	10
Total	**1,821**	**1,394**	**1,821**	**31[b]**

(a) Value and change at constant scope.
(b) Change related to the upturn in business and exceptional cleaning operations at a distillery.

Measurement frequencies at the highest-contributing Maisons are compliant with local regulations but remain limited with regard to the changes observed in quantities discharged.

LVMH also joined the ZDHC (Zero Discharge of Hazardous Chemicals) trade association, which aims to promote best practices concerning the use of dangerous substances and the quality of discharged wastewater at textile and leather manufacturing sites. LVMH has drawn up a detailed roadmap that encompasses LVMH's production sites as well as key suppliers of Maisons in the Fashion and Leather Goods business group. The following targets are in place for 2023:

- rollout of ZDHC's Supplier to Zero program, designed to ensure awareness and implementation of sustainable chemical management by suppliers, through certification at the program's Foundational Level, with a minimum coverage rate of 50% by volume of leather and textiles purchased by the Group's Maisons;
- verification of compliance of chemical formulations with ZDHC MRSL, with a recommended compliance rate of 50%;
- control on wastewater quality at targeted sites operated by the Group's suppliers, with at least one ZDHC ClearStream report per year. The aim is to cover at least 20% by volume of leather and textiles purchased by the Group's Maisons.

In 2022, the Riba Guixa and Masoni tanneries thus reached the program's Foundational Level and verified the compliance of their chemical formulations. At the same time, the Maisons have begun the rollout of measures with targeted suppliers using wet processes. The results are detailed in the table below:

Rollout of the ZDHC program	Performance in 2022	Target for 2023
Fashion and Leather Goods *(as % of quantities purchased in 2022)*		
Participation by leather suppliers	83%	
Participation by textile suppliers	41%	
Quantity of leather from suppliers having received a Foundational Level certificate	19%	50%
Quantity of textiles from suppliers having received a Foundational Level certificate	18%	50%
Quantity of leather from suppliers having generated a ClearStream report	20%	20%
Quantity of textiles from suppliers having generated a ClearStream report	18%	20%

Volatile Organic Compound (VOC) emissions are addressed through specific action plans, notably for Perfumes and Cosmetics operations and the tanneries.

4. LIFE 360 – TRACEABILITY AND TRANSPARENCY

4.1 Overview of the Traceability and Transparency policy

Tracing a material – be it gold, cotton or leather – from source through to finished product is no simple matter. However, it is a vital step in ensuring the adoption of responsible practices. If the Group is to reduce its carbon impact, introduce ecosystem-friendly farming practices and ensure that its suppliers use responsible practices, it must first have end-to-end knowledge of the value chains of all materials that go into the exceptional products made by the artisans and manufacturers it works with. Traceability is thus a prerequisite for identifying issues, implementing responsible practices and transparently sharing those practices with stakeholders. This is known by LVMH as the Chain of Custody system, defined by ISEAL [1] as "the complete set of documents and mechanisms used to verify the traceability between the verified unit of production and the claim about the final product".

Building on the formal certification policy put in place for its supply chains as early as 2016, LVMH has set itself new targets to perfect product traceability and boost its progress in relation to customer transparency:

- all strategic supply chains to be covered by a dedicated traceability system by 2030;
- all new products to come with a dedicated customer information system by 2026.

(1) Source: "Chain of custody models and definitions", ISEAL Alliance, V 1.0, September 2016 (page 2).

4.1.1 Traceability

What action is required to ensure traceability across the entire value chain depends on the characteristics of the supply chain in question: whether or not it is integrated (one of the Group's distinctive features is that it owns a large number of manufacturing businesses, enabling it to ensure traceability and responsible practices through direct control); how structurally mature it is; and whether the materials produced are compound.

Traceability is a key concern for the following strategic raw materials:

- grapes, rye and barley;
- leathers, raw lamb and calf skins, exotic leathers and furs;
- cotton;
- wool;
- down and feathers;
- viscose;
- silk;
- wood, paper and cardboard;
- gems and precious metals;
- palm oil and its derivatives;
- soya and its derivatives for cosmetic use;
- alcohol;
- iconic ingredients used by Maisons in the Perfumes and Cosmetics business group.

To ensure that all strategic supply chains are covered by a dedicated traceability system enabling full traceability from raw material to finished product by 2030, three sub-goals have been put in place:

- **2023:** country of origin to be known for all strategic supply chains;
- **2026:** all strategic supply chains to have a dedicated traceability system;
- **2030:** all strategic supply chains to be fully traceable from raw material to finished product with the help of the dedicated traceability system.

To achieve these targets, LVMH is implementing an ambitious certification process for its strategic supply chains based on the most stringent standards, as set out in §3.1.1. These standards are mainly based on Chain of Custody models and strengthen the upstream traceability process for the most complex supply chains.

In 2021, the Environmental Development and Purchasing departments launched a joint Upstream Traceability Working Group with members drawn from over 25 Maisons. This working group's goals are as follows:

- to raise awareness of upstream traceability issues for supply chains and work together to build solutions to them;
- to initiate and/or accelerate upstream traceability projects within each Maison;
- to manage cross-functional requirements and standardize upstream traceability practices across the industry for selected materials.

In 2022, efforts to raise awareness of traceability requirements and methods continued. A comprehensive review of existing standards, given the goal to strengthen upstream traceability, was carried out for gold suppliers in particular. Work to identify the best traceability tools was completed. Some of them were tested specifically for the most complex supply chains, such as those for leather and cotton, and are now entering their operational phase.

4.1.2 Transparency

Sharing information about products' environmental performance with customers has become a key requirement for the Group, which has set a target of ensuring that each product comes with a dedicated information system by 2030. With this in mind, LVMH is involved in ongoing discussions on environmental labelling at both the French and European levels, notably in respect of fashion products where quality and lifespan are of critical importance. Over the next three years, each business group will be equipped with the tools it needs to produce environmental indicators to be shared with customers. All the associated targets are set out in §1.2.2.

4.2 Key achievements in 2022: Traceability and Transparency

4.2.1 Adoption of new traceability tools

The Group continued the rollout of a system for mapping its strategic supply chains. The objectives of this system are to monitor flows of materials along value chains, to collect information directly from the parties involved in supply chains and to identify and mitigate environmental and social risks as well as risks to ethics and animal welfare. In taking this approach, the Group aims to optimize synergies and streamline information management for Maisons and their suppliers. In 2021, the Group and its Maisons chose a specific solution and a pilot project was coordinated in 2022. Involving 12 Maisons and nearly 450 suppliers, the pilot project allows participants to test the solution's various features in multiple scenarios. The Group aims to extend the use of the tool in 2023 to cover several strategic materials.

In 2021, LVMH, together with Prada Group and Cartier, announced the launch of the Aura Blockchain Consortium: a unique, global blockchain solution, open to all luxury brands worldwide to address shared challenges in responsible sourcing. For example, Hublot has introduced a system to create e-warranties registered on the Aura network, which can be used by customers to recognize their watch and certify its authenticity by simply taking a photo of it with their smartphone. Among its highlights in 2022, the consortium announced a partnership with Sarine, a diamond authentication specialist, to provide full supply chain traceability for diamonds, thus encouraging the adoption of responsible practices. This partnership offers yet another opportunity for the Maisons to strengthen the traceability of their products. In 2022, Louis Vuitton took advantage of this partnership to launch the LV Diamonds certificate, a unique and secure digital certificate that lists the main characteristics of the central diamond set in a piece of jewelry and tracks its journey from its extraction to the final purchase.

In 2021, Tiffany & Co. introduced full traceability for all rough diamonds used in its pieces all the way back to the mine of origin. They come mainly from Botswana, Canada, Namibia and South Africa. All of the gold, silver and platinum used is also traceable to the mine or the recycler. In addition, the Maison purchased its first Fairmined-certified gold from mines in Peru. Lastly, for colored gemstones, Tiffany & Co. published the Colored Gemstone and Pearl Source Warranty Protocol in 2021 to serve as a practical, operational tool shared with suppliers to help them improve traceability as well as their social and environmental practices. The Maison operates five polishing workshops around the world, where nearly 1,500 artisans ensure the excellence of its jewelry creations. Having embedded traceability in its operating procedures thanks to its vertically integrated business model, Tiffany & Co now provides information on every link in its supply chain for newly sourced diamonds. With its Diamond Craft Journey initiative, launched in 2020, thus one year ahead of schedule, the Maison became the first global luxury jeweler to disclose the countries where all recently sourced and individually registered diamonds are crafted.

In 2022, Fendi was still one of the highest-ranking companies in the Fashion Transparency Index, with a score of 53/100. This index evaluates performance with regard to transparency, environmental and societal policies together with impacts in their own operations and in their supply chains. Fendi has adopted ambitious goals in these areas and reports on its progress via its website.

In keeping with the Animal Materials Supply Charter published in 2019, the Group's Maisons are working to ensure that their raw materials are traceable; in 2022, the source of materials of animal origin was known for 89% of exotic leathers, 89% of furs and 64% of wools.

Summary of LIFE 360 "Traceability and Transparency" targets for 2022:

Traceability indicators	Performance in 2022	Performance in 2021	Target for 2023
Fashion and Leather Goods *(as % of quantities purchased in 2022)*			
Sheep and cow leather – country of origin known	86%	76%	100%
Exotic leather – country of slaughter known	89%	90%	100%
Fur – country of rearing or trapping known	89%	87%	100%
Wools (merino sheep and other breeds, and cashmere) – country of rearing known	64%	62%	100%

4.2.2 New information systems

The Group and its Maisons have begun rolling out systems that measure the environmental impact of products as well as monitoring the sustainability of their design (see Section 2.1.1). For several years, LVMH has taken part in French and European methodological work on environmental labelling. Two Maisons, Louis Vuitton and Patou, took part in official testing of the European apparel standard currently under development. In 2022, LVMH also responded, in collaboration with the Fédération de la Haute Couture et de la Mode, to the call for methodology proposals issued by the French government. LVMH and its fashion Maisons began the rollout of a tool to meet the requirements of France's new anti-waste law for a circular economy, known as the AGEC law, and specifically its Article 13 relating to the sharing of environmental and traceability information at the time of purchase.

LVMH is also one of the founding members of the Eco-Beauty Score Consortium, which aims to develop a shared methodology for measuring and communicating the environmental footprint of cosmetic products. The development of this methodology continued in 2022.

In 2022, 9,500 products sold by the Group's Maisons already had an information system.

5. LIFE 360 – CLIMATE

Combating climate change is a major focus of LVMH's environmental policy. The Group has often played a pioneering role in this area. In the early 2000s, for example, it took part in testing the carbon assessment method that would later become the Bilan Carbone®. In 2015 it was also the first luxury company to set up an internal carbon fund.

5.1 Overview of the Climate policy

Based on its overall carbon footprint updated annually by an outside firm, LVMH mapped out a carbon trajectory in line with the Paris Agreement. This carbon trajectory was approved in December 2021 by leading international third-party organization the Science Based Targets initiative (SBTi), a coalition that brings together the Carbon Disclosure Project (CDP), the United Nations Global Compact (UNGC), the World Resources Institute (WRI) and the World Wildlife Fund (WWF). In July 2022, LVMH pledged to submit its net-zero pathway for approval by the SBTi within the next 24 months and to set a target in relation to two new frameworks, the SBTi's FLAG Guidance and the GHG Protocol's Land Sector and Removals Guidance.

Over and above the Group's overall commitment, in 2021 four of its Maisons – Louis Vuitton, Moët Hennessy, Parfums Christian Dior and Guerlain – secured approval from the SBTi for their carbon trajectories across their own scopes, confirming their goals built into each Maison's strategy: "Our Committed Journey" for Louis Vuitton, "Living Soils" for Moët Hennessy, "Beauty as a Legacy" for Parfums Christian Dior and "In the Name of Beauty" for Guerlain. For its part, Tiffany & Co. has pledged to reach net zero by 2050, in particular by procuring 100% of electricity for its own operational requirements from renewable sources and removing commodity-driven deforestation from all its supply chains.

The Group's current targets are to:

- reducing energy-related greenhouse gas (GHG) emissions at its sites and stores by 50% in absolute terms by 2026 (baseline: 2019) thanks to a policy of 100% renewable and low-carbon energy;
- reducing or avoiding 55% of Scope 3 GHG emissions (raw materials, purchases, transportation, waste, product usage and end-of-life treatment) per unit of added value by 2030 (baseline: 2019).

5.1.1 Key levers for reducing Scope 1 and 2 emissions

The Group's actions to mitigate the impact of its activities on energy consumption are concentrated in two key areas:

- the improvement in the environmental profile of stores, which represent the main source of the Group's energy consumption;
- greater use of renewable energies at production and logistics sites, administrative sites and stores.

To halve GHG emissions from stores (CO_2 emitted by energy generation and refrigerant gases used in air conditioning systems), the Group has set tangible and ambitious targets for the first two milestones in 2023 and 2026:

- **2023:** all sites and stores to have the ability to report their energy consumption (bills or meters);
- **2026:** all stores to be equipped with LED lighting, with stores over seven years old undergoing partial renovation of their lighting systems.

Alongside actions to reduce its fossil fuel consumption, LVMH is rapidly expanding its use of renewable energy with a target of exclusive use of renewable or low-carbon energy by 2026. Framework agreements signed with energy suppliers in different regions have been one of the main drivers of the Group's progress in the area of electricity and gas since 2015.

In addition, the Group sets an electricity consumption threshold for its stores. In 2020, the relevant threshold was 700 kWh per square meter. Set at 600 kWh per square meter in 2021 and 2022, this will fall to 500 kWh in 2023, 400 kWh in 2026 and 300 kWh in 2030. The Better Stores program helps to identify the causes of excess consumption by way of a precise analysis of electricity consumption data, particularly at night and over the weekend. The installation of smart electricity meters, with access to data at a much more granular level, resulted in energy savings of 25% on average.

5.1.2 Key levers for reducing Scope 3 emissions

The Group's actions to reduce Scope 3 emissions are concentrated in three key areas:

- a lower carbon footprint for raw materials, products and packaging: dedicated policies on sustainable product design and packaging (see §2.1.1) and the sourcing of certified raw materials (see §3.1.1) are being implemented by each business group, with the involvement of suppliers, such as independent grape suppliers, livestock farmers and growers;
- sustainable transport, using several different methods: an emphasis on local sourcing, use of trains and boats where possible, supply chain optimization, biofuel use for air freight and electric vehicles for last-mile deliveries.

- a lower carbon footprint for computer use: based on the success of initiatives already launched by the main Maisons, LVMH has created a Green IT working group to draw on existing approaches to propose a shared approach in order to accelerate progress towards LIFE 360 targets for energy consumption, sustainable design and product life spans.

LVMH is also continuing with its work in the following areas: the adoption of a green e-commerce approach; collaboration with the livestock industry to establish a position on methane, which has significant warming potential; and the implementation of a responsible advertising policy.

5.1.3 Key levers for adapting to climate change

The Group is also conducting a review of the various issues involved in adapting to climate change. Winegrowing activities are notably included in the review. In the medium term, changing winegrowing practices is the main component of the Group's adaptation strategy.

Several solutions are available for European vineyards depending on the climate scenario, from altering harvest dates to developing different methods of vineyard management (such as widening rows, increasing the size of grapevine stocks and employing irrigation in certain countries) and testing new grape varieties. For vineyards in Argentina and California, the main issue is the availability of water (see §3.2.3).

More broadly, innovation – a key component of the Group's mitigation policy – also plays a part in LVMH's adaptation policy: new regenerative farming practices (see §3.1.2), the switch to new materials derived from biotechnologies and the use of biomimetics provide opportunities for reducing greenhouse gas emissions while simultaneously diversifying procurement sources and reducing the Group's exposure to climate change. The program to jointly develop clean technologies with Bertrand Piccard's Solar Impulse Foundation, the Matières à Penser (Food for Thought) materials library, and the Maison/0 partnership with Central Saint Martins dedicated to innovation and sustainable creativity will help drive new solutions at the Group's Maisons.

These ambitious reduction and adaptation objectives have raised questions as to the relevance of certain solutions, notably carbon offsetting. To maximize leverage in reducing emissions, LVMH had previously refrained from making use of large-scale carbon offsetting (i.e. buying carbon credits linked to projects to avoid or sequester emissions to offset those emissions still produced by the Group). However, the goal of achieving global net-zero emissions by 2050 raises the question of the role of carbon credits, which the SBTi Net Zero standard proposes should be used once reduction targets have been met. Against this backdrop, the Maisons are trialing various types of offsetting.

5.2 Key achievements in 2022: Climate

In 2022, to strengthen its approach to climate impacts in the management of the Group's various operations (production, investments), LVMH updated its analysis of physical and transition risks relating to climate change by applying the scenario analysis method and studying the related financial consequences.

At a time when combating climate change is of vital importance, and corporate citizens must play a decisive role in this fight, LVMH participated in COP27 to present its actions and engage in dialogue with stakeholders:

- the Group took part in a round table at the French Pavilion, in association with OP2B and Genesis, on the theme "For a regenerative agriculture with positive outcomes for farmers, nature and the climate";
- At this event, Moet Hennessy spoke about the work of the Coalition of Action 4 Soil Health (CA4SH), whose main objective is to improve soil health globally. Moët Hennessy, which has made soil protection and regeneration a cornerstone of its sustainable development approach, held the inaugural edition of its World Living Soils Forum in June 2022;
- LVMH, the Circular Bioeconomy Alliance (CBA) and the International Rescue Committee (IRC) announced a large-scale agroforestry project in the Lake Chad region (see §3.2.2).

As part of its policy to reduce energy consumption and particularly in its stores, LVMH announced the launch of a pioneering partnership with Hang Lung Properties, a leading owner of shopping malls, aimed at implementing joint actions to promote energy conservation and exchange sustainability data, while pursuing projects together in areas such as the protection of biodiversity and improvements in waste treatment. This announcement was followed by the partnership's inaugural Real Estate and Climate Forum, held in Hong Kong, Shanghai and Paris. The aim was to bring together 96 changemakers from the two groups, along with external experts, to discuss solutions at 12 workshops on 12 sustainability topics selected by both LVMH and Heng Lung. At this two-day event, and after completing a training session online, the participants were able to develop 36 concrete ideas in three categories: "Ideas for impact", "Ideas for collaboration", and "Ideas for innovation".

In addition to a program to jointly develop clean technologies with the Solar Impulse Foundation, in 2022 LVMH's Carbon Fund invested 9 million euros in 95 innovation projects that would together avoid more than 81,000 metric tons of CO_2 equivalent. Lastly, to bring creativity and innovation to the fore in the development of climate change adaptation strategies, the Sustainable Store Planning team proposed partnerships with two design schools, Central Saint Martins in London and Strate in Lyon and Paris, to the Maisons. Workshops attended by representatives of various Maisons resulted in the development of many ideas, including a proposal for a store using only 5 watts per square meter and ways to keep stores cool without air conditioning. These two projects were presented at the LIFE in Stores Awards.

5.2.1 Energy consumption

Improving energy efficiency and expanding the use of renewable energy are the main thrusts of LVMH's strategy to limit its carbon footprint, an approach that also entails better energy management, which is vital to help reduce overall energy consumption. Measures to reduce these emissions have been in place for a number of years at Maisons' production sites. Responding to the French government's call to action, LVMH announced the adoption of its energy conservation plan in September 2022, in order to contribute rapidly and in a concrete manner to the national effort. The plan includes three key measures aimed at reducing energy consumption by 10% between October 2022 and October 2023, first in France, then in Europe and finally around the world:

- turning off lights in all stores operated by the Group's Maisons between 10 p.m. and 7 a.m. and those at administrative sites at 9 p.m.;
- changing thermostat temperatures for all industrial sites, administrative sites and stores, lowered by 1°C in the winter and raised by 1°C in the summer;
- adopting new energy efficiency measures such as reducing screen brightness and deleting unused documents.

This energy conservation plan, which came into effect on October 1, 2022, had an immediate impact at a certain number of Maisons. Among these, Sephora managed to reduce energy consumption at its stores and offices in France by 19.6% between October and December 2022, thanks to a specific plan mobilizing the efforts of teams working in more than 300 French stores. Owing to this achievement, Sephora was the winner of the Energy Conservation prize at the LIFE in Stores Awards (a new category introduced in 2022).

In 2022, total energy consumption amounted to 1,346,593 MWh in for the Group's subsidiaries included in the reporting scope. This corresponds to primary energy sources (such as fuel oil, butane, propane and natural gas) added to secondary energy sources (such as electricity, steam and ice water) mainly used for the implementation of manufacturing processes in addition to buildings and stores' air conditioning and heating systems. Power consumption by stores not covered by reporting (27% of the total sales floor area) estimated based on consolidated figures stands at 184,586 MWh. To optimize how stores' energy consumption is managed, the Maisons install the most advanced lighting systems offered by the LVMH Lighting program and follow the LVMH Store Guidelines: 77% of the sales floor area is already covered by full LED lighting, based on the scope of stores that report this data.

Alongside action to reduce consumption and boost energy efficiency, LVMH is increasing the proportion of renewable energy in its energy mix.

Consumption of renewables rose from 1% to more than 47% of the Group's total energy mix between 2013 and 2022. Framework agreements signed with energy suppliers have been one of the main drivers of the Group's progress in this area. The first of these dates back to 2015 and supplies green electricity to more than 90% of LVMH's sites in France, belonging to 23 of its Maisons. A similar agreement was signed in 2016 for the supply of electricity to a number of the Group's Italian Maisons, while some sites in Spain and Portugal now use renewable energy. Many sites have also installed solar panels or geothermal systems. As of 2019, all of Sephora's sites in the United States are powered by green electricity. The other driver is the use of biogas, which is either produced from production waste (Glenmorangie since 2017) or purchased (biomethane with a regional guarantee of origin sourced by Hennessy in 2020 and Guerlain in 2021). LVMH has chosen SAVE Energies, France's second-largest buyer of biomethane, to supply all its French production facilities and sites with biomethane for three years starting in 2023. Biomethane, which is produced from organic waste, generates 81% fewer greenhouse gas emissions than conventional gas. To maximize local benefits, methanation units will be located as close to Maisons' sites as possible.

In 2022, Hennessy used biogas exclusively as fuel at all of its administrative and industrial sites. For its part, Belvedere now generates enough renewable energy to cover 95% of its needs thanks to its biomass capture facility and the solar panels installed at its distillery.

Energy consumption by business group changed as follows between 2021 and 2022:

(in MWh)	2022	2022 Estimated store scope[b]	2021	2022 pro forma[a]	Change[a] [c] *(as %)*
Wines and Spirits	245,961	-	233,665	246,699	5
Fashion and Leather Goods	409,896	85,000	398,686	405,767	2
Perfumes and Cosmetics	99,760	4,232	99,267	96,504	(3)
Watches and Jewelry	102,060	34,498	46,869	44,162	(6)
Selective Retailing	338,092	60,478	308,582	317,150	3
Other activities	150,824	378	111,075	117,231	6
Total	**1,346,593**	**184,586**	**1,198,144**	**1,227,513**	**2**

(a) Value and change at constant scope.
(b) Estimated power consumption by stores not covered by reporting (27% of total sales floor area).
(c) Excludes estimated store power consumption.

Energy consumption by business group and by energy source was as follows in 2022:

(in MWh)	Electricity	Natural gas, butane and propane	Fuel oil and heavy fuel oil	Steam	Ice water	Renewable energies	% renewable energies[a]
Wines and Spirits	10,871	60,885	34,622	-	-	139,583	57
Fashion and Leather Goods	152,248	105,322	11,399	2,804	3,391	134,732	33
Perfumes and Cosmetics	10,879	28,193	2,731	429	-	57,528	58
Watches and Jewelry	6,065	5,040	381	1,334	333	88,907	87
Selective Retailing	151,433	15,778	1,053	5,761	7,310	156,757	46
Other activities	49,780	32,342	10,816	4,329	3,761	49,796	33
Total	**381,276**	**247,560**	**61,002**	**14,657**	**14,795**	**627,303**	**47**

(a) Not including estimated data for stores not covered by reporting.

5.2.2 Greenhouse gas emissions

5.2.2.1 Direct emissions (Scope 1) and indirect emissions (Scope 2)

Scope 1 emissions are those generated mainly through the combustion of fuel oil and natural gas. Scope 2 emissions are those generated indirectly from energy use, mainly electricity used in stores and at the Group's production sites. In 2022, the emissions factors were updated on the basis of the most recent databases (IEA, Ecoinvent, etc.).

Energy-related CO_2 emissions by business group changed as follows between 2021 and 2022:

(in metric tons of CO_2 equivalent)	CO_2 emissions in 2022[e]	*Of which:*		CO_2 emissions in 2022 estimated store scope[c]	CO_2 emissions in 2021	CO_2 emissions in 2022 pro forma[a]	Change[a] [b] [d] *(as %)*
		Direct CO_2 emissions	*Indirect CO_2 emissions*				
Wines and Spirits	25,939	*21,743*	*4,196*	-	34,470	26,111	(24)
Fashion and Leather Goods	97,875	*24,731*	*73,145*	33,154	107,301	93,677	(13)
Perfumes and Cosmetics	12,696	*6,475*	*6,221*	2,449	14,285	11,140	(22)
Watches and Jewelry	7,779	*1,137*	*6,642*	13,461	8,965	7,071	(21)
Selective Retailing	85,134	*3,504*	*81,630*	22,835	96,315	81,650	(15)
Other activities	28,020	*9,803*	*18,217*	75	28,842	27,989	(3)
Total	**257,444**	***67,393***	***190,051***	**71,973**	**290,177**	**247,638**	**(15)**

(a) Value and change at constant scope.
(b) Update of emissions factors.
(c) CO_2 emissions by stores not covered by reporting (27% of total sales floor area).
(d) Excludes estimated store power consumption.
(e) This figure does not include estimated emissions generated by stores in 2021.

5.2.2.2 Scope 3 emissions

In 2022, LVMH enlisted the services of an external firm to assess the carbon footprint of its entire value chain based on 2021 data. The 2019 baseline was revised to take into account additional emissions, in particular relating to fixed assets; this revision was approved by SBTi. The total carbon footprint thus stood at 6.1 million metric tons of CO_2 equivalent (tCO_2e), including 5.7 million metric tons from Scope 3 emissions, broken down as follows:

- more than 50% of Scope 3 emissions are generated by the sourcing of raw materials (products and packaging). The main sources of greenhouse gas emissions are the production of luxury wool fibers (599,100 tCO_2e); leather (357,000 tCO_2e); grapes, wines and spirits (94,960 tCO_2e, which includes vineyards belonging to the Group's Maisons as well as independent grape suppliers); glass for packaging (97,800 tCO_2e); and cotton (187,000 tCO_2e);
- inbound and outbound transport of components and finished products is the second-largest area, generating 14% of Scope 3 emissions;
- employees' commutes were assessed using average figures by geographic region and accounted for 3% of Scope 3 emissions.

Greenhouse gas emissions generated by inbound transport (transport of raw materials and components toward production sites; only the main components and raw materials are taken into account) broke down as follows in 2022:

(in metric tons of CO_2 equivalent)	Road	Air	Ship	Rail	Liquid natural gas	Total
Wines and Spirits	28,114	258	720	8	67	29,167
Fashion and Leather Goods	10,586	6,615	490	-	18	17,709
Perfumes and Cosmetics	1,322	43,558	424	-	29	45,333
Watches and Jewelry	188	1,752	-	-	-	1,940
Selective Retailing	-	-	-	-	-	-
Other activities	5	16	-	-	-	21
Total	**40,215**	**52,199**	**1,634**	**8**	**114**	**94,170**

Greenhouse gas emissions generated by outbound transport (transport of finished products from production sites to distribution centers) broke down as follows in 2022:

(in metric tons of CO_2 equivalent)	Road	Rail	Air	Ship	Inland barge	Electric vehicle	Liquid natural gas	Total
Wines and Spirits	28,120	573	6,488	21,209	-	3	340	56,733
Fashion and Leather Goods	6,088	12	202,566	2,091	-	6	1,121	211,884
Perfumes and Cosmetics	3,382	-	177,103	1,512	-	-	143	182,140
Watches and Jewelry	516	-	23,122	139	-	-	-	23,777
Selective Retailing	4,524	-	2,601	77	-	42	9	7,253
Other activities	185	-	-	-	-	-	-	185
Total	**42,815**	**585**	**411,880**	**25,028**	**-**	**51**	**1,613**	**481,972**

The following Maisons did not report any data for transport-related indicators: Rimowa, DFS, Royal Van Lent, Pucci, Thélios and Château Cheval Blanc. Furthermore, the reporting process in respect of inbound transport is still under development at some Maisons, with the result that inbound transport indicators are subject to a high degree of uncertainty.

Louis Vuitton is working to reduce its dependence on air freight and contributed to the aviation sector's transition, by increasing the use of sustainable aviation fuel (SAF) and by supporting its development. This biofuel is made exclusively from used cooking oil, with the potential to reduce CO_2 emissions by 80% compared with fossil kerosene. In 2022, Louis Vuitton was one of the leading contributors to SAF development worldwide, due to its strong advocacy in this area. The Maison's CO_2 emissions due to air freight have been reduced by 20%.

5.2.3 Results for LIFE 360 "Climate" targets

The three LIFE 2020 climate targets were already met in 2019: the increase in the proportion of renewable energy in the energy mix and the improvement in store energy efficiency together had enabled a 25% reduction in emissions compared with 2013.

With LIFE 360, the target reduction in energy-related greenhouse gas emissions (Scopes 1 and 2) is measured relative to a new baseline year (2019). The baseline value will be recalculated at each significant change in scope to better reflect changes, in accordance with the GHG Protocol.

Between 2019 and 2022, Scope 1 and 2 emissions declined by 11% and the proportion of renewable energies rose from 39% to 47%. The reduction in greenhouse gas emissions was mainly the result of the higher proportion of renewable energy used and energy efficiency improvements by stores.

Energy efficiency at the Group's stores has been steadily improving since 2013 thanks to a specific lighting policy, audits of the least energy-efficient stores and a sustainable design policy (see Section 5.1.1). To drive continued strong performance, the LIFE 360 program has endeavored to set more ambitious targets such as full LED lighting across all of the Group's retail floor space.

Summary of LIFE 360 "Climate" targets for 2022

Indicators	Performance in 2022	Performance in 2021	Target for 2026
Energy-related CO_2 emissions (Scopes 1 and 2, baseline: 2019)	-11.3%(a)	-6%	-50%
Proportion of renewable energy in the Group's energy mix	47%	39%	100%
Proportion of stores lit entirely by LED lighting	77%(b)	57%	100%

(a) In accordance with the GHG protocol, performance between 2019 and 2022 is based on a recalculated 2019 scope that takes into account changes since 2022: inclusion of emissions from Maisons that joined the LVMH reporting scope; inclusion of emissions related to new sites opened since 2019; exclusion of emissions from sites present in 2019 but absent in 2022; inclusion of changes since 2019 in retail floor space, to which average 2019 emissions per square meter are applied. For entities for which 2019 data is not available, emissions for 2020, 2021 or 2022 are used instead, constituting a relatively conservative approach.
(b) Based on the scope of data available, which covers around 47% of all data.

5.3 Supporting the principles of the Task Force on Climate-Related Financial Disclosures (TCFD)

In June 2017, the Financial Stability Board, established by the G20, published recommendations issued by the Task Force on Climate-Related Financial Disclosures (TCFD) aimed at providing a clear, comparable and consistent framework for the assessment and disclosure of climate-related information while enabling companies to disclose more information to stakeholders. Understanding that inadequate information can lead to assets and capital allocation being incorrectly assessed, financial decision-makers are increasingly asking companies to (i) manage their exposure to climate-related risks and (ii) reduce their contribution to climate change.

In 2019, as part of its previous LIFE 2020 program, LVMH commissioned a survey to establish how closely the Group's practices were aligned with the TCFD recommendations. This survey highlighted both the robustness of the targets that had been set and how much progress remained to be made on incorporating climate-related issues into governance, corporate strategy and risk management. These conclusions were taken into account when the LIFE 360 action plan was drawn up.

At the end of 2020, LVMH committed to support the TCFD principles and embarked on a process of continuous improvement to implement its recommendations. In 2022, LVMH updated its analysis of physical and transition risks relating to climate change by applying the scenario analysis method and studying the related financial consequences. The disclosures resulting from this update are provided in this report, in the public response to the CDP Climate Change 2022 Questionnaire, for which LVMH earned an A score (https://www.cdp.net/en/responses), and in the Group's most recent social and environmental responsibility report, available on LVMH's website.

A breakdown of the corresponding information is set out in the following table:

Category	TCFD recommended disclosures	References in URD, response to CDP 2022 questionnaire and most recent CSR report
Governance Describe the organization's governance around climate-related risks and opportunities	a) Describe the board's oversight of climate-related risks and opportunities	– URD: Organization of the Group's environmental approach, p. 76; Ethics & Sustainable Development Committee, p. 194 – CDP: C1.1b (Details on the board's oversight of climate-related issues) – CSR report: Governance of social and environmental responsibility, p. 75 and p. 111
	b) Describe management's role in assessing and managing climate-related risks and opportunities	– CDP: C.1.2a (Describe where in the organizational structure… and/or committees lie, what… responsibilities are, and how climate-related issues are monitored)
Strategy Describe the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is pertinent	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	– URD: Risk analysis matrix, p. 140; Strategic, operational and financial risks, p. 140 – CDP: C2.3a (details of risks identified with the potential to have a substantive financial or strategic impact on your business) and C2.4a (details of opportunities identified with the potential to have a substantive financial or strategic impact on your business)
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	– URD: Risks arising from access to and pricing of raw materials, p. 142; Climate change-related risks, p. 146 – CDP: C 2.3a and C2.4a
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	– URD: Risks arising from access to and pricing of raw materials, p. 142; Climate change-related risks, p. 146 – CDP: 3.2 (Details of your organization's use of climate-related scenario analysis)
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: Risk identification, p. 53; Risk analysis matrix, p. 140 – CDP: C2.2 (Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities)
	b) Describe the organization's processes for managing climate-related risks	– URD: Risk management, p. 54 – CDP: C2.2 – CSR report: Taking action for the climate, p. 87
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	– URD: Strategic, operational and financial risks, p. 140 – CDP: C2.2a
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	– CDP: C2.3a (details of risks identified with the potential to have a substantive financial or strategic impact on your business) and C2.4a (details of opportunities identified with the potential to have a substantive financial or strategic impact on your business)
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	– URD: Reduce energy-related GHG emissions by 50% in absolute terms, p. 100; Reduce Scope 3 GHG emissions by 55%, p. 100 – CDP: C6 (Emissions data); C7 (Emissions breakdowns) – CSR report: LVMH's carbon footprint by business group, p. 91; Breakdown of direct and indirect emissions by year (Scopes 1 and 2), pp. 133-134
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	– URD: Climate targets in line with the Paris Agreement, p.95; Key achievements in 2022: Climate, p. 96 – CDP: C4 (Targets and performance) – CSR report: LIFE 360, pp. 68-69; Climate trajectory in line with the Paris Agreement, p. 88

6. ENVIRONMENTAL TAXONOMY

In accordance with Regulation (EU) 2020/852 establishing criteria for determining whether an economic activity qualifies as environmentally sustainable ("the Regulation"), LVMH has:

(i) identified those of its activities that qualify as contributing to climate change adaptation and mitigation objectives ("the Climate Objectives");

(ii) analyzed the contribution made by eligible activities to the Climate Objectives, while ensuring that this contribution does not cause significant harm to any of the other Climate Objectives and that the activity complies with the minimum safeguards outlined below, thus permitting the validation of the activity's "alignment".

Activities considered as eligible in relation to the climate objectives established by the Regulation are those having the greatest impact on climate change, thus offering the greatest potential for reducing greenhouse gas emissions. Given the objectives involved and the activities targeted at present in relation to these objectives, only LVMH's operating investments in the real estate sector have been analyzed for the purposes of this reporting as of December 31, 2022. In accordance with the Regulation, they correspond to the total of:

- acquisitions of property, plant and equipment and intangible assets;
- capitalized fixed lease payments; and
- assets and capitalized fixed lease payments relating to changes in the scope of consolidation (excluding goodwill).

As of December 31, 2022, the Regulation calls for the disclosure of two key performance indicators (KPIs) determined in relation to financial items and defined as follows:

- KPI 1: Capex relating to eligible activities ("eligible capex" or "real estate capex");
- KP1 2: Eligible capex meeting the criteria for substantial contribution to climate change mitigation without causing significant harm to any other Climate Objectives and while complying with the minimum safeguards ("aligned capex").

Eligible capex and aligned capex are presented below, as amounts and percentages of total capex and, for aligned capex, as a percentage of eligible capex.

LVMH's environmental actions are only reflected to a limited extent in the Group's business activities and the indicators to be disclosed at this stage under the Regulation, which are presented below (further information on LVMH's actions to promote the circularity of its products and to protect biodiversity, in particular, is presented in §2, "LIFE 360 – Circular Design" and §3, "LIFE 360 – Biodiversity").

6.1 KPIs relating to operating investments (capex)

In accordance with the criteria set out in the Regulation, the contribution to climate change mitigation of activities corresponding to real estate capex was evaluated on the basis of the energy efficiency of buildings involved in purchases, leases and renovation projects during the fiscal year. For buildings constructed before December 31, 2020, only the premises purchased or leased whose energy efficiency is at least equivalent to that of 15% of the most energy efficient buildings in the countries where they are located are included in KPI 2. For buildings constructed after this date, only zero-energy buildings are included in KPI 2. The thresholds applicable in France were used to evaluate the energy efficiency of buildings located in countries that lack data relating to the energy efficiency of their buildings as a whole. The figures presented in the "Real estate capex deemed energy-efficient" columns correspond to aligned capex as defined above.

KPI 1 and KPI 2 relating to real estate capex break down as follows for fiscal year 2022:

(EUR millions or as %)						2022
	Total capex	**Real estate capex (KPI 1 – Eligible capex)[c]**		**KPI 2 – Real estate capex deemed energy efficient (KPI 2 – Aligned capex)[a] [c] [d]**		
	Amount	*Amount*	*as % of total capex*	*Amount*	*as % of total capex*	*as % of eligible capex*
Purchases relating to the real estate sector, of which:	4,604	4,604	50%	345	3.7%	7.5%
– Purchases of buildings[e]	420	420	5%	39	0.4%	0.8%
– Capitalized fixed lease payments	3,591	3,591	39%	185	2.0%	4.0%
– Buildings	156	156	2%	81	0.9%	1.8%
– Renovations and green initiatives	437	437	5%	40	0.4%	0.9%
Other acquisitions of property, plant and equipment and intangible assets	4,070	-	0%	-	0.0%	-
Purchases of assets and capitalized fixed lease payments	**8,675**	**4,604**	**50%**	**345**	**3.7%**	**7.5%**
Changes in the scope of consolidation	590	-	-	-	-	-
Total[b]	**9,264**	**4,604**	**50%**	**345**	**3.7%**	**7.5%**

(a) The analysis of real estate capex taken into account for KPI 2 confirmed that, in addition to compliance with an energy consumption threshold, the corresponding activities:
- do not cause any significant harm to any of the Regulation's other objectives (climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems);
- comply with the minimum safeguards stipulated in the Regulation in the areas of human rights (including labor and consumer rights), bribery and corruption, fair competition and taxation.

(b) See Notes 3, 6 and 7 to the consolidated financial statements.
(c) Since a breakdown of acquisitions of property, plant and equipment in respect of Taxonomy-eligible activities is not available within the Group's financial reporting, this information has only been collected for those Maisons contributing significantly to purchases during the period; these Maisons accounted for 88% of the Group's total capex in 2022 (60% in 2021). No extrapolations were performed for the other Maisons, whose acquired fixed assets were considered "ineligible" for the requirements of this reporting.
(d) The analysis of the energy efficiency of leased premises for the fiscal year was only carried out for the Maisons contributing significantly to capital fixed lease payments, corresponding to 84% of the Group's capitalized fixed lease payments in 2022. The capitalized fixed lease payments of the remaining Maisons were deemed as not aligned for the purposes of this reporting.
(e) When a building is acquired, the land is not considered ineligible. Its acquisition cost is included in total capex.

Most of LVMH's purchases or leases involve its network of stores, which are generally situated in buildings in historic city centers. However, the building standards in force when they were constructed made little or no mention of energy efficiency and they have for the most part not recently undergone thermal renovation work, which results in a low rate of compliance with the energy efficiency levels stipulated by the Regulation. For this reason, KPI 2 for purchases and leases of buildings in 2022 respectively stood at 0.4% and 2.0% of total capex, and 0.8% and 4.0% of real estate capex.

Nevertheless, whenever buildings with inadequate energy efficiency are purchased or leased, LVMH aims to include energy efficiency improvement as part of the renovation projects for these buildings to the extent possible, and these efforts should be reflected in the improvement in KPI 2 relating to building renovation and construction. In 2022, construction and renovation projects complying with the thresholds for energy efficiency set out in the Regulation together accounted for 1.3% of total capex and 2.6% of eligible capex.

6.2 Indicators relating to turnover and maintenance, R&D and rental expenses (opex)

Since LVMH's main activities are not at this stage cited by the Regulation in relation to the achievement of the Climate Objectives, the turnover indicators are nil for LVMH in respect of fiscal years 2022 and 2021.

Maintenance of real estate assets, R&D and rental expenses (in respect of short-term leases) represent a non-material proportion of the Group's total operating expenditure. That being the case, LVMH has applied the materiality exemption to opex.

The tables required by the Regulation are set out in the Appendices below.

Table 1 – Revenue

Percentage of revenue derived from products or services associated with Taxonomy-aligned economic activities – 2022 information

				Substantial contribution criteria						
Economic activities	Code(s)	Absolute revenue	Percentage of revenue	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	
		EUR millions	*%*	*%*	*%*	*%*	*%*	*%*	*%*	
A. TAXONOMY-ELIGIBLE ACTIVITIES										
A.1. Environmentally sustainable activities (Taxonomy-aligned)										
		-								
Revenue from environmentally sustainable activities (Taxonomy-aligned) (A.1)		-								
A.2. Activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned)										
		-								
Revenue from activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned) (A.2)		-								
Total (A.1 + A.2)		-								

B. ACTIVITIES NOT ELIGIBLE FOR THE TAXONOMY		
Revenue from non-Taxonomy-eligible activities (B)	**79,184**	**100%**
Total (A + B)	**79,184**	**100%**

	Do No Significant Harm criteria (DNSH)										
	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Percentage of Taxonomy-aligned revenue, year Y	Percentage of Taxonomy-aligned revenue, year Y-1	Category (enabling activity)	Category (transition activity)
	Y/N	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*%*	*E*	*T*
								-			
								-			
								-		-	
								-		-	

Table 2 – Capex

Percentage of capex from products or services associated with Taxonomy-aligned economic activities – 2022 information

				Substantial contribution criteria						
Economic activities	**Code(s)**	**Absolute capex**	**Percentage of capex**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Biodiversity and ecosystems**	
		EUR millions	*%*	*%*	*%*	*%*	*%*	*%*	*%*	
A. TAXONOMY-ELIGIBLE ACTIVITIES										
A.1. Environmentally sustainable activities (Taxonomy-aligned)										
Renovation of existing buildings	7.2	13	0%	100%						
Installation, maintenance and repair of energy efficiency equipment	7.3	20	0%	100%						
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	8	0%	100%						
Acquisition and ownership of buildings	7.7	304	3%	100%						
Capex of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**345**	**4%**	**100%**						
A.2. Activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned)										
Renovation of existing buildings	7.2	357	4%							
Installation, maintenance and repair of energy efficiency equipment	7.3	40	0%							
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	-	0%							
Acquisition and ownership of buildings	7.7	3,862	42%							
Capex of activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned) (A.2)		**4,259**	**46%**							
Total (A.1 + A.2)		**4,604**	**50%**							
B. ACTIVITIES NOT ELIGIBLE FOR THE TAXONOMY										
Capex of non-Taxonomy-eligible activities (B)		**4,661**	**50%**							
Total (A + B)		**9,265**	**100%**							

	Do No Significant Harm criteria (DNSH)										
	Climate change mitigation	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Biodiversity and ecosystems**	**Minimum safeguards**	**Percentage of Taxonomy-aligned capex, year Y**	**Percentage of Taxonomy-aligned capex, year Y-1**	**Category (enabling activity)**	**Category (transition activity)**
	Y/N	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*%*	*E*	*T*
		Yes	Yes	Yes	Yes	Yes	Yes	0%			T
		Yes			Yes		Yes	0%		E	
		Yes					Yes	0%		E	
		Yes					Yes	3%			
								4%			
								4%			

Table 3 – Opex

Percentage of opex from products or services associated with Taxonomy-aligned economic activities – 2022 information

				Substantial contribution criteria						
Economic activities	Code(s)	Absolute opex	Percentage of opex	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	
		EUR millions	*%*	*%*	*%*	*%*	*%*	*%*	*%*	
A. TAXONOMY-ELIGIBLE ACTIVITIES										
A.1. Environmentally sustainable activities (Taxonomy-aligned)										
Opex of environmentally sustainable activities (Taxonomy-aligned) (A.1)										
A.2. Activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned)										
Opex of activities that are eligible for the Taxonomy but not environmentally sustainable (non-Taxonomy-aligned) (A.2)										
Total (A.1 + A.2)										
B. ACTIVITIES NOT ELIGIBLE FOR THE TAXONOMY										
Opex of non-Taxonomy-eligible activities (B)										
Total (A + B)		**875**	**100%**							

Since this data is not available within the Group's financial reporting, it has been extrapolated based on the 2021 analysis undertaken on a sample of the main Maisons.

	Do No Significant Harm criteria (DNSH)										
	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Percentage of Taxonomy-aligned opex, year Y	Percentage of Taxonomy-aligned opex, year Y-1	Category (enabling activity)	Category (transition activity)
	Y/N	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*Y/N*	*%*	*%*	*E*	*T*