

LVMH

2018 ENVIRONMENTAL REPORT



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MESSAGE FROM THE CHAIRMAN



Protecting the environment is now no longer an option. It's a necessity. We can see which of LVMH Group's activities are most sensitive to the natural world: grape harvests are coming increasingly early, the raw materials from which we create our perfumes are changing. Our Group is a network of sensors attuned to changes happening in the world.

It's in a spirit of progress that we have to engage in understanding these changes, taking responsibility ourselves to ensure that our thinking aligns with the long-term vision that characterizes us. LVMH has therefore decided to forge its own path, a path guided by two principles: sustainability and respect for nature.

There is no LVMH Group House that doesn't care about sustainability. The surest way to reduce our environmental footprint is to make our product lifetimes as long as possible. And for a product to last, it has to be exceptional. This is why our luxury goods Houses have so much to contribute to the economy, as they've succeeded in the feat of continually renewing their creativity, without succumbing to passing fads. If our products are standing the test of time, it's precisely because they're aligned with nature. This means, on our part, as strong a commitment to nature as to culture, in other words, investing as much in protecting natural resources as in perpetuating artisanal techniques. This approach is made possible by our mastery of the entire value chain, from sourcing raw materials to distributing our products. Indeed, I've always believed that having full ownership of our tools of production is a necessary condition of achieving the highest levels of quality. And that applies to the environment as much as to other fields.

I'm convinced that sustainable, globalized growth is possible. When our sales grow by 10%, our CO₂ emissions fall by about the same. When we use scarce raw materials, it is with the commitment to protect species by offering local communities a viable economic and environmental model.

This is why, from our point of view as actors in this process, we want to see reversed the gloomy hypothesis into which climate projections are plunging us: the more perceptible the climate change, the more numerous the innovations to remedy it, and the more solutions likely to see the light of day.

Bernard Arnault

Chairman and Chief Executive Officer



Environmental excellence

A PERMANENT VALUE AND STRATEGIC
COMMITMENT FOR LVMH

Introduced more than twenty-seven years ago in line with the values of the Group, the environmental policy of LVMH has always been a pillar of its growth strategy. It is deployed within a framework designed to create and amplify a drive for progress constructed around a unifying program of goals for 2020 shared by all the Houses. Its effectiveness is equally based on vectors of ongoing improvement and the sharing of best practices.

KEY DATES

OF LVMH'S ENVIRONMENTAL POLICY

2001

LVMH innovates in the luxury goods industry by producing a first-ever environmental report. Bernard Arnault goes one step further by signing an Environmental Charter, in the name of all Group employees, that confirms the Group's environmental goals.

1998

Hennessy is the first Group House, and the first wine and spirits producer in the world, to achieve ISO 14001 environmental certification.

1995

The Houses in the Perfumes & Cosmetics business sector set up an ethno-botany department. The aim of this department is to protect plant species that are of interest for cosmetics.

1992

LVMH sets up a pioneering body, the Environment Department. The same year, Hennessy launches the first analysis of a product's life cycle.

2002

While Ademe (French environment and energy management agency) is still reviewing the carbon assessment method, most of the LVMH Houses are already testing this new tool, which allows them to measure their CO₂ emissions.

2003

LVMH joins the Global Compact, a United Nations initiative that aims to encourage companies to adopt a socially responsible attitude.

2004

Two tools are created to help the Group's Houses eco-design outstanding products: an "environmental trend handbook", and an online "materials library" that lists environmentally-friendly components and materials.

2005

At the Aichi World Expo in Japan, Louis Vuitton highlights the theme of environment and reduction of greenhouse gases by creating a house built entirely of salt, a natural and high-quality material. After the event, this temporary construction was dissolved and the salt was released into the sea.

2012

LVMH commits to the French National Strategy for Biodiversity. The Group gives an internal boost to its environmental policy by launching the LIFE (LVMH Initiatives For the Environment) Program.

2009

In Pithiviers, the Environmental Center for Eco-friendly Packaging Breakdown and Recycling (CEDRE) begins to process tons of waste generated by the Group's Houses.

2008

LVMH draws up a Code of Conduct for its suppliers, in order to extend the commitments made in its Environmental Charter. The following year, this Code is supplemented by a Code of Conduct intended for the employees.

2006

At Cergy-Pontoise, Louis Vuitton inaugurates Eole, the first warehouse in France built in accordance with the High Environmental Quality (HQE®) approach.

2015

LVMH sets up an internal carbon fund, a pioneering initiative in the luxury goods industry to mark COP21 in Paris. The aim of this fund is to promote the financing of programs launched by its Houses to contribute to the fight against the climate crisis.

2016

In order to encourage and support environmental best practices in its sales floor areas, the Group launches the "LVMH LIFE in Stores" program.

2017

LVMH celebrates the 25th anniversary of its Environment Department and introduces its LIFE 2020 program, which will allow the Group to pursue its historical commitment to the environment.

2018

LVMH doubles its internal carbon fund, which provides the resources to devote €11.3 million to finance 112 projects launched by 28 Houses to reduce their greenhouse gas emissions.

FEEDBACK ON TWO HIGHLIGHTS



2015

Mobilization around the internal carbon fund

EXPLAINED BY
Antonio Belloni, Group
General Manager

“The creation in late 2015 of our internal carbon fund, a first in the luxury goods industry, demonstrates both the willingness of LVMH to commit fully to the fight against climate change and its ability to innovate in this area. At a time when higher temperatures threaten the future of future generations, it is no longer enough to make progress, we need to do so quickly. We are acting on this. First, by setting a new, particularly ambitious goal in the context of LIFE 2020: to cut our CO₂ emissions by 25% between 2013 and 2020. And, second, by deciding to double the internal carbon fund in 2018. The price of a ton of CO₂ thus rose from €15 to €30. This has given us the funds to invest more than €11 million in projects that are both structuring and innovative, and will result in a substantial reduction in our carbon impact. The mobilization of our Houses has been a key factor. For the Houses, participating in the internal carbon fund is an amazing opportunity – the chance to play an active role in the protection of the environment.”



2018

The Future LIFE evening in Tokyo

EXPLAINED BY
Sylvie Bénard, Environment
Director

“Our environmental approach is anchored in time but directed toward the future. With a view to ensuring ongoing improvement, we are constantly raising our standards. This is the meaning of the launch of LIFE 2020, which now allows us to mobilize the Houses around shared ambitions for 2020. Shared ambitions mean collective success. To meet these challenges, it is important to bring all of the company’s employees worldwide on board in our approach. In September 2017, during the Future LIFE event organized in Paris, we took advantage of the celebration of the 25th anniversary of the Environment Department to officially launch LIFE 2020. In May 2018, we presented Future LIFE in Tokyo to the representatives of our Houses operating in Asia. And we are going to continue to meet with the teams, to indicate the importance of the environmental policy in the Group’s development strategy, and to invite every individual to make a commitment to a future where natural resources are respected.”

THE FRAMEWORK FOR ACTION

TO BE A PIONEER IN ENVIRONMENTAL COMMITMENT

For nearly three decades, the Group has strived constantly to preserve the quality of our water, air, and soils, and to protect biodiversity and ecosystems. As the world leader in luxury, it must be exemplary. Its approach is therefore characterized by very stringent standards. It is underpinned by heavy financial commitment: in 2018, the company's purely environmental expenditure totaled €38.8 million, including €26.1 million in operating expenses and €12.7 million in investments. The LVMH environmental policy was defined in an Environmental Charter signed by Bernard Arnault in 2001, structured around five vectors:

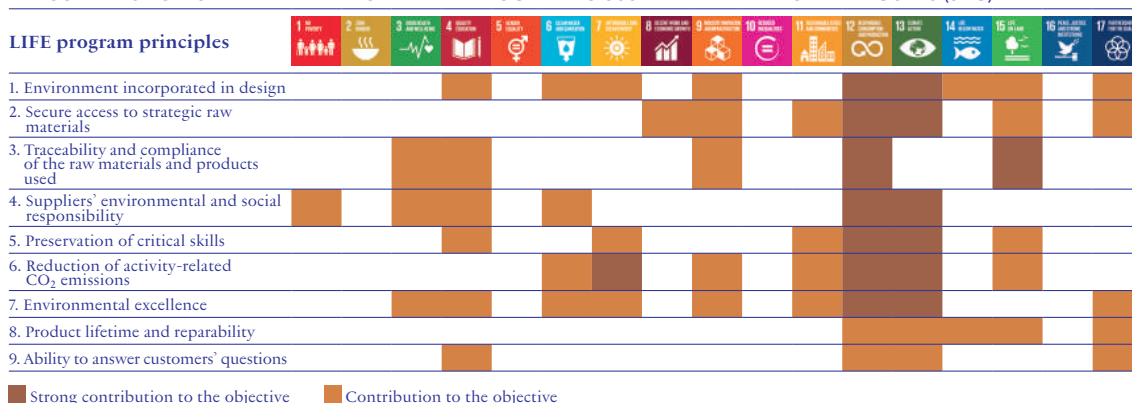
- achieve a high level of environmental performance;
- generate collective commitment;
- optimize the management of environmental risks;
- incorporate the environment into product design;
- be engaged and act beyond the Group.

In 2012, this policy inspired the development of the LIFE program. In 2008, the Group also developed Codes of Conduct intended to frame the practices of employees and suppliers. In addition to these founding texts, new, national and international voluntary commitments form the framework for the environmental approach of LVMH. For example, the Group joined the United Nations Global Compact, established to promote the civic responsibility of businesses, and the Caring for Climate program which goes hand in hand with the Compact.

LVMH also supports the Universal Declaration of Human Rights, the OECD Guiding Principles, the

International Labor Organization's Fundamental Conventions, the Kimberley Process (an international system for certification of rough diamonds dating from 2003), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). One of the primary commitments of LVMH is its contribution to the 17 Sustainable Development Goals (SDG) established on September 25, 2015, in conjunction with the UN General Assembly, by the leaders of 193 countries. These goals, defined in 169 targets, are designed to guarantee the fate of future generations, by solving the problem of climate change. In July 2018, the Group once again demonstrated its proactive approach by signing a charter of commitments within the context of Act4nature, launched by Entreprises pour l'environnement (EpE), the French association of businesses for the environment. Ten of these commitments are collective and should allow for the incorporation of the issue of biodiversity into all activities of the signatory companies, from governance and strategy to the most concrete operations so that they make a net positive contribution to nature. Each company also commits to implementing new actions adapted to its businesses. By participating in this action for progress, LVMH will contribute to preparations for two major deadlines in 2020: the World Congress of the International Union for Conservation of Nature to be held in Marseille, France, and the COP15 of the Convention on Biological Diversity organized in Beijing, China.

CONTRIBUTION OF THE LIFE ENVIRONMENTAL PROGRAM TO SUSTAINABLE DEVELOPMENT GOALS (SDG)



NEW COMMITMENTS TO PROTECT BIODIVERSITY

By joining Act4nature in 2018, LVMH reaffirmed its desire to provide concrete solutions to contribute to the goals on biodiversity set by the international community. This initiative, launched by EpE with many partners (NGOs, scientific institutions, public authorities, etc.) is designed to generate real international collective momentum through the involvement of businesses evolving in all business sectors. Like the other signatories of the Act4nature Charter, LVMH has made ten commitments:

1 – Integrate biodiversity into its business strategy based on the available scientific knowledge. **2 – Engage** in discussions with all its stakeholders about their expectations, their impacts, their actions and their progress. **3 – Evaluate** the various components of biodiversity that affect the Group using indicators of direct and indirect impacts, risks and progress, and for decision making when relevant, economically assess its impacts and its dependence on the correct function of ecosystems. **4 – Promote** the progressive integration of biodiversity in decisions throughout its value chains, from the production of natural raw materials until the end of life of products after they are used by consumers. **5 – Avoid, reduce** and, ultimately, offset its impacts by aiming, on a case by case basis, to at least break even or even achieve a net gain in biodiversity in its activities and geographic areas of influence, and by taking into consideration the needs of ecosystems to adapt to climate change. **6 – Develop** as a priority solutions based on nature, ensuring that implementation of those solutions is performed on a well-established scientific basis and is beneficial to biodiversity, particularly by promoting a certain variety in these solutions. **7 – Incorporate** biodiversity into its dialog with public authorities in order to support the consideration of this challenge in public policies; when the Group is asked to do so, contribute to national strategies for the biodiversity of the countries in which it operates. **8 – Increase** employee awareness and train them in biodiversity and its relationship to their businesses; promote and encourage their initiatives on behalf of nature and give recognition to these actions and practices. **9 – Mobilize** its resources and establish the appropriate partnerships to support its concrete actions and ensure follow-up. **10 – Report** to the public on the implementation of these collective and individual commitments.

THE FRAMEWORK FOR ACTION

ESTABLISH A COMPREHENSIVE PROGRAM: THE LIFE PROGRAM

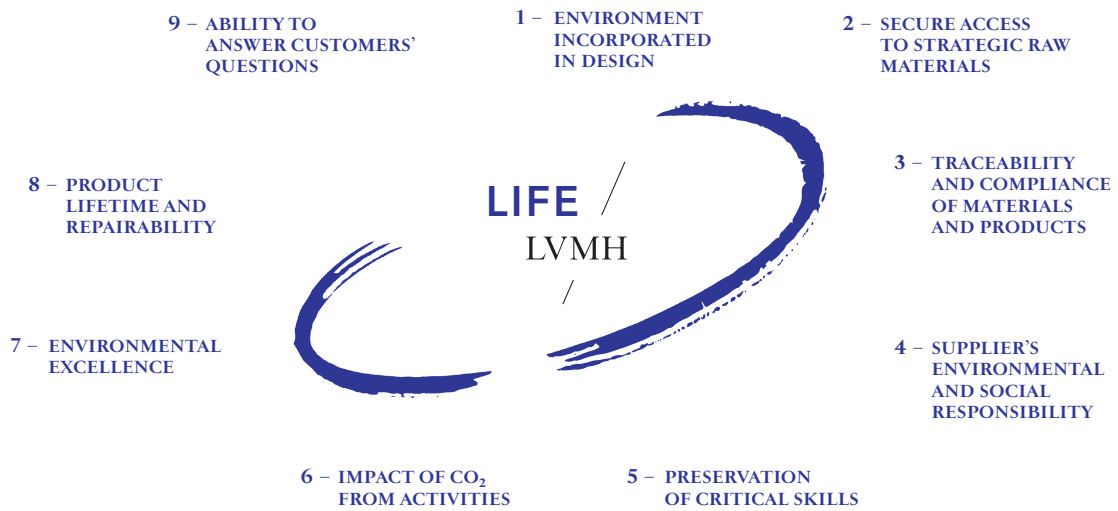
In 2012, LVMH decided to strengthen its approach to protect the environment by deploying a comprehensive program: LIFE (LVMH Initiatives For the Environment). This program is based on nine challenges that are key to the environmental performance of the company, including product design, the shipment of raw materials, manufacturing and marketing, and after-sales services. These key challenges were reinforced in 2016 with the definition of four LIFE 2020 strategic objectives: a reduction in the environmental footprint of the products; the establishment of a sustainable supply stream; a decrease in greenhouse gas emissions to contribute to the fight against climate change; and improvement in the environmental impact of the sites. Since 2015, with the support of the Environment Department, all the Houses have incorporated LIFE into the strategic plan that

they present every year to the Group Executive Committee. This is their opportunity to present their action plan to achieve the four LIFE 2020 goals. Progress is monitored based on a set of indicators. Some indicators are shared, such as the Environmental Performance Index (EPI), which calculates the environmental performance of packaging. Other indicators are specific, enabling the Houses to take their businesses' particular operating methods into account.

LIFE is the backbone of the LVMH environmental policy. The program has structured the actions taken around a unified vision, a collective commitment and priorities shared by the Houses with a long-term perspective. It has enhanced the integration of the environment into the Houses' strategy and managerial processes.

LIFE PROGRAM DYNAMICS

In 2015, all the Houses incorporated LIFE into their strategic plan. A source of innovation and creativity, it speaks a common language that heavily involves senior management. All actions are consolidated by the Group and are supported by LVMH's Environment Department.



LIFE 2020 OBJECTIVES



PRODUCT OBJECTIVE

Improving the environmental performance of all products.



SECTOR AND SUPPLIER OBJECTIVE

Applying the highest standards in 70% of the procurement chains, in order to reach 100% by 2025.



CLIMATE CHANGE OBJECTIVE

Reduce the CO₂ emissions related to energy consumption by 25% from the 2013 level.



SITE OBJECTIVE

Improve key indicators of environmental efficiency (water consumption, energy consumption, waste production) by at least 10% in all industrial and administrative sites.

THE FRAMEWORK FOR ACTION

ORGANIZE TO TAKE EFFECTIVE ACTION TO PROTECT THE ENVIRONMENT

Decentralized organization

LVMH very rapidly organized to give shape to its commitment to the environment and to translate that commitment into useful and concrete actions. In order to act effectively, the Group has prioritized an organizational structure that is both decentralized and unified, one that unites without standardizing the different and very specific businesses. The LVMH Environment Department inspires the shared vision, defines the broad outlines for actions in all areas related to the preservation of natural resources, monitors compliance with the commitments made, and directs the global environmental reporting. It has implemented the LIFE program since its launch. As the real “orchestra conductor”, the Department serves as the interface between the Executive Committee and the Houses’ management teams, and coordinates cross-divisional initiatives. It also works to develop collaboration with the other divisions of the Group on environmental issues.

Composed of a dozen experts at present, the Environment Department places its expertise at the service of the Houses, helping them to succeed in their own green actions. It offers them useful information, practical tools and customized support by relying on a network of environment managers. These key officers are responsible for conveying, relaying and deploying the LIFE program within the management of their House. The network consists of around sixty women and men with a variety of backgrounds and positions, all of whom share a high level of environmental expertise. The Environment Department meets with them three times a year in an Environment Committee. These crucial moments for dialog and emulation are an opportunity to assess the progress of the actions taken, the results

obtained and the current projects, or to come and pass on best practices. They also allow the dissemination of best practices and the enhancement of collective expertise by inviting international specialists to speak on issues related to the preservation of natural resources.

Mobilization of the Houses

The Houses have incorporated the LIFE objectives into their road maps. Like the Group, several Houses have restructured their organization to support their environmental policy. Guerlain, for example, established a Sustainable Development Department in 2007 and a steering committee composed of 18 people from all businesses of the company. Each of them writes and deploys an action plan adapted to their site or department based on their area of expertise or targeting a specific annual objective. This organization can coherently cover all activities and provide both pragmatic and comprehensive responses. In June 2018, Guerlain took an additional step by making Director of Sustainable Development Sandrine Sommer a new member of its Executive Committee. With this symbolic appointment, the House affirms the integration of sustainable development at the center of its governance and its goal to strengthen its action in this area, particularly for the preservation of natural resources. Some Houses place the emphasis on networking in order to mobilize their teams. This is the case for Louis Vuitton, which has entrusted its environmental strategy to a dedicated department. Approximately one hundred correspondents and local Green Teams representing the key positions for environmental performance relay its action at all sites and in all activities. In countries such as Japan, China, Italy and Switzerland,

Louis Vuitton also has CSR ambassadors and store correspondents, the Green Advisors. In order to act more effectively, the Houses often target insight building by creating specific steering or working groups on issues with major environmental challenges. Thus, Hennessy has established, within its environment committee, three sub-committees respectively dealing with production and shipment, administration and brandies.

Train the teams at the Environment Academy

LVMH knows that its environmental progress is closely linked to its ability to make its employers actors in its approach. As a result, the Group gives great importance to the awareness and training of its 156,000 employees on this issue. Everyone is involved, from the executives who provide the impetus to the operational teams who implement best practices in the field. In 2016, the company created the Environment Academy. It is responsible for developing and deploying educational courses using a variety of media, such as live sessions, training via e-learning or virtual classes. The training offer includes a core set of basic lessons named "The Fundamentals". Designed for new environmental managers, this training covers the major environmental challenges, running an environmental management system, and environmental law. In addition, business modules are offered "à la carte" (for example, the module on eco-design to train employees working in design, R&D and marketing) as well as a soft skills module to teach each person, whatever their position, how to convince and exert influence on environmental challenges. As proof of the crucial role assigned to the Environment Academy, the number of training hours provided serves as an indicator to monitor the LVMH environmental policy and assess the progress made in the implementation of its LIFE program. One of the goals of the Perfumes & Cosmetics Houses, for example, is to have trained 100% of their buyers in supplier environmental audits by the end of 2019.

Since its launch, the training has become international, as indicated by the session in Milan in September 2018 that saw the participation of people working for Houses located in Italy, such as Bvlgari. Business training sessions have covered various topics, such as environmental allegations, wood regulations, the CITES and the assessment of the environmental performance of suppliers. A total of 20,196 hours of training were provided within the Group during the year. The Environment Academy

has also placed its expertise at the service of the Houses. With its assistance, Loewe released an online module designed to present its sustainable development projects to its employees at all stages in the life cycle of the products.

To provide more support to the different internal audiences, the environmental training offer is regularly enhanced, both with content and with approaches and tools. In 2018, a new, particularly innovative training tool was rolled out: LIFE Influencer Agency, a SPOC or Small Private Online Course (in reference to MOOC or Massive Open Online Course) used by universities to train their students. This mobile application developed with a design agency and a company specializing in EdTech is intended for architects and operational directors, who play a key role in the improvement of the environmental performance of the sites. Downloadable on smartphones since 2019 in Europe, the United States and Asia, it offers them an introduction to sustainable construction in four steps: LIFE Vision, LIFE in Stores, LIFE in Finance and LIFE Influencer. The application is integrated into a six-month educational course that also includes five face-to-face workshops in a very entertaining format. With this initiative, LVMH not only wants to make its architects and operational directors active contributors to its environmental policy, it also wants to create a community for them to encourage sharing and the dissemination of best practices, and accelerate the rise in the level of collective expertise.

THE FRAMEWORK FOR ACTION

MONITOR THE PROGRESS MADE AND IDENTIFY AREAS FOR IMPROVEMENT

LVMH quickly equipped itself with the means to assess the impact of its activities on natural resources, to identify the improvements to be prioritized, and to measure the progress achieved in order to go further. **Cascade**, its reporting tool for the main environmental issues, was rolled out in 1998. The data collected by Cascade is audited by an independent third party, Ernst & Young. The data is published in the Environmental Report that LVMH has prepared each year since 2001, and has been consolidated since 2004 in the Management Report prepared by the Group's Board of Directors. This information is also made available online on the website www.lvmh.fr and sent on request to the company's stakeholders. LVMH regularly improves Cascade in order to enhance the quality of the reporting. In 2018, the questionnaire on purchases of raw materials sent to the Houses was redesigned to collect more complete and precise information.

The audits launched at Group level, in addition to those conducted by the Houses, are another assessment tool widely used by LVMH to direct its environmental policy. In 2018, 877 suppliers were the subject of 1,092 social and/or environmental audits. For a number of years, LVMH has also launched sector audits to validate, in the field, the implementation of sustainable practices and the quality of the raw materials obtained. For example, after the plants coming from Thailand, China, Madagascar and Burkina Faso, the cashmere from Mongolia, the mines of Colombia and the crocodile leathers from several countries, the Group in 2018 focused on the only farms in the world (all established in France) that raise Orylag® rabbits, the fur of which is used by several Houses. The audit revealed an excellent sector, in which practices exceed the requirements of the best standards, particularly with regard to

animal well-being. In addition to the audit campaigns, LVMH develops studies to prioritize its environmental actions and assess its results. Since 2015, for example, the Group has evaluated the environmental impact of its supply chain every two years. The results of the second study will generate additional action channels in 2019.

LVMH also relies on outside evaluation to find new challenges to social and environmental challenges. The Group responds to certain questionnaires issued by independent, non-financial ratings agencies when they do not include a request for a financial contribution; it permanently ensures that there are no conflicts of interest, either real or perceived. Its historical commitment to the environment has also earned it a position among the companies selected in the main indices based on responsible investment criteria: the FTSE 4Good Global 100, the EuroNext Vigeo Eurozone 120, and the Ethibel Sustainability Indices Europe.

PROGRESS DRIVERS AND BEST PRACTICES

CO-BUILD WITH INTERNAL AND EXTERNAL PARTNERSHIPS

Increase professional exchanges

It is impossible for one business alone to solve often systemic environmental problems. This is why common discussion and reflection in the Group's environmental policy is so important. It actively participates, alongside public and private stakeholders, in a number of professional technical projects on the protection of natural resources. It also plays a driving role in pushing its markets toward environmental excellence and contributes to many collective advances.

This policy particularly focuses on sustainable development issues, which are central in meeting the challenges set by LIFE 2020. LVMH is a member of the Biodiversity working groups of Orée, the French multi-player organization, and of the Fédération des entreprises de la beauté (FEBEA, the French beauty companies association), sits on the Responsible Jewelry Council (RJC), takes an active role in The Dragonfly Initiative (TDI) on best practices in the extraction of colored stones, the Leather Working Group (LWG), Textile Exchange and Business for Social Responsibility (BSR), the world leader in corporate social, societal and environmental responsibility.

Set up project partnerships

Its desire to progress through collective action leads LVMH to regularly develop project partnerships. The Group collaborates with several states and communities. In 2015, it signed the Paris Climate Action Charter initiated by the City of Paris, making a commitment to reduce energy consumption by 20% and to increase green energy consumption by 50% at its

150 sites located within the area of Greater Paris 2020. Early in 2018, these targets had already been achieved as the rate of green energy used on the sites had already reached 60% and energy use had declined by 20%. Faced with the climate emergency, LVMH then took a new step: a signatory of the new Paris Climate Plan, the Group now supports a vision of a carbon-neutral city of Paris and 100% renewable energy by 2050.

LVMH also has research partners, such as the Foundation for Biodiversity Research (FRB). A founding member of the FRB, in 2014 the Group became the first private company to join the eight public research bodies to sit on its Board of Directors. It is also one of the 160 members of the Foundation's Strategy Board, charged with reviewing the design of research programs to promote biodiversity. LVMH monitors all the FRB's work, and regularly contributes to this work with the assistance of the Houses. Based on a study conducted on two lines of plants for cosmetic use present in the formulation of the Christian Dior perfumes, for example, the FRB published recommendations on the use of natural substances and access to and the sharing of the benefits in the cosmetics industry. Established in Montreal, Quebec, the CIRAIG, the International Reference Center for the Life Cycle of Products, Processes and Services, is another key partner of LVMH. As an industrial partner, the Group supports the Center's work on the circular economy and the water footprint. It has also financed a Research Chair since 2003, so that its Houses can benefit from the support of the best global specialists in the areas of Life Cycle Analysis (LCA) and eco-design.

In addition to these partnerships, LVMH has forged partnerships in the academic world. They allow

LVMH to support the training of students and their awareness of environmental issues, while feeding its creativity and capacity for innovation. One of the most emblematic partnerships is the one forged in Great Britain with Central Saint Martins College of Art and Design, an internationally renowned London institution for the education it provides in art and design. The two partners, which have collaborated for many years, strengthened their ties in 2017 by launching a new program entitled "Sustainability & Innovation in Luxury | Fostering Creativity". This program co-developed by the two partners is based on their shared desire to meet the multiple challenges facing the luxury goods industry and has a three-fold ambition: to promote creativity, encourage young talent, and identify breakthrough solutions to support sustainable development and innovation in the sector. The program covers several courses of study at the school, including fashion, architecture and jewelry. From the outset, it has proven a real melting pot for the research and development of new methods for design and new materials. For example, a Green Trail was organized to recognize the five greenest projects developed by students across all areas of study. In addition, 15 employees of LVMH, primarily architects working for Benefit, Berluti, Bvlgari, Celine, Le Bon Marché, Louis Vuitton and Parfums Christian Dior, and 25 students and 5 members of the teaching staff from Central Saint Martins combined their talents within the framework of the Green Concept Store. They worked in teams for nearly eight months to develop a green boutique concept in line with the DNA of the Houses which meets their quality requirements. Beyond the interest in the winning project, the competition was an opportunity to share and highlight particularly innovative ideas, such as the use of mushrooms to create a highly renewable material for the fabrication of furnishings, or the purification of ambient air through a circuit of algae. **Louis Vuitton** also conducted a project with the students, who had to propose new product concepts for accessories, leather goods and customer gifts by integrating the concept of circular creativity. Finally, the Green Trail was an opportunity, in June 2018, to highlight, from among all the end-of-year projects developed by the Central Saint Martins students, the projects and products with the most successful environmental approach. Five winners were selected by a jury from among the approximately one hundred candidates.

Several academic partnerships established within the Group were forged at the initiative of the Houses. In France, for example, **Guerlain** supports

the Institut d'Administration des Entreprises Gustave Eiffel, one of the best university management schools, and sponsors its Master's program in Innovation, Design and Luxury Goods. The common thread for this sponsorship was sustainable development and the students were offered a case study, which consisted of creating the new Guerlain eco-designed product. In Poland, **Belvedere** has supported training in environmental themes for students at the university of Łódź since 2008. In Italy, **Bvlgari** is a longstanding partner of the Management Institute of the Sant'Anna School of Advanced Studies in Pisa, a prestigious university institute in the field of applied sciences. Since 2006, the House has financed a Master's program in: "Management and Control of the Environment: the Circular Economy and Efficient Use of Resources". In 2018, the program included a collaborative educational project composed of three students, their academic instructor and experts from Bvlgari to work on a problem: the deployment of sustainable practices in the production process of Bvlgari Accessories in Florence. The project resulted in the development of an action plan designed to reduce the volume of waste and CO₂ emissions through the supply chain, with the emphasis placed on two key items to reduce environmental impacts: shipping and packaging.

Support fundamental research

In addition to expanding knowledge, LVMH wants to contribute to the transfer of knowledge from the scientific sphere to business and civil society. Convinced that scientific knowledge can improve the integration of the need to preserve natural resources in corporate strategies, the Group relies in particular on research into natural capital. In 2018, LVMH went one step further by financing the creation of a Chair of Environmental Accounting in partnership with AgroParisTech (the Paris Institute of Technology for Life, Food and Environmental Sciences) and the ParisTech Foundation. This Chair unites players from various backgrounds – academics, professionals, institutions, etc. – for development, promotion and experimentation in environmental accounting with strong sustainability. In contrast to so-called "weak" sustainability, this concept is based on the complementary features of technical, human and natural capital. It therefore does not allow interchangeability among these three types of capital. With this Chair, the general objective is to develop a sustainable socio-economic system that respects the environment and includes all players concerned, including economic players.



The five winners of the Green Trail at Central Saint Martins which recognizes the most environmentally-friendly and innovative projects.

Act through corporate sponsorship

Corporate sponsorship is another major vector in the environmental policy of LVMH. The Group's Houses make broad use of sponsorship for a variety of environmental causes. **Hennessy** financed research on wood and vine diseases through a donation of €600,000 to a team of international scientists. Since 2011, with the National Forests Office, the Champagne Houses have developed sustainably managed forests through the Forêt d'Exception® label. **Kenzo** is joining forces with Blue Marine

Foundation to protect the oceans. Working alongside the Foundation for the Protection of the Environment of the Polish city of Żyrdów, **Belvedere** ensures that the Pisia-Gągoliną river is clean. With the Marine Conservation Society, **Glenmorangie** is committed to protecting the Scottish estuary of Dornoch and is supporting a project to reintroduce oysters into the estuary. **TAG Heuer** promotes green energy through the FIA Formula E, a 100% electric automobile racing championship. **Moët-Hennessy** has a similar project as the official partner of the *Solar Impulse* solar plane.

Hublot is acting with the Black Jaguar-White Tiger Foundation to prevent the disappearance of big cats: jaguars, tigers, leopards, lions and pumas. Since 2010, in collaboration with Depeche Mode, the House has also committed to the protection of an essential natural resource – water. After supporting several associations, Hublot and Depeche Mode have been working together since 2013 by aiding the charity: water foundation to bring clean drinking water to the people of the world. In 2018, a new corporate sponsorship operation was launched around 55 unique Hublot *Big Bang* watches, each one reproducing the record sleeve of 55 singles from the band Depeche Mode. At the end of the operation, the two partners were able to donate the sum of \$3.1 million to charity: water to bring water to more than 80,000 people.

Bees have a strong historical relationship with several LVMH Houses. Just as they are threatened with extinction and play a key role in the preservation of biodiversity, they also hold a special place in the charitable actions conducted within the Group. This is notably the case at Guerlain, whose symbol has been the bee since 1853. The House has aided and supported the Association for the Protection of the Black Brittany Bee on Ouessant Island for a number of years. Since 2015, Guerlain has also been helping the French Apidology Monitoring Center to achieve its goal: to train 30,000 new beekeepers in Europe, and to create 10 million new bee colonies by 2025. In 2017, the House launched a new initiative by organizing the first Bee University event. This is a conference designed to share, with the top experts, the challenges associated with the protection of bees and to come together to consider solutions to prevent their extinction. The second Bee University event was held on June 5, 2018. On that occasion, Guerlain announced the launch of the Bee School, a program to make children aware of the need to preserve bees that is led by its employees. The training of volunteer employees began when school opened that year. It will gradually be expanded to all countries where the House has a presence, with one objective: to act so that, in 2020, each Guerlain employee around the world can become an ambassador for the bees and biodiversity with children.

Rely on experts

In line with its longstanding commitment to biodiversity, and as a result of the conclusions of the seventh plenary meeting of the Intergovernmental Science Policy Platform on Biodiversity and

Ecosystem Services (IPBES), otherwise known under the name “IPCC of biodiversity”), LVMH is partnering with UNESCO and is becoming partner of its inter-governmental scientific program “Man and the Biosphere” (MAB), the goal of which is to act to protect global biodiversity. The MAB program is an important tool for international cooperation in achieving the UN’s sustainable development goals. It is one of UNESCO’s major programs.

Through the partnership, the Group will be present with UNESCO at future major international events in the coming years, including the 15th Conference of the Parties (COP15) at the Convention on Biological Diversity that will take place in November 2020 in Kunming, China.

In addition, LVMH and the Group’s Houses will rely on UNESCO’s scientific expertise in the sustainable industries sourcing program via its network of 686 biosphere reserves. As a result, the Houses benefit from regional and international networks of experts useful for the creation and success of their actions to protect biodiversity. This partnership will also facilitate the implementation of innovative solutions for sustainable management of natural resources and the identification of products and new markets based on the quality and traceability of the materials. In addition, LVMH will participate in the scientific research projects supported by the MAB and will contribute to some of its infrastructures to set up pilot sites for the conservation and responsible use of biodiversity over the long term.



On Ouessant, Brittany, the island of black bees protected by the Guerlain House.

**PROGRESS DRIVERS
AND BEST PRACTICES**

PUBLICIZE THE ENVIRONMENTAL POLICY INSIDE AND OUTSIDE THE GROUP

Developing communications and internal events

Training is not the only lever used by LVMH to mobilize its employees for environmental challenges. The Group is also developing internal communication and mobilization through major events that are excellent opportunities for unification and mobilization. In 2018, for the eighth consecutive year, for example, the Group participated in Green Week, the largest annual conference on European environmental policy. The theme of that event, held from May 21-25, was "Green Cities for a Greener Future". On this occasion, an educational sheet was distributed to more than 70,000 Group employees to explain how the Group contributes to the emergence of sustainable cities by acting to reduce its greenhouse gas emissions, preserve natural resources and protect biodiversity. These communication and mobilization efforts are relayed and amplified by the Houses. For the first time in 2018, Belvedere relied on Green Week to boost employee awareness of its Polmos distillery with good practices for the planet.

For internal communication, the trend is the integration of environmental problems in the daily life of the teams and the progressive dissemination of a green culture within the LVMH Group. This was illustrated in 2018, for example, with the opening of the "Environment Every Day" page on its new Hennessy intranet portal. This page presents good practices to reduce the impact of the activities on natural resources, and offers data on themes such as energy, water, package eco-design, waste, sustainable wine growing, sustainable transport or the environmental

performance for the year. To facilitate dialog on these themes, the page also offers employees the option to send their comments and good ideas. At Sephora North America, the desire to bring its employees on board with the House's environmental policy gave birth in 2018 to "Tips to Green Stores": advice given to store employees to reduce the environmental footprint by lowering energy consumption and waste production. For example, they are invited to use reusable water bottles, sort their waste, close exterior doors, systematically ask customers if they want a bag, or offer them an electronic receipt.

Publicize the environmental policy of LVMH

LVMH continues to develop external communication about its environmental policy. The Group wants to provide information in the most comprehensive and transparent manner to not only its customers, partners and regulatory authorities, but also to public players, non-governmental organizations, associations and all citizens concerned by environmental issues. The cornerstone of its communication process is the Environmental Report distributed every year since 2001. The report goes hand in hand with a large number of documents, articles, videos and public comments in traditional, digital and social media. LVMH also responds to the questions asked by its stakeholders (this is also challenge 8 of its LIFE program). The Group also demonstrates its environmental commitment at major national and international events: climate and biological diversity summits organized under the aegis of the UN;

annual highlights such as European Sustainable Development Week, Green Week or World Environment Day; themed events such as the International Africa and Beauty Forum, or the Luxury Packaging Trade Show; in-house key events like the 25-year anniversary celebration of its Environment Department in 2017, or the second LIFE in Stores show in 2018. These events marked by conferences, round table discussions and debates are all opportunities for LVMH to set out its vision on the issues discussed and share information and best practices.

LVMH's initiatives to publicize its environmental policy are relayed and amplified by the initiatives of the Houses, which are increasingly speaking out about their environmental actions. **Guerlain** has been a pioneer in this area with its communications on its eco-designed products. It has published an annual sustainable development report since 2014 and organizes events such as "Les inspirations durables du 68", private galas honoring celebrities committed to society and the environment.

Following in Guerlain's footsteps, this desire to "inform" is progressively gaining ground within the Group. **Louis Vuitton** offered an illustration of this desire in October 2018 when it introduced its leathers tanned with natural plant extracts and its perfumes with refillable bottles during the Go for Good operation of Galeries Lafayette that was intended to highlight the environmental, social and local commitments of the brands. In the context of this event, ten employees were named ambassadors to customers, and a dynamic was born with the creation of a dedicated discussion group, and the pro-

duction of mini-films: "What are you doing for the environment?" In addition, on September 22, Louis Vuitton invited its customers to attend an event focused on the sustainability values of its creations based around a Leather Care presentation organized with two artisans from the European repair shop. The communication commitments of Louis Vuitton are bearing fruit. In October 2018, the House received the Butterfly Trust Mark, created by the London company Positive Luxury to recognize brands that act with respect for the planet and future generations. To earn this award, they must have a positive impact on humans and the planet, and go beyond the minimum standards set by international law. Louis Vuitton has made its mark, among other initiatives, through its responsible supply chains, the deployment of a circular economy approach, and the reduction of its CO₂ emissions through choices for renewable energy sources and greener shipping methods.



At Hyères International Festival of Fashion and Photography, LVMH raises awareness of environmental issues to future young creative talent.



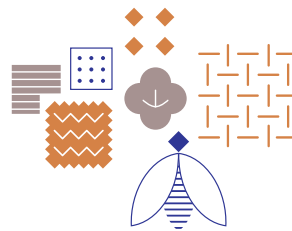
2018

A NEW YEAR OF ENVIRONMENTAL
PROGRESS

In 2018, LVMH made further progress toward its goal: environmental excellence. Thanks to the commitment of its Houses, the mobilization of its 156,000 employees, and the momentum generated by LIFE 2020, progress was significant in the four areas the Group's ambitions for 2020 fall under: products, supply chains, sites, and the reduction of greenhouse gas emissions to combat climate change.

LIFE 2020

STATUS REPORT PER OBJECTIVE IN 2018

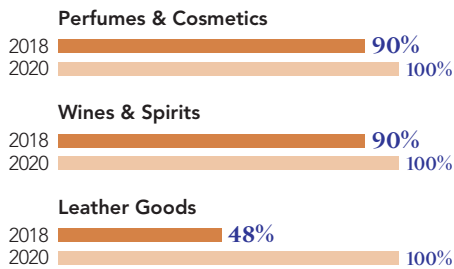


PRODUCT OBJECTIVE

SECTOR OBJECTIVE

Improving the environmental performance of all products

EPI of products



Widespread roll-out of eco-design

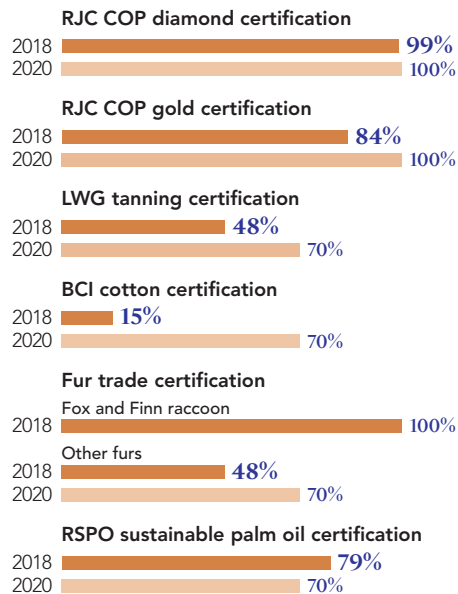
- Evaluation of the environmental performance of packaging with the Edibox tool: improvement in Perfumes & Cosmetics (+4% in 2018), Champagne (+5%), and Hennessy (+12%) indices. 2020 target: +10%
- Use and enhancement of the LVMH materials reference library with more than 500 innovative, green materials.

Preserve traditional expertise

Safeguard traditional processes and actions that reduce environmental impact (gathering unique flowers, wine-growing techniques, leather tanning, etc.).

Apply the highest standards in 70% of procurement chains

Give preference to certified supplies

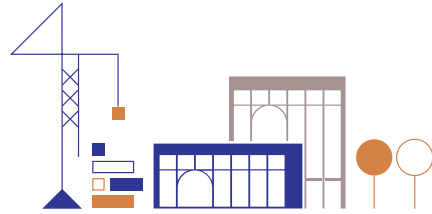


LVMH crocodile certification

First three farms in the world certified for crocodile breeding, supplying the Heng Long tannery, Singapore. Objectives at end 2019: 100%.

Make a commitment to animal well-being

- **Crocodile farms:** creation of the first standard in the world for the responsible supply of crocodile leather in 2019 audited by an independent body.
- **Snakes and lizards:** signing of official collaboration with SARCA (Southeast Asia Reptile Conservation Alliance).
- **Furs:** backing of the FurMark certification and special programs (Orylag®...).



CO₂ OBJECTIVE

SITES OBJECTIVE

Reduce by 25% the CO₂ emissions associated with energy consumption



Accelerate innovation with the internal carbon fund

Double the number of structuring projects promoting CO₂ reduction with €11.3 million capital investment in 2018.

Improve energy efficiency

- 16% less energy consumption in kWh/m² in stores between 2013 and 2019.
- 300,000 m² illuminated exclusively by LEDs thanks to the LVMH Lighting program.

Use increasing levels of green energy sources

Increase proportion of renewable energy in the Group's energy mix:



Reduce the carbon impact of transportation

- Adoption of low-CO₂ transportation with the development of rail transport for Hennessy.
- Access for employees to more-sustainable modes of transport.

Improve the key indicators of environmental efficiency for all sites by at least 10%

Make sustainable construction widespread

Certification of all new LVMH sites with international standards as basis (BBC®, HQE®, etc.).

Promote eco-design of boutiques with the LVMH LIFE in Stores program.

Improve the energy efficiency of boutiques:



Integrate the environment into site management

Production and administration sites certified for their environment management system:



Save and purify water

Limit water consumption at production sites:



Reduce waste and give it new life

In 2018, 91% of waste was recycled or converted into energy.

OBJECTIVE

PRODUCT

Improve
the environmental
performance of
100%
of products

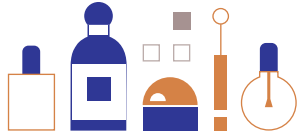
Forever committed to limiting the impact of their products on the natural ecosystems, the Houses of the LVMH Group have a new target in the context of LIFE 2020: **to improve the environmental performance of 100% of the items** they offer to their customers, taking into consideration the entire life cycle. The actions taken to reach this goal vary depending on the activity. As the environmental impact of the Fashion & Leather Goods and Watches & Jewelry Houses is closely related to the raw materials they use, their priority is to develop sustainable supply chains. The companies in the Wines & Spirits and Perfumes & Cosmetics business sectors, on the other hand, are first focusing their efforts on reducing the environmental impact of the packaging, reducing the size and opting for green, recyclable materials.



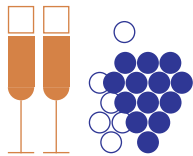
PRIORITIES

- Fashion & Leather Goods: working to develop sustainable supply chains.
 - Wines & Spirits, Perfumes & Cosmetics: working on packaging and supply chains.
-

IMPROVE THE ENVIRONMENTAL PERFORMANCE OF 100% OF PRODUCTS



Perfumes & Cosmetics



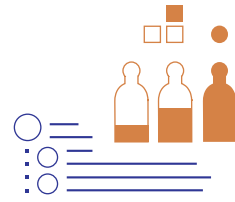
Wines & Spirits



Leather Goods



WIDESPREAD ROLL-OUT OF ECO-DESIGN



Use of Edibox (Web-based tool for measuring the environmental efficiency of packaging)

- Improve the EPI (target +10% in 2020): Perfumes & Cosmetics (+4%), Champagne (+5%), Hennessy (+12%).

Enhancement and use of materials reference library

- LVMH library of the "Eco-Materials Handbook" with more than 500 innovative, green materials.

Mobilization of internal teams for eco-design

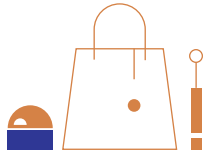
- Many eco-design training courses with LVMH's Environment Academy.

Development of refillable packaging

- All new Parfums Christian Dior products to be refillable by 2020.
- Creation of *Orchidée Impériale* cream for the Guerlain House with reusable presentation box.

PRESERVE TRADITIONAL EXPERTISE

Maintain traditional skills in gathering unique flowers, wine-growing techniques, leather tanning, etc. to control the environmental impact of manufacturing our products. Casks made by hand, by master coopers for Hennessy, using PEFC™ (Program for the Endorsement of Forest Certification, launched in 1998) certified oak.



Widespread roll-out of eco-design

LVMH's new "Product" objective for achievement by 2020 encourages the Houses to proceed with the widespread roll-out of eco-design, which takes the environment into consideration from the product design stage.

In order to improve, all the Houses rely on a palette of tools developed for and with the Houses by the Environment Department and which are regularly improved. A continually enhanced source of inspiration, the **online materials reference library** the "Eco-Materials Handbook" offers to the teams responsible for the design, development and marketing more than 500 innovative, green materials adapted to the luxury goods industry. It also prepares a list of best practices to be implemented to manufacture, distribute, use and facilitate end-of-life management of the products, whether the prod-

uct is cotton pants, a store furnishing, a jewel box, a bottle of wine, footwear, or even a website. **Edibox**, another Web tool available to the Houses, calculates the EPI of the packaging and the carbon impact of the materials used to make it. Since the 2016 roll-out of the second version, the estimates include the environmental impact of shipping materials and of the processes used to process and decorate them. The Houses of the Wines & Spirits and Perfumes & Cosmetics business sectors now calculate the EPI for all their products. The Group has given them a new target: a 10% improvement in evaluations in 2020. In 2018, the use of Edibox was also expanded to the three American Houses – Sephora North America, Fresh and Benefit. The LVMH teams have also worked on the development of a third, even more comprehensive version, and also participated in the SPICE working group aimed at standardizing environmental assessment methods in the world of Perfumes & Cosmetics.

An increasing number of Houses are using a method used for the first time by Hennessy in 1992: **the LCA of the products**. In 2018, for example, Acqua di Parma completed LCA for its *Colonia Pura* perfume, from design to "post-consumption" management. The analysis took into account each component of the perfume: liquid, bottle, sprayer, label... *Colonia Pura* thus became the first product developed by the House on the basis of specifications in which eco-design was the priority. Louis Vuitton made another use of LCA in 2018, using it to compare two processes to manufacture metal parts used in leather work and identify environmental optimization paths. In order to accelerate and increase the number of eco-designed projects, the Houses train their employees, equip them and adapt their organization.

ACTIONS AND EVENTS



In 2018, for example, the Perfume Houses organized a common operation to boost the eco-design awareness of their teams charged with packaging development and marketing. Dior Parfums also developed a white book on eco-design and uploaded an online EPI simulator. For its part, Guerlain strengthened the eco-design of its packaging by establishing an eco-design committee, which meets several times a year and is composed of representatives of its marketing, merchandizing, packaging development, industrial and procurement departments. Driven by a desire to promote the natural bases of its formulas, the House has also set up an eco-formula committee, which provides its teams responsible for sustainable development, R&D, marketing and regulatory questions to talk on a regular basis and move together in a structured and measured way toward more natural products.

The mobilization of the Houses was successful in 2018. For example, Parfums Christian Dior significantly reduced both the weight and the volume of the new box for the *Diorskin Nude* powder compact and the packaging of the face and body foundation of its *Backstage* product line. Givenchy also reduced the size of its Christmas boxes. This initiative resulted in a significant improvement in the EPI, which rose from 2.9 to 8.1. It also increased the number of boxes per pallet for shipping, resulting in the equivalent of 20 fewer containers (1,000 pallets) than for the Christmas 2017 campaign. In the Wines & Spirits business sector, Krug stood out with *Verticale I*, a prestige package for six bottles of *Grande Cuvée* champagne. Manufactured in France from a single material – FSC-certified cardboard – and water-based glue, it posted an EPI of 11.26.

Manufacture products that withstand the passage of time

Increasing the lifespan of products is another way to reduce their environmental impact. The Houses of the LVMH Group strive to achieve this goal, backed by a major asset: their extremely high quality standards, intrinsic to the luxury goods industry and an essential aspect of their activities. To extend the use of the products, after-sale services are also appearing, such as the one set up by Loewe to maintain and clean the leather and its ready-to-wear items. For perfumes and cosmetics, the Houses are also developing the concept of refillable packaging. More than 80% of the creams and serums of Parfums Christian Dior are marketed in this form, for example. For the cream *Capture Totale* alone, the House saves 600,000 liters of water and nearly 11.6 tons of waste per year. "Refills" also lie at the center of the Guerlain strategy, which offers its customers the opportunity for infinite refills of their bottles in the perfume fountains in its stores. In 2018, the House again illustrated its desire to extend the longevity of its products as much as possible. Its *Orchidée Impériale* cream was dressed in an artisan porcelain jewel box crafted by the Bernardaud family establishment, which has embodied the excellence of French porcelain for nearly one hundred and fifty years. This refillable box is the ultimate expression of more sustainable luxury.

Preserve traditional expertise

To manufacture their products, the Houses of the LVMH Group and their partners rely on traditional, sometimes age-old, practices and processes. Some are directly linked to the natural resources. This is the case for the methods of growing and picking unique flowers, such as the tuberoses, roses or irises in the Perfumes & Cosmetics sector, the wine-growing techniques in the Wines & Spirits segment, and tanning for the fabrication of Fashion & Leather Goods items. The preservation of this critical expertise is vital in making high-quality products. The Houses therefore work to protect their long-term survival by ensuring they are passed on and modernized. In France, the barrels of La Tonnellerie de La Sarrazine in Cognac, where the Hennessy brandies age, are therefore made and repaired by hand by master-coopers. They work as their predecessors did in the 18th, 19th and 20th centuries, using oak from sustainably managed forests which are PEFCTM-certified. In Spain, the incomparably supple and soft Loewe leathers are the fruit of the ancestral expertise of the tanners in the Cordero Entrefino region. However, they also owe their exceptional quality to innovative processes that have improved their environmental profile. In China, the leaves from the Pu'er tea trees, the oldest tea in the world, with which Cha Ling develops its line in cosmetic skin care, are cultivated in the thousand-year-old forests of Yunnan without fertilizers or pesticides. Harvested using traditional techniques, they are then used in the composition of the products designed by the House in its R&D laboratories to place the virtues of the Pu'er tree in the service of beauty.

TABLE TRACKING LIFE 2020 PRODUCT OBJECTIVES

Indicators	Baseline	2018 Performance	2020 Objective
EPI of packaging Perfumes & Cosmetics	8.32	8.55 (+4%)	+10%
EPI of packaging Wine & Spirits	Champagne 16.03 Cognac 10.6	16.88 (+5%) 11.9 (+12%)	+10%

OBJECTIVE

SECTOR

70%
of supply chains
to meet highest environmental
standards by 2020

Given its heavy dependence on natural processes, as well as its esthetic and heritage values, LVMH has to prioritize supply chains that protect the environment. For many years, the Group has exerted strong vigilance over the materials and substances that it uses, their origin and the manner in which they are prepared. By relying on traceability and compliance with increasingly stringent internal and external rules, it develops responsible purchasing. With LIFE 2020, this policy has been intensified. **LVMH wants to ensure that 70% of its supply chains meet the best environmental standards in 2020, and is targeting a rate of 100% in 2025.** This ambition drives all its Houses, in all its business sectors. Their approaches are adapted to their respective challenges. The Wines & Spirits Houses give priority to the spread of sustainable wine growing, which ensures the sustainability of the vine and respects the soils and the environment. The Perfumes & Cosmetics Houses are developing ethno-botany and assess their suppliers. The Fashion & Leather Goods and Watches & Jewelry Houses are setting up sustainable supply chains by relying on certification.



THE PRIORITIES OF THE ANIMAL SUPPLY CHAIN CHARTER

- Traceability.
 - Animal well-being.
 - Respect for populations and environment.
-

**APPLY THE HIGHEST STANDARDS
IN 70% OF SUPPLY CHAINS**



GIVE PREFERENCE TO CERTIFIED SUPPLIES

RJC COP diamond certification



RJC COP gold certification



LWG certification of the tanneries



Fur trade certification



BCI cotton certification



Sustainable-viticulture certification



RSPO certification (palm oil)



LVMH certification for the first three certified crocodile breeding farms in the world supplying Heng Long. End 2019: all farms.

**MAKE A COMMITMENT
TO ANIMAL WELL-BEING**



Crocodile farms

The first-ever standard in the world for the responsible supply of crocodile leather in 2019 audited by an independent body.

Snakes and lizards

Official collaboration signed with SARCA (Southeast Asia Reptile Conservation Alliance).

Furs

Backing of the FurMark certification and special programs (Orylag, etc.).

**ENSURE THE QUALITY
OF RAW MATERIALS AND
THEIR HARMLESSNESS**

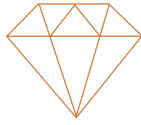
Application of the LVMH RSL

(Restricted Substances List) by 100% of Fashion & Leather Goods Houses with more than 200 controlled substances (more than 20,000 tests in 2018).

**INCREASE
THE RESPONSIBILITY
OF SUPPLIERS AND
SUB-CONTRACTORS**

**Increased number
of corporate and
environmental audits**

1,092 corporate and/or environmental audits conducted in 2018 by LVMH at 877 suppliers.



Give preference to certified supplies

To develop its responsible purchasing, LVMH relies on certification, which is a guarantee that practices comply with the highest environmental standards in its supply chains. Since 2018, for example, nearly 80% of the palm oil by-products purchased by the Group are RSPO (Roundtable on Sustainable Palm Oil) certified. Within the framework of LIFE 2020, the Group has set new objectives. By 2020, 100% of the volumes of gold and diamonds purchased by its Houses will have to be certified. In addition, 70% of the leathers will have to come from **LWG** (Leather Working Group) certified tanneries; 70% of the cotton purchased must be certified organic, **Better Cotton** grown in accordance with the recommendation of the BCI (Better Cotton Initiative), recycled or fair trade; 70% of fur farm stock purchased will have to be certified. In 2025, these rates must be raised to 100%. The Group is at the ready to help its Houses achieve these objectives. For example, since 2017, it has conducted a campaign for LWG certification of the tanneries that supply its leathers. Five new tanneries were certified in 2018, which raises the rate of leather volumes purchased by LVMH from LWG certified tanneries to 48%.

Motivated and supported, the Houses are making rapid progress. Today, all the Houses of the Watches & Jewelry business sector are certified **RJC**. Bvlgari has become the first company in its market to earn the CoC (Chain of Custody) "Traceability Chain" certification introduced by the RJC. This certification for the production of gold jewelry guarantees the exclusive use of responsible gold – from the point of extraction to the point of sale. At the end of 2018, almost all gold purchased by Bvlgari was certified. The House, which is supplied almost exclusively with responsible silver, is now actively working with other players in the sector, for the emergence of an ethical, social and environmental standard applicable to colored stones. Sustainable purchases are also increasing in the Group's other business sectors and affect an increasingly wide range of resources. The cotton purchasing policy of LVMH is one illustration. While cotton fiber is highly appreciated around the world, its use has a number of impacts on the environment, which can lead to

heavy water consumption, the use of pesticides and the erosion of soils. Therefore, the Houses are replacing conventional cotton with alternatives, such as Better Cotton or organic cotton.

Make a commitment to animal well-being

Wool, leather, fur... Several of the raw materials used by LVMH are of animal origin. At the end of 2018, to strengthen the existing approaches, primarily in the context of the LIFE 2020 goals, an in-depth project was undertaken to formalize more ambitious, cross-divisional commitments on animal supply chains. This approach, which will be shared in 2019, includes traceability, animal well-being and respect for populations and the environment.

Fur

Fur, a key resource for LVMH. On this sensitive issue, the Group respects each individual's personal choices. The Group's intention is to provide customers who want to wear fur with a product that has been made in the most responsible and ethical manner possible: compliance with all regulations governing the fur trade, no use of fur from endangered species, and a supply composed of certified skins. LVMH and its Houses work hand in hand with primarily European and American suppliers. Absolute priority is given to certified skins coming from farms that are audited regularly, with the results verified by independent third parties. These audits are based on recognized quality standards, such as the European **Welfur** label or the standards



ACTIONS AND EVENTS



Encouraged by initiatives like the training day organized in March 2018 in Portugal to introduce to their suppliers the advantages of Better Cotton, all the Houses have begun transition to more sustainable alternatives. Today, for example, Louis Vuitton is supplied with Better Cotton to manufacture 100% of the protective covers for its items before they are given to the customers. Organic cotton is also used: it now represents 100% of the cotton used at Baby Dior, and Celine Leather Goods and Loewe use it to manufacture all their packaging for leather goods.



Vicuña, a species saved by Loro Piana.

developed by **SAGA** and the American players. In addition, LVMH actively works on the development of the FurMark certification with the International Fur Federation, which will serve as an umbrella for all existing certifications and will have a more direct and active control of the existing standards.

Exotic leathers

LVMH is also extremely attentive to its supplies of exotic leathers, such as crocodile leathers. As part of a global approach on the conditions under which animals are raised and animal well-being, LVMH is far ahead of the regulations governing supplies of crocodile leathers by launching a brand new standard. These new criteria have been developed and validated by a committee of technical experts, including **the independent NSF International organization. The new certification has already been awarded to three farms that supply Singapore-based Heng Long**, a tannery wholly owned by LVMH. It strengthens the traceability requirement already met by the tannery. **Around 20 farms that supply Heng Long and are situated in Australia, Zambia, Zimbabwe, Kenya and the United States will be certified by the end of 2020.** This new standard is based on four pillars:

- the preservation of the species and respect for local communities;
- the well-being of the animal through the stages of its life;

- the working conditions of the men and women on the farms;
- the protection of the environment.

In order to control the entire supply chain for crocodile leathers, a first important step was initiated by the Group in 2011 with the acquisition of Heng Long, a tannery of high-quality crocodile leathers.

Heng Long is the first and only tannery of exotic leathers in the world to be Leather Working Group (LWG) certified since 2017 for its respect for the environment and the working conditions of its teams. It is recognized and appreciated by the world's largest luxury goods groups and supplies the Group's Houses and other players in the sector.

For six years, the tannery has worked hand in hand with its partner farms and with scientific experts and veterinarians to improve the conditions in which the crocodiles are raised. The results of the research projects conducted and the texts of the Crocodile Specialist Group of the International Union for Conservation of Nature (IUCN) served as the bases for the new LVMH standard. The audit protocol was created by a committee of internationally recognized experts, including NSF International, which led and facilitated the process thanks to its expertise in the development of animal breeding conditions. The first three farms to supply Heng Long have already

obtained certification by NSF International. The Group is committed to have all farms that supply Heng Long certified under this standard by the end of 2020.

In this way, LVMH guarantees respect for the well-being of the animals on these farms (handling, intervention of a veterinarian on site, quality of the living space and food) in addition to the traceability of 100% of the skins already in place. Work is also under way on animal well-being for the production of reptile and semi-exotic leathers. In 2018, for example, LVMH made **its collaboration with the SARCA official**. This collaboration will lead to the development of a diagnostic on the numbers of animals and the species used by the sector, a prelude to a study on improving practices. The Group sees in these initiatives a significant, long-term investment for social, ethical and sustainable development that contributes to the protection of breeders and animal species that are otherwise threatened.

Wool

Animal well-being in the wool supply chain is another priority for LVMH. The Group is working to improve sheep breeding practices, particularly by encouraging breeders of merino sheep in Australia to develop satisfactory and effective alternatives to mulesing. It is encouraging its suppliers to deploy alternatives and to adopt sustainable standards like the **Responsible Wool Standard (RWS)**. The Houses are aware of their responsibility in the well-being and conservation of the animals raised for their wool. This explains the commitment of Loro Piana to protect the vicuña. This small camelid typical in the high-altitude areas of South America is threatened with extinction. The House has taken action, finding outlets for its high-quality wool, importing breeding techniques from Australia, and even creating a natural park where 3,000 animals now live. These efforts have been successful. The herd has grown from 55,000 twenty years ago to 400,000 today. In Peru, Loro Piana strengthened its commitment to the vicuña by launching the "Acqua" project in mid-2018. The goal is to protect the water, which is becoming scarce in certain sectors because of global warming. This change has irreversible effects on the habitat of the vicuñas and, more generally, on the fauna, flora and local populations. As a result, Loro Piana decided to act to control the situation. In the region of Arequipa, the House has been working for several months to test different technical solutions designed to collect the water in reservoir basins and then to use it to irrigate pastures and create wet zones. The most efficient solutions will be rolled out on a large scale,

including in other regions of Peru. Several projects are also being monitored and deployed by LVMH and its Houses for the cashmere supply chain via the Sustainable Fiber Alliance and the Textile Exchange platform.

Leather

With regard to the traditional leathers from cattle, sheep and goats, LVMH knows that the quality of the finished products is linked to good breeding and raising conditions, for the breeders and for the animals. This explains the Group's commitment for many years to improve breeding and raising practices in close collaboration with the relevant professional organizations. This collective and participative approach promotes the dissemination of improvements and their validation by scientists. It also prevents a "race to the bottom" competition, which is a source of bad practices. LVMH also participates in the Responsible Leather Initiative led by Textile Exchange, which is aimed at defining the best environmental and social practices, from breeding through to tanning.

Finally, in the context of BSR, LVMH participated in 2016 in the drafting of a new version of the Animal Sourcing Principles and promotes its distribution with the suppliers affected.

Launched at the end of 2018, to strengthen the existing approaches and to supplement the LIFE program, an in-depth project to formalize more ambitious, cross-divisional commitments on animal supply chains, including animal well-being, will be fully unveiled in 2019.

FOCUS

LVMH CREATES A CENTER OF EXCELLENCE FOR CROCODILE LEATHER

As part of a global approach to the conditions under which animals are raised and for animal well-being, LVMH is far ahead of the regulations governing supplies of crocodile leathers by launching a brand new standard at the start of 2019.



Crocodiles raised in any Australian farm that supplies the Heng Long tannery.

“Due to insufficient rules regarding the supply of crocodiles, the Group is setting up a new frame of reference by launching a pioneering standard for the industry,” says Jean-Baptiste Voisin, Chief Strategy Officer, LVMH Group.

A first important step was initiated by the Group in 2011 with the acquisition of Heng Long, a Singapore-based tannery of high-quality crocodile leathers. For seven years, the tannery has worked hand in hand with its partner farms and with scientific experts and veterinarians to improve the conditions in which the crocodiles are raised.

The results of this work as well as the reports of the Crocodile Specialist Group of the IUCN have enabled the Group to go further in mastering the entire supply chain and have served to underpin a new LVMH standard which rests on four pillars:

- the preservation of the species and respect for local communities;
- the well-being of the animal throughout the stages of its life;
- the working conditions of the men and women on the farms;
- protection of the environment.

These new criteria have been developed and validated by a committee of technical experts, including the independent NSF International organization. Three farms supplying Heng Long have now been audited and certified by an independent body. The Group is committed to have all farms (in Australia, Zambia, Zimbabwe, Kenya and the United States) that supply Heng Long certified under this standard by the end of 2020.

Use sustainable supplies of plant-based raw materials

Along with the actions taken to improve animal well-being, LVMH ensures that it obtains sustainable supplies of plant-based raw materials. This is the meaning of its pioneering commitment to **sustainable viticulture**. Thus, its Champagne Houses were the first in the region to receive sustainable viticulture certification in 2014, and then in 2015 to earn the double sustainable viticulture and **high environmental value** agriculture certification for their entire vineyard. Since 2016, they have been assisting their grape suppliers to follow suit, particularly through training actions. In April 2018, an additional step was taken. In conjunction with the renewal of their approval to provide phytopharmaceutical product services, the Champagne Houses were also qualified as "sustainable viticulture service providers". With this dual recognition, the Houses can now encourage the deployment of sustainable viticulture by working with their vineyard partners that entrust the Houses with their plots. The Houses are also continuing their actions to increase awareness of the challenges and opportunities of sustainable wine growing in Champagne, as illustrated by the conference they organized on this subject during Green Week 2018. In order to develop sustainable viticulture, LVMH innovates. Hennessy's policy in this area is an illustration. The company joined the DEPHY network of farms, charged with promoting the establishment of cropping systems that reduce the use of phytosanitary products. In 2018, it continued its work in this area, using the technique of sexual confusion over 46 hectares of land to limit the use of insecticides and testing new options, such as the use of an algae-based green fungicide. As a result of its commitment, Hennessy achieved the objectives of the Ecophyto 2025 plan during the year, six years ahead of schedule. For many years, the House has also conducted agri-environmental trials. In 2018, for example, it experimented with a mix of Chinese radishes, oats and vetch grass for plant covers between the rows and a varied mix of green fertilizers on the resting plots. In addition to these initiatives, measures beneficial to the local biodiversity were also taken, including the establishment of 10 hectares of fallow land of nectar plants intended to prepare the soil before a new planting, the preservation of 6 hectares of prairie, and even the planting of 685 meters of shrub hedges.

Like the companies of the Wines & Spirits business sector, the Perfumes & Cosmetics Houses are working to establish a supply chain while preserving plant resources. Guerlain, in particular, has set up

several sustainable chains for its exotic raw materials. Following Chinese orchids, Indian vetiver, and even French lavender, the company has recently developed a new supply chain for Australian sandalwood.

After establishing contact with the company Santanol during a trade show, Guerlain's perfumer Thierry Wasser visited this producer's sandalwood fields. Seduced by their potential, he offered his expertise to assist Santanol in obtaining an excellent product, through a responsible process aimed mainly at preserving local biodiversity. This Australian sandalwood made a remarkable entry at Guerlain, since it is used as one of the signature ingredients of *Mon Guerlain*, the women's perfume launched in 2017.

Monitor the materials and substances present in the products

LVMH's sustainable procurement policy begins with very careful attention to the compliance of the materials and substances used to manufacture the products. The Group scrupulously ensures compliance with national and international regulations in this area. For example, it ensures application of the regulations resulting from the implementation of the Nagoya protocol, which is intended to provide better protection for the planet's species and ecosystems, and share the benefits more equitably; application of the CITES for trade in certain exotic plants and leathers; the 2013 European Wood Regulation and the environmental obligations related to the Common Agricultural Policy for grapes.

Compliance with regulations is the vital foundation on which LVMH has constructed a much more ambitious approach that is equal to its push for excellence. To develop this approach, the Group takes into account the opinion of scientific committees and the recommendations of professional associations. It has established internal rules for the development of new products and ensures they are applied by its suppliers. It has also established a virtuous circle by identifying the most stringent regulations and assisting its Houses and their partners to comply with them. Thus, since 2013, each supplier has undertaken by letter to comply with the **REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals)**, which has governed the registration, evaluation and authorization of chemical products within the European Union since 2007 (or similar regulations such as Proposition 65 in California). To provide



In Épernay, at the Moët & Chandon vineyards.

greater support for the Houses in their substitution and innovation projects, LVMH has set up a network of REACH correspondents who meet regularly with the Environment Department. The Group has taken this one step further for its Fashion, Leather Goods and Watchmaking Houses, and has its own **LVMH Restricted Substances List (RSL)**, which prohibits

or restricts the presence of certain substances in the items sold and their use by suppliers. The Fashion & Leather Goods Houses also have access to the LVMH Testing Program. This program allows them to use partner laboratories to test substances considered riskier because of the materials. In addition to these initiatives, specific guides have been developed to assist suppliers to eliminate substances and use alternatives.

▾

ACTIONS AND INITIATIVES

In late 2018, LVMH joined the Zero Discharge of Hazardous Chemicals program. This membership is a first step and symbolizes the goal of the Group's Houses to not only have a Product Restricted Substances List but also a Manufacturing Restricted Substances List, which controls the use of substances directly at the manufacturing sites.

Increase the responsibility of suppliers and subcontractors

The actions taken by LVMH to establish sustainable supplies all have one point in common: they require suppliers and subcontractors to assume greater responsibility. This explains the implementation in 2008 of a Code of Conduct for Group suppliers. Updated in 2017, this code defines the principles to be respected, such as strict application of the regulations and standards in force, the use of techniques that protect natural resources, and the establishment of an environmental management

TOOLS



Supplier Code of Conduct created in 2008 and upgraded in 2017.

Compliance audits conducted by the Group and the Houses at their suppliers: corporate, environmental audits...

Group tools to strengthen the environmental assessment of suppliers: 35 questions.

Pooled audits by Houses, where they use the same suppliers.

Introduction of corrective actions for audits whose results do not align with Group requirements.

system. LVMH also has environmental audit grids adapted to the buyers in a 10-question or 35-question version. Training sessions for LVMH buyers are organized on a regular basis. The Houses can launch compliance audits with their suppliers at any time and are increasingly using this right.

The audits are not just a means to control effective implementation of the Code of Conduct principles. They allow LVMH to help its suppliers and subcontractors to improve at the environmental level. The company identifies non-conformities and the areas for improvement, can launch corrective or innovative action plans, monitor results, and make adjustments within the framework of ongoing improvement. The campaign conducted group-wide in 2018 is an illustration of this process. Of the 1,092 social and environmental audits conducted in 2018, 20% of the suppliers audited did not meet the requirements defined by the Group, according to a four-level performance scale, that takes into account the number and gravity of the non-conformities found, 4% of which found non-conformities considered to be critical. The Houses also know how to anticipate in order to improve the scores obtained during the audits. For

example, in November 2018, Belvedere organized its 13th seminar in Poland based on a partnership program set up with scientists and its raw materials suppliers to improve the quality of the spirits, deploy agricultural methods that protect the environment, and guarantee the purchase of local rye. In 2018, Fendi had 314 audits conducted. The company developed specific criteria to assess the performances of its suppliers at the social and environmental levels. These performances now count for 20% in the total assessment, along with price, delivery time, quality and development. Between 2017 and 2018, Fendi sharply increased the audits of raw materials suppliers for the production of its ready-to-wear and fur items. Audits jumped from 103 to 149, an increase of 44%. The House is now preparing the next step. It will audit the suppliers of threatened raw materials in 2019.

In 2018, the policy to increase the responsibility of LVMH suppliers was again enhanced through pooling. LVMH now has an in-house platform to share audit results and joined EcoVadis, another outside platform to assess the social and environmental responsibility of the suppliers. For example, the Houses of the Perfumes & Cosmetics business sector conducted 20 packaging supplier audits and 26 audits of raw materials suppliers using this pooled method. A total of 105 audits of the same type are scheduled by 2020.

TABLE TRACKING LIFE 2020 SECTOR OBJECTIVES

Indicators	Baseline (2013)	2018 performance	2020 objective
Wines & Spirits			
Sustainable viticulture certification (as a percentage of tons of grapes certified)	LVMH vineyards: French vineyards: 100%	LVMH vineyards: French vineyards: 100% Rest of world: 44%	LVMH vineyards: French vineyards: 100% Rest of world: 44%
	Grape suppliers: Champagne (7%)	Grape suppliers: Champagne (10%)	
Fashion & Leather Goods			
LWG certification of tanneries (as a percentage of tons of leather coming from certified tanneries)	25%	48%	70%
Certified cotton (BCI, organic, etc.)	2%	15%	70%
Perfumes & Cosmetics			
Performance of perfume ingredient suppliers	64	85	90
Performance of cosmetic ingredient suppliers	56	75	80
Palm oil derivatives (as a percentage of tons of by-products certified RSPO Mass Balance or Segregated)	0%	79%	70%
Fashion & Leather Goods			
Diamond: RJC COP certification	90%	99%	100%
Gold: RJC COP certification	94%	84%	100%
RJC CoC certification	-	77%	100%

OBJECTIVE

CO₂

Reduce by
25%
the CO₂ emissions associated
with energy consumption

At the beginning of the new century, for example, LVMH participated in experiments with a method for evaluating emissions that was to become the carbon footprint. Fifteen years later, in 2015, the company also became the first group in the luxury goods industry to develop an internal carbon fund. Driven by innovations and the daily commitment of its teams, the LVMH Group explores all channels to reduce its CO₂ emissions, acting on the energy consumption of its sites, its production, transport, logistics, and even work habits. With LIFE 2020, the Group mobilized its Houses around a new shared ambition: **to reduce the CO₂ emissions associated with energy consumption by 25% between 2013 and 2020**. To achieve this goal, three levers of progress are used. The first is to improve tracking and reporting. The second is to improve energy efficiency, i.e. a reduction in energy consumption. As a priority, the Houses are targeting improved energy efficiency in their stores, which cover more than one million square meters around the world. The third lever is a growing use of renewable energy, and the target is to reach a rate of 30% of the Group's energy mix in 2020. This strategy is proving to be effective since, at the end of 2018, LVMH had reduced its emissions from energy consumption by 16% from 2013 levels.



PRIORITIES

- Reduce the energy consumption of stores.
 - Promote the use of renewable energy.
-

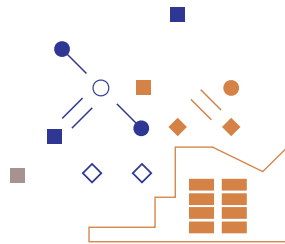
REDUCE BY 25% THE CO₂ EMISSIONS ASSOCIATED WITH ENERGY CONSUMPTION



ACCELERATE INNOVATION WITH THE INTERNAL CARBON FUND

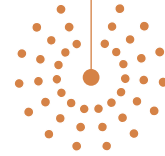
x 2
Double the number of structuring projects promoting CO₂ reduction

- 28 Houses affected in 2018
- CO₂ price per ton doubled: €30 since January 1, 2018
- €11.3 million investment in 2018



Appointment of an Energy Officer at Houses eligible for the carbon fund

IMPROVE ENERGY EFFICIENCY



-16%
less energy consumption in kWh/m² in stores between 2013 and 2019

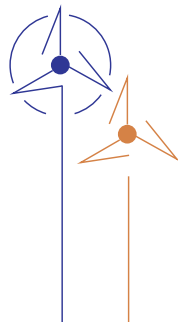
Improved energy management



300,000 m²
illuminated exclusively by LEDs in 2018 as part of the LVMH Lighting program

USE INCREASING LEVELS OF GREEN ENERGY SOURCES

Increase the number of framework contracts signed
with renewable-energy suppliers.



Increase the proportion of renewable energy in the Group's 2108 energy mix



REDUCE THE CARBON IMPACT OF TRANSPORTATION AND MOBILITY



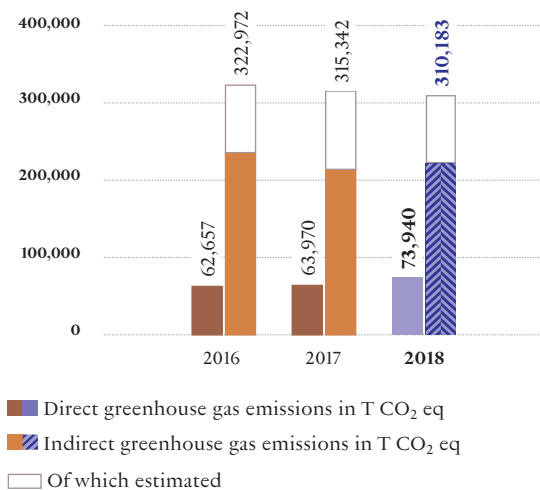
Opt for transport that generates less CO₂

- Louis Vuitton includes a zero-diesel requirement in its "Global Transport" calls for tender.
- Hennessy develops a rail transport policy for its Cognac shipments.

Access for employees to more-sustainable modes of transport

- Jojob app facilitates ride-sharing for Bvlgari employees in Valenza, Italy.

CHANGE IN GREENHOUSE GAS EMISSIONS (in metric tons of CO₂ equivalent)



Accelerate innovation with the internal carbon fund

In three years, the LVMH internal carbon fund has become a major strategic driver for investments to combat climate change. It was at the opening of COP21 (the 21st Conference of the Parties to the United Nations Framework Agreement on climate change) in Paris that this fund was launched. It is based on the idea that placing a value on the cost of greenhouse gas emitting activities can stimulate a change in behaviors. LVMH decided to set a price of €30 for each ton of CO₂ generated by the operations of its Houses, particularly by the energy consumption of their production sites and sales floor areas. The contributions of the Houses are calculated on this basis. They must then release an investment amount that is at least equal to finance innovative projects that will limit their carbon footprint. As a result, the fund gives them an “additional right to invest” to reduce their greenhouse gas emissions. Two types of projects can be financed: equipment, to reduce this consumption, and the production of renewable energies. The projects supported are selected on the basis of the carbon impact (emissions avoided), and the trigger effect (carbon fund approval releases the investment). The internal carbon fund and the active participation of the Houses have allowed the Group to

establish a virtuous circle to accelerate the decline in its greenhouse gas emissions. From €15 initially, the price per metric ton of CO₂ generated had doubled in 2018 to €30 at January 1. Contributions thus reached a total of €11.3 million, up from €6.7 million and €5.8 million in 2016 and 2017. The fund financed 112 structuring projects, 100% more than the previous year. The projects selected are led by 28 Houses: Acqua di Parma, Belvedere, Benefit, Berluti, Bvlgari, Celine, Chandon India, Christian Dior Couture, DFS, Fendi, Fred, Fresh, Givenchy, Glenmorangie, Guerlain, Hennessy, Hublot, Le Bon Marché, Loewe, Loro Piana, Louis Vuitton, LVMH Fragrance Brands, MHCS, Parfums Christian Dior, Royal Van Lent, Sephora, Tag Heuer and Zenith. The majority (55%) of the projects financed affect the boutiques, 43% the industrial and logistics sites and 2% the corporate offices. Nearly 80% of the projects will improve energy efficiency and 13% involve the production of renewable energy.

Two Houses, Fendi and Le Bon Marché, took advantage of this measure designed to accelerate changes. The Fendi Energy Officer works on 13 sites, including 7 boutiques, which represent a total of 28,000 m². The manager at Le Bon Marché has jurisdiction over the entire Paris perimeter of the House. Certain projects financed by the LVMH carbon fund are particularly innovative, such as the project launched by Belvedere in Poland. This project is working to design a co-generation system for the production of power and steam from biomass. The House is going to invest €2 million in the development of this doubly pioneering equipment because of its reduced size and its industrial use. The operation is so innovative with such potential for the future that the Polish government has decided to subsidize it at the level of 40%. The Louis Vuitton House alone has launched 45 different projects since the fund was formed in 2016,

ACTIONS AND INITIATIVES

For the first time ever, in 2018 an Energy Officer was appointed, eligible to manage the carbon fund. The Energy Officer's role is to reduce energy consumption while ensuring operational continuity and quality at the sites.

FOCUS

THE HOUSES TAKE ADVANTAGE OF THE CARBON FUND

Two years after its creation on the occasion of the opening of COP21, the internal carbon fund achieved its objective and enabled the Group to set up a virtuous circle to speed up the reduction in greenhouse gas emissions. In 2018, the Group doubled carbon metric ton prices, reaffirming its drive for environmental excellence. Three examples of proactive participation by the Houses.



Belvedere: R&D to install a biomass-fueled power plant.



Chandon India: photovoltaic panels to cool wine cellars.



Louis Vuitton: a proven initiative for green investment.

“Striving for efficiency, we focused on the energy used for distillation. A biomass-fueled power plant at our facility will produce our own renewable energy. The project was supported by the carbon fund right from the R&D stage, and that is so valuable when you consider how much investment is necessary.”

Wojciech Kosakowski,
Technical Director, Belvedere

Starting in 2021, Belvedere will be reducing its CO₂ emissions by **2,444** metric tons per year. An ambitious initiative in a country where **81%** of the energy is produced from petroleum and coal.

“In a tropical country like India, we have to cool our wine cellars. We decided to use the intense Indian sunshine to our advantage and install solar panels on the roofs at our site, in Nashik. This project supported by the carbon fund is all the more beneficial in a country that suffers from heavy pollution.”

Rajesh Dixit, Estate Director,
Chandon India

To keep its sparkling wines at **16°C**, Chandon India uses **469** solar panels to power the facility and reduce CO₂ equivalent emissions by **19%** in a region where **57%** of electricity is produced by burning coal.

“At Louis Vuitton, the carbon fund is an effective tool for raising awareness and mobilizing in-house commitment to tackle the climate challenge! Every year, we call for projects from our environment community. And over the years, we are proud to see that our property managers and site and regional contacts (at head offices, stores, logistics centers, etc.) are submitting more and more projects to us. We assess them based on our own effectiveness criteria, and then submit them to our Chairman who personally decides which ones to approve.”

Sandrine Noël, Corporate
Environment Manager,
Louis Vuitton

45 projects driven by Louis Vuitton and approved by the carbon fund avoid **892 metric tons⁽¹⁾** of CO₂ equivalent in offices, warehouses and stores, amounting to **10.5%** of total Louis Vuitton emissions.

(1) As the 45 projects were set up mainly in countries with a low-emission energy mix (e.g. France) or sites already supplied by electricity produced by renewable energy, CO₂ equivalent gains are more difficult to obtain.

ranging from the installation of guidance systems with heat recovery on cutting machines to the installation of LED lighting in boutiques and a green energy supply for the corporate headquarters. Overall, these projects represent a reduction of 892 metric tons of CO₂ equivalent emitted, representing 10.5% of Louis Vuitton's emissions. The new projects financed in 2018 by the internal carbon fund will give the Group the means to continue to combat climate change. During their entire life cycle, the equipment installed in 2018 will, in fact, prevent the emission into the atmosphere of nearly 3,000 metric tons of CO₂ equivalent. The installation by Chandon India of 150 kW of photovoltaic panels for cooling sparkling wines alone represents a saving of 190 metric tons of CO₂ equivalent per year, a decrease of 19% in emissions.

Strengthening the assessment and monitoring of CO₂ emissions

A study conducted in 2016 on the environmental impact of the production of the raw materials necessary in the manufacture of the Houses' products was updated in 2018. The study stresses that more than 70% of the emissions are generated by leather, grapes and the glass used in packaging. With the assistance of its partners, the Group continues its efforts to quantify these emissions, and is also working to refine the assessment of the impact of raw materials such as leather, gold or cotton. The principal sources of greenhouse gas emissions are the production of leathers (432,000 metric tons of CO₂

equivalent), viticulture (172,000 metric tons of CO₂ equivalent, which includes the wines owned by Group Houses as well as the grape suppliers) and glass packaging (158,000 metric tons of CO₂ equivalent). Transport, another key item in the scope 3 of LVMH, is discussed in the following paragraphs; downstream transport represents 617,000 metric tons of CO₂ equivalent and upstream transport 76,000 metric tons of CO₂ equivalent.

The Group's ability to measure its greenhouse gas emissions precisely and monitor changes over time is one of the keys to the success of its approach; it knows where and how to act first in order to be as effective as possible. This is the reason for the constant reinforcement of reporting. LVMH assesses its carbon footprint each year by consolidating the emissions associated with the energy consumption of the sites (scopes 1 and 2). In 2018, its emissions reached 295,759 metric tons of CO₂ equivalent, plus the 88,364 tons estimated and generated by 30% of the sales floor areas not included in the accounting consolidation.

Improve energy efficiency

In 2018, the total energy consumption of LVMH was 1,096,760 MWh, plus 180,323 MWh consumed by the 30% of sales floor areas not included in the scope of the reporting. Reducing this consumption has always been a crucial challenge for the Group, which again raised its goals with LIFE 2020. In order to achieve its objective, the Group is improv-



LVMH LIGHTING PROGRAM

In 2018, LVMH continued to boost the LVMH Lighting program. To optimize the quality of facilities and cut costs, the Group has reduced the number of its LED equipment suppliers to 15. It now wants to develop contracts to govern relations between its suppliers and its Houses. Some of them have begun this process. DFS, for example, signed a two-year contract with its supplier. LVMH also contributes to the emergence of high-

tech facilities. LVMH is heavily involved in the LED End-Customers Club and in Certiled, a forum for discussions with manufacturers, and opened, during an LED Expo in May 2018, a "LAB" designed to present innovative solutions to its suppliers. The LVMH Store Lighting Working Group, a space for dialog with the Houses about green lighting in the boutiques, has generated discussions on new trends such as the white laser. Its desire

for excellence also pushes LVMH to work for the consideration of environmental challenges in the design of eco-lighting solutions. This is why it participated in the creation of a think tank of manufacturers in May 2018. The objective is to encourage the marketing of LED equipment with a longer life cycle, and that is repairable, reusable and completely recyclable through the establishment of an eco-design label.

ing energy efficiency, targeting in particular its 4,370 boutiques, the principal sources of its carbon footprint (70% of the scopes 1 and 2 CO₂ emissions of LVMH is related to their energy consumption). In this context, LED (light-emitting diode) technology is of great interest to the Group because lighting is one of its main items of energy consumption at the sites (representing half the consumption of the stores). An LED light reduces electricity consumption by 30% compared with traditional lighting, while eliminating much of the maintenance and supplying quality, reliable lighting. Thus, LVMH wants to have equipped 90% of its stores and production sites with LED lighting by 2020. The progressive use of LED lighting alone should reduce the electricity consumption of the boutiques by 15% by 2020. The Group is disseminating an "LED culture" in its Houses, offering them support to install it through the LVMH Lighting program. The program has also allowed LVMH to develop its own equipment, like the LVMH Light Engine, a miniaturized lighting module that did not exist on the market: it provides a light volume identical to that of a 40 watt bulb but uses only 12 watts.

The Group is gradually decreasing the amount of LED equipment without losing power or lighting quality. The long-term challenge is to fall below the threshold of 30 watts consumed per m². The emphasis is placed not only on the choice of better solutions, but also on their correct use in the luxury goods industry. Architects are key participants in this area and LVMH offers them specific training sessions. These sessions continued in 2018, taking the form, for instance, of visits to museums, exhibitions and conferences given by lighting designers. These initiatives are beginning to yield concrete results in the sales floor areas. In 2018, Guerlain worked with a lighting designer to optimize the light and reduce electricity consumption in its Passy boutique. The work conducted led to the installation of a system of smart drivers which can create lighting scenarios without a wired system.

Over the years, the number of m² illuminated entirely with LED lighting within the Group has continued to increase. Between the end of 2016 and the end of 2018, it rose from 80,000 to 300,000, with – and this is key – a significant reduction in CO₂ emissions. The mobilization of the Houses continues to keep pace. Sephora proved it in 2016 when it announced the three-year deployment of LED installations to replace the traditional lighting in the sales floor areas of more than 280 boutiques located in 12 countries. Two years after it was launched, this project (financed by

ACTIONS AND INITIATIVES

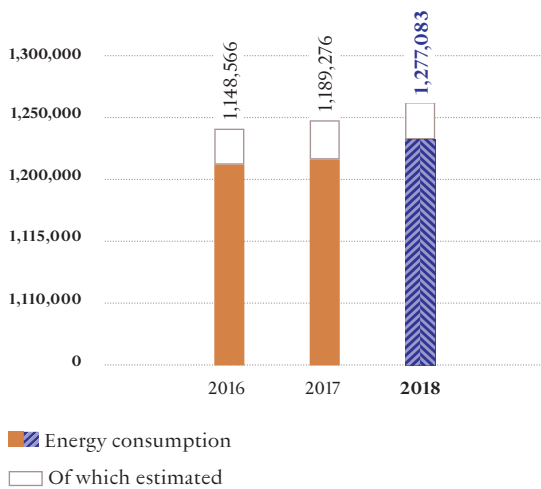


At Cloudy Bay, the installation of a hot water supply system that runs only on green electricity, to replace the old system half powered by diesel, will result in a substantial reduction in the carbon impact of hot water production: emissions are expected to decline from 54.4 metric tons of CO₂ equivalent to 1.5 tons. Several Louis Vuitton workshops have worked to reduce their energy consumption as a result of technical improvements made in 2018, which included the repair of air conditioning units (in the workshops at Asnières), the replacement of compressors (including those in the Ducey workshop), or the replacement of two 405 kW boilers dating from 1990 with two 370 kW condensation boilers (in the Saint-Pourçain workshop). The year 2018 was also marked by preparations for very promising projects. The first project, launched in 2019, will allow the boutiques of 12 Houses (Acqua di Parma, Berluti, Bvlgari, Celine, Christian Dior, Cova, Emilio Pucci, Fendi, Givenchy, Loewe, Loro Piana and Louis Vuitton) located on Montenapoleone and Sant'Andrea streets in Milan, Italy, to use geothermy as an energy source, particularly for their production of sanitary hot water. The resulting energy saving in each boutique is estimated at nearly 50%.

the Group's internal carbon fund) has already saved 2,460 metric tons of CO₂ equivalent (i.e. 14% of the carbon emissions). The Houses are also developing tools to monitor their consumption in real time and manage it better. Between 2007 and 2018, for example, Sephora deployed an energy management system in all its sales floor areas in the United States. The House is now going to optimize energy management in each store using smart technologies such as smart thermostats.

A site that respects the environment is an energy-efficient site. With this in mind, the Houses use all the resources at their disposal to limit their consumption. In all the Group's business sectors, they are installing metering systems, and then completing and refining them. They record and regularly analyze indicators, initiate energy audits and track waste. They are centralizing the control and management of consumption, naming energy managers, and training their teams in good practices. They are improving the lighting, heating and air conditioning, and are repairing and modernizing their equipment and processes to gain energy efficiency, replacing

GROUP'S ENERGY CONSUMPTION (in MWh)



fossil energy with green energy sources, investing in innovative installations and processes, such as geothermy, heat recovery, recovery of biomass, and more. At the sites, for example, more energy-efficient forced air burners are replacing atmospheric burners. Condensation furnaces and solar water heaters are installed. All lighting is moving to LED, including in the plants and workshops, programming clocks are installed, adjustments are made to optimize natural light and nocturnal lighting is limited. New insulation materials and air curtains are being installed to conserve heat inside buildings. Some Houses are even transferring the management of their data to the cloud to reduce the use of their local servers.

Use increasing levels of green energy sources

To reduce its carbon footprint, LVMH is also replacing fossil fuel energy with green energy sources. From representing barely 1% in 2013, the portion of renewable energy sources in its energy mix reached 27% at the end of 2018. Here again, so much progress has been made that the Group tripled its goals for 2020, raising the target rate from 10% to 30%. One of the main drivers for action in this area is the signature of framework contracts with energy suppliers. Agreements are signed at Group level.

Since 2015, 450 French sites of LVMH, owned by 27 Houses, have been supplied exclusively with green energy for example. A similar framework agreement was signed in 2016 to supply several Italian Houses and the approach is soon expected to be rolled out to the supply for its Spanish and American sites. In addition to these contracts, the Houses are being equipped to produce renewable energy. For example, for four years all the electricity consumed at the Tag Heuer site in La Chaux-de-Fonds, Switzerland, comes from renewable sources. The distributor Viteos also markets electricity produced from 777 m² of photovoltaic panels installed on the roof of the La Chaux-de-Fonds site with the agreement of Tag Heuer. Financed in part by the House, the panels supply 108,000 kWh of electricity per year. In 2019, TAG Heuer is planning to use a portion of this solar electricity for itself and has initiated discussions with Viteos to supply biogas.

Reduce the carbon impact of transport and mobility

Transport

Transport is a major source of greenhouse gas emissions for LVMH. In order to reduce its carbon footprint, the Group also acts in this area. The Houses do not directly manage the transport of their products over long distances. They are, however, adopting practices that will allow them to combine operational performance and environmental performance. Some equip and organize themselves to limit the volumes to be shipped, making each volume count to the maximum. The Houses are also opting for transport methods that generate less CO₂, preferring trains to trucks and ships to planes. Since 2010, Hennessy has conducted a voluntary process to develop rail transport of its products leaving the Cognac railway station. At the end of September 2018, 34% of the shipments from Cognac to European ports were carried by train. In addition, during the year, the House established a sustainable solution for its shipments to China: the "silk route", a 10,700 km journey by rail through six countries. Twice as fast as ships, this solution also has a carbon impact 100 times lower than air transport. In recent years, Houses have been exploring a new path: make respect for the environment one of the selection criteria used for their transport providers. The lead was taken by Louis Vuitton in 2016, with the launch of a "World Transport" bid tender for the distribution of its products leaving France to all its warehouses. The bid process included a preliminary environmental component to allow preselection of candidates. In 2017, the House

BREAKDOWN OF GREENHOUSE GAS EMISSIONS GENERATED BY UPSTREAM TRANSPORTATION IN 2018
(in metric tons of CO₂ equivalent)

	Road	Air	Sea	TOTAL
Wines & Spirits	16,294	407	1,120	17,821
Fashion & Leather Goods	966	15,876	52	16,894
Perfumes & Cosmetics	1,205	37,239	457	38,901
Watches & Jewelry	3	1,997	1	2,001
Selective Retailing	-	-	-	-
TOTAL	18,468	55,519	1,630	75,617

BREAKDOWN OF GREENHOUSE GAS EMISSIONS GENERATED BY DOWNSTREAM TRANSPORTATION IN 2018
(in metric tons of CO₂ equivalent)

	Road	Rail	Air	Sea	River barge	Electric vehicle	Liquefied natural gas	TOTAL
Wines & Spirits	23,020	587	42,949	18,344	203	4	209	85,316
Fashion & Leather Goods	18,478	40	173,238	134	1	-	154	192,045
Perfumes & Cosmetics	2,911	-	279,969	2,632	-	-	-	285,512
Watches & Jewelry	349	-	39,179	196	-	-	-	39,724
Selective Retailing	3,124	-	10,802	185	-	81	-	14,192
TOTAL	47,882	627	546,137	21,491	204	85	363	616,789

launched a similar bid tender, this time for the transport of components of its products. **In 2018, the "World Transport" bid process** was extended with an **"Asia Transport"** bid tender. It resulted in the selection of a virtuous environmental service provider to distribute the products in this region. The same responsible logic is driving the Houses to reduce CO₂ emissions for shipping products over short distances. Sephora is developing delivery to the last mile to its points of sale by electric trucks. These deliveries, which appeared for the first time in France, were extended to China in 2015, Italy in 2016 and Spain in 2017. In 2018, the House deployed them in North America. A "zero emission" vehicle now delivers to its points of sale in San Francisco and some of its branches in East Bay. This initiative saves 36 metric tons of CO₂ equiv-

alent every year. Sephora's commitment to alternative transport in 2018 earned it the Loader prize awarded by a manufacturer of social and environmental assessment software for transport. It recognizes the company's growing use of hybrid vehicles and the very high proportion (98%) of tons/kilometers carried by its committed and labeled shippers.

Mobility

In addition to the efforts made in the transport of goods, **the Houses promote the sustainable mobility of their personnel. They are acquiring hybrid and electric vehicle fleets and installing charging stations. They are providing bike parking areas and establishing shuttle services. They are developing mobility plans and rely on a variety of mechanisms to encourage their employees to abandon**

the individual car in favor of greener transportation methods. In Italy, the employees of the Bvlgari factory in Valenza, for example, are encouraged to car-share through the Jojob mobile app. The success of this effort was demonstrated in 2018, when the House was recognized as the Italian company most frequently using the Jojob services, with nearly 22,000 certified trips made via the application. As a result, Bvlgari and Jojob strengthened their partnership. Those who work at the factory can now have their trips made on foot, bicycle or shuttle certified. Moreover, the platform has been charged to collect information about the travel of all employees at the site, and a Jojob team makes regular visits to increase their awareness of the advantages of sustainable mobility.

scientific knowledge, the vineyards located in New Zealand and Australia actually seem to be the least sensitive to climate change. In the European countries, several responses are possible for the Houses depending on the magnitude of the change. The harvest dates can be modified, the methods for arranging the vines can change (expand the rows, increase the size of the vine trunk, use of irrigation, for example), new vine varieties can be tested, etc. For the Argentine and Californian vineyards, the deciding factor is the availability of water. The Houses are deploying best practices to ensure planned and controlled irrigation.

Adapt to climate change

Mobilized to combat climate change, LVMH must also adapt its activities to this change. The Group conducted a study on the different challenges it must meet in the context of this adaptation. The work performed revealed that the step in the value chain most sensitive to climate changes was the preparation of the raw materials, particularly for the production of wines and spirits. LVMH therefore made changes in viticulture practices a major component of its adaptation strategy. This is particularly the case in Europe and on the American continent: based on current

TABLE TRACKING LIFE 2020 CLIMATE CHANGE OBJECTIVES

Indicators	Baseline	2018 performance	2020 objective
CO ₂ emissions	220,480 metric tons of CO ₂ equivalent	-16%	Reduce CO ₂ emissions by 25% (scopes 1 and 2 at constant consolidation scope)
Breakdown of renewable energy in the Group's energy mix	1%	27%	Reach 30% renewable energy in the Group's energy mix
Energy performance of the stores (in kWh/m ²)	460 kWh/m ²	-16%	Improve the energy performance of the stores by 15% (in kWh/m ²) (goal reached in 2017)



Aerial view of the Cheval Blanc Estate, in Saint-Émilion.

OBJECTIVE

SITES

10%

**improvement in the key
environmental efficiency indicators
for all sites**

By launching the LIFE program, LVMH made a commitment to ensure that all its sites respect the environment. This commitment was strengthened with LIFE 2020 and today covers 393 production, logistics and administrative sites and 4,592 stores. LVMH's goal is organized into several objectives. The Group has asked its Houses to set up an environmental management system at all their production sites and all their administrative sites with more than 50 employees. They must also make a commitment **to a process of ongoing improvement at each site by reducing key indicators of environmental efficiency by at least 10% between 2013 and 2020**: water consumption and/or energy consumption and/or waste production. The Houses have two objectives to reach for their boutiques. The first is to improve the average energy efficiency of each existing sales floor area by 30%. The second concerns the new boutiques, which must reach at least 50/100 on the LVMH Store Guidelines grid developed on the basis of the most stringent global standards. The implementation of the LVMH LIFE in Stores program, based on this grid, is one of the drivers used by the Houses to make progress. This is not the only one: whether it is sales floor areas, factories, workshops or corporate offices, they now have many ways of taking action to improve the environmental profile of their sites.



PRIORITIES

- Reduce and convert waste.
 - Reduce water consumption.
 - Control energy use.
-

IMPROVE THE KEY INDICATORS OF ENVIRONMENTAL EFFICIENCY FOR ALL SITES BY AT LEAST 10%

PROMOTE THE ECO-DESIGN OF THE BOUTIQUES



LVMH LIFE in Stores program

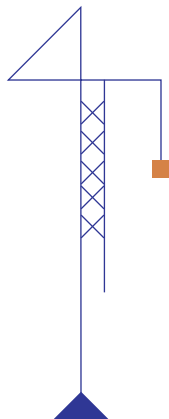
- **Educate and train teams** in the environmental excellence of retail spaces and organize the LIFE in Stores Awards ceremony in 2018.
- **Achieve the minimum score of 50/100** on the LVMH Store Guidelines grid in 2020 for all new boutiques.
- **Improve the energy efficiency of boutiques:**



MAKE SUSTAINABLE CONSTRUCTION WIDESPREAD

Certification of all new buildings with international standards as basis: BBC®, HQE®, BREEAM®, LEED®.

The latest news to date: the Hennessy Pont Neuf plant certified HQE® and the Bvlgari manufacturing plant in Valenza certified LEED®.



INTEGRATE THE ENVIRONMENT INTO SITE MANAGEMENT

Set up a certified environmental management system (EMS) at production sites and administrative sites.



SAVE AND PURIFY WATER

Improve water management



Water consumption at production sites:



Water pollution:

Target: to reduce organic waste by 70% between 2013 and 2020.



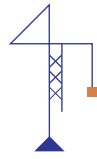
REDUCE WASTE AND GIVE IT NEW LIFE

2,143 tons of waste treated and converted at the CEDRE recycling facility.



Waste recycled, converted to energy, or reused:





Make sustainable construction widespread

For several decades, LVMH has acted to build and renovate its buildings with respect for the environment. The Group's objective today is to roll this policy out groupwide in order to have sites in compliance with the major international standards, such as BBC® (Energy-Efficient Building), HQE® (High Environmental Quality), BREEAM® (Building Research Establishment's Environmental Assessment Method) or LEED® (Leadership in Energy and Environmental Design). By relying on these standards, LVMH ensures that all environmental parameters are taken into consideration at every step of its real estate projects, from the construction site to the quality of the architecture, the use of natural materials, the search for the greatest energy performance possible or waste management and the maintenance of the premises. This policy is relayed by the Houses: for example, in 2018, Louis Vuitton decided to incorporate environmental criteria into the renovation of the showrooms at its Paris headquarters and in the design of all its workshop projects. This increase in sustainable construction allows the Group to expand its list of eco-friendly sites every year. Several are remarkable for their pioneering or particularly green character. This is the case of the Guerlain plants in Chartres and those of Hennessy at Pont Neuf, both of which are HQE® certified; it is also true for the Bvlgari factory in Valenza, LEED® certified at the Gold level; for Eole, the Louis Vuitton warehouse in Cergy-Pontoise, which has earned LEED® EBOM certification, also at the Gold level; and also, for two new European corporate offices of Sephora, certified HQE® at the level of Excellent. In 2018, the list of LVMH sites built or renovated in an exemplary way grew even longer. The extension of the Moët-Hennessy cellars and fermenting room at Montaigne earned HQE® certification as a result. And the new boutique of Parfums Christian Dior on the Champs-Élysées in Paris was certified LEED® at the Silver level. The House continues to forge ahead. In 2018, it completed an LCA on its point of sale at Le Printemps Haussmann, with the goal of using the results

obtained to support its teams in moving toward a systematic approach of eco-design for the boutiques.

The sustainable construction process of LVMH includes growing attention to the interior decor of the sites. As part of the renovation of its Sèvres boutique, scheduled in 2019, Guerlain for example planned the installation of furnishings manufactured from recycled materials. The new display furniture for Benefit products at Sephora is also made from recycled materials. Eco-designed according to the ReNew system, it is lighter and more modular, which means that it can be transported, installed and changed in an eco-friendlier manner. The management of the end of life of furniture items is also optimized, as each element can be dismantled to facilitate reuse. Integration of the buildings within their natural environment is another major challenge for the Houses. Extremely vigilant in this area, they create flowery fallow land and green spaces managed sustainably, reforest and protect certain areas, install bee hives and establish eco-pastures. An illustration of this policy is the fact that, since 2018, between May and October, sheep graze around the Moët-Hennessy storage site in Recy. This prevents pollution and the noise that mechanical garden tools could generate. The herd also offers a bucolic appearance to the location that is appreciated by the employees.

Promote the eco-design of the boutiques

The strong commitment shown by the Houses allowed LVMH to reach one of the initial objectives of LIFE 2020 ahead of schedule – the 15% improvement in the average energy efficiency of the existing boutiques. Antonio Belloni, Group General Manager, thus announced the Group is doubling the target rate to 30%. This rapid progress is particularly driven by LVMH LIFE in Stores, a new program intended to support the teams. Launched in 2016 as an extension of LVMH Lighting, it is designed to encourage the inclusion of the environmental challenges upstream of projects for boutiques, starting at the design phase. It is based on internal guidelines, developed on the basis of the best known global standards, including LEED®, HQE® and the WELL Building Standard®. The purpose of LVMH LIFE in Stores is to inform, educate and train key audiences about the environmental excellence of the sales floor areas. Since its roll-out, the program has given birth to a guide, a



check list identifying the ten most important points to be covered to design an energy efficient boutique, and an information letter specifically designed for the architect community. A LIFE in Stores fair was also organized to highlight the latest innovations and increase awareness, at all levels of the Group, of the responsibility of each individual and the efforts to be made. The second edition of the LIFE in Stores fair was organized on May 16-17, 2018. At the end of the event, the LIFE in

Stores Awards recognized the best eight environmental practices of the Houses at their points of sale. Seven Houses were honored. Celine received the Envelope prize (building insulation) for its Miami store. Louis Vuitton earned the Building Services prize (water and energy management) for its Place Vendôme store in Paris. Loro Piana was recognized with the Air and Acoustic award (air quality and sound insulation) for its boutique on New Bond Street in London. Guerlain received the Interior Design prize (use of materials, transport) for its Paris boutique on rue Saint-Honoré. DFS was awarded the Lighting Design prize (energy efficient lighting) for its boutique in the Palais de T Fondaco dei Tedeschi in Venice. The Maintenance prize (management of consumption) was presented to Loewe for its Puerto Banús boutique near Malaga. The Construction prize (management of construction waste) went to Sephora for its boutique in Century City, near Los Angeles. And the special award for Lighting was won by Sephora Europe for its LED retrofit project. More than just awards, these prizes are a source of inspiration within the

TOOLS



**Implementation of an EMS:
a very effective tool for continuous improvement.**

Group, opening new paths for areas as varied as building insulation, lighting efficiency, consumption management and air purity.

Integrate the environment into site management

The implementation of an EMS is another cornerstone of LVMH's ecological policy at its sites. EMS, which incorporates the environment into management of the sites, is a very effective tool for continuous improvement: simultaneously dynamic, unifying and motivating, it gives the Group better assessments of the environmental impact of its activities and allows it to reduce that impact more effectively and rapidly. The Environmental Charter of LVMH already requires the Houses to establish an EMS at the management level. With LIFE 2020, the Group is now targeting 100% of the production sites and administrative sites with more than 50 employees to be certified for their EMS by 2020. The widespread roll-out of the EMS process is on track with a rate of 63% at the end of 2018. Most of the Houses have opted for the ISO 14001 standard. This is the case for Guerlain, which has deployed the standard since 2011 and targets world certification in 2021. After France, Belgium, Luxembourg, Germany, Spain, Portugal and Italy, the House extended its process to the sites in Great Britain and Japan in 2018. In 2019, Switzerland, Austria, Mexico and Hong Kong will be included in the scope. The year also saw the renewal of ISO 14001 certification of all Paris sites of Parfums Christian Dior and confirmation of the certification of its operations at Saint-Jean-de-Braye. This means that the House's activity meets almost all the requirement criteria for an environmental management system. The auditors stressed, in particular, two strong points of Parfums Christian Dior: the mobilization of the teams and the incorporation of environmental challenges into its business lines.

Eco-management is generating results, as demonstrated by those achieved by Hennessy, which celebrated twenty years of ISO 14001 certification in 2018. The House was the first Wines & Spirits company in the world certified under this standard. In 2016, it was also one of the pioneer Houses certified under standard 2015 of ISO 14001, which is even more stringent and applies to the entire product value chain. Its dynamic environmental management system is based on an environmental committee composed of 40 men and women who represent all its departments, 15 auditors, 10 trainers and 10 internal relays as well as around ten envi-

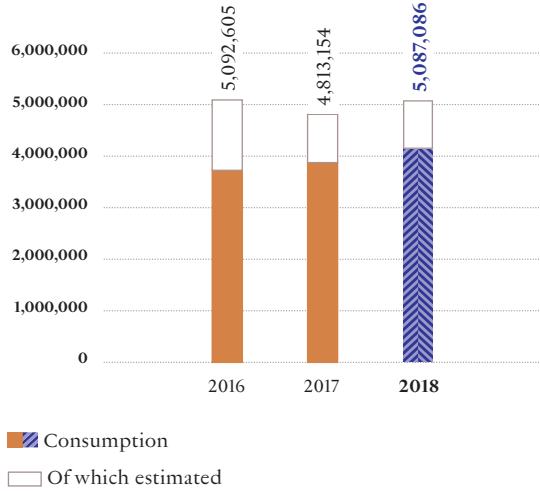
ronmental performance indicators. After the first audit in 2017, a follow-up audit was completed in 2018 on Hennessy's implementation of the new standard. The scope of the audit covered a total of 7 sites and 15 departments. No non-compliance was found. The audit highlighted 5 sensitive points and 6 elements for improvement on which the House will take action. The report also stresses 17 strong points, including management, the managerial leadership, control of the regulatory process, sustainable viticulture, waste management, cleanliness, energy management and the analysis of product development. Hennessy's eco-management today appears to be mature and adapted to its activities. The audit report stresses that the objectives and targets reached are consistent with the House's commitments, and that actions are taken on the basis of risks and opportunities that are identified, assessed and ranked.

While the hotel Cheval Blanc de Courchevel in France and Randheli in the Maldives are certified EarthCheck, the equivalent of ISO 14001 in the hotel sector, this standard is not the only one on which the Houses rely to improve the environmental performance of their sites. In the United States, Chandon California and Newton, for example, are certified Napa Green Winery and Napa Green Land, standards awarded to vineyards and wineries in the Napa Valley that practice organic agriculture. All Fendi's sites in Italy have dual ISO 14001 and OHSAS 18001 certification (British Standard Occupational Health and Safety Assessment Series), the British standard for health management and workplace safety. Hennessy and the Champagne Houses are ISO 22000 certified for management of food safety. Belvedere, also OHSAS 18001 and ISO 22000 certified, is ISO 50001 certified for the management of energy performance, as are the Champagne Houses and Le Bon Marché, which earned this certification in 2018.

Save and purify water

In addition to energy, the Houses work to save water, a precious resource for the Group. In 2018, the Group consumed a total of 5,568,770 m³ for agricultural purposes and 4,170,596 m³ to manufacture its products (plus 916,490 m³ consumed by 81% of sales floor areas not included within the scope of reporting). To improve its water management, LVMH had an in-depth study conducted in 2012 using the Pfister 2009 index and the Aquastat 2012 database. The objective was to analyze the sensitivity of each site location by comparing water

GROUP WATER CONSUMPTION
(in m³)



consumption with available resources locally. This analysis showed that four wine-growing Houses, which consume significant amounts of water at Group level (Cheval des Andes, Terrazas de Los Andes, Domaine Chandon California and Newton), are located in regions with severe water stress. These Houses therefore made saving water a priority, developing rain water recovery and recycling, eliminating irrigation or opting for drop irrigation, and rethinking their production processes. In addition to local challenges related to water stress, attention to water management is found in all Houses of the LVMH Group. It is accompanied by initiatives to treat waste water and prevent water pollution, as demonstrated by the plan launched by Bodega Numanthia to treat its waste water and eliminate any trace of chemicals and bacteria.

In 2018, LVMH water management improved again thanks to a number of initiatives. In late June, for example, Louis Vuitton started up the CLIMESPACE connection for the main building of its Paris headquarters to replace air-cooled towers. At the end of the third quarter, this new facility had resulted in a 53% decrease in water consumption. For its part, Loewe invested in specific equipment to clean ink spots staining the metal components of some of its machines. The equipment operates in a closed circuit with an eco-friendly aqueous solution. In particular, it has the advantage of generating significant water savings. Previously, cleaning was performed by hand

by around thirty people at the rate of five minutes per component, twice a day.

Reduce waste and give it new life

With LIFE 2020, LVMH is also stepping up its efforts toward exemplary waste management. For a long time, the Group has worked to limit the production of waste, encourage sorting and recycling, and develop the circular economy. In 2018, the Group generated 102,184 tons of waste, 93% of which was recycled, transformed into energy or reused. The CEDRE platform alone treated 2,174 tons of various waste products ranging from bio-waste to product testers, and gave them a new life through several selective sorting streams (glass, cardboard, wood, metal, plastic, alcohol, cellophane, etc.). Since it opened in 2010 in Pithiviers, CEDRE has continued to expand. In 2018, it established a stream to recover metal parts and invested in a new machine to process textile waste. In addition, after a first audit conducted in 2017, a second audit was conducted on the platform to verify the improvements made and evaluate the service provider responsible for recycling alcohol. The results were very positive, which confirmed LVMH's decision: set up a similar platform in Italy to treat and recycle waste products from the Perfumes & Cosmetics activities. A first test was organized with Bvlgari for the collection and decontamination of 20,000 pieces coming from three products, before new experiments planned in 2019 with other brands. In same spirit of pooling, LVMH launched a pilot project to collect waste previously sorted in 7 Paris boutiques. The project ended in the spring of 2018, opening the way for a second phase: the selection of a service provider to collect waste from 13 corporate headquarters and 8 boutiques of 5 Houses (Berluti, Fendi, Givenchy, Loewe and Louis Vuitton) in Paris. The mobilization of the Houses is essential for LVMH to make progress in reducing and managing its waste. Their mobilization did not disappoint in 2018. By using new shipping packaging boxes with pre-glued tape, Louis Vuitton for example reduced the quantity of adhesive tape used at the source and encouraged re-use of the boxes. The House also continued its partnership with the Réserve des Arts and ArtStock associations, which recover the company waste for the cultural sector. As a result, over 80% of the decor elements from our 2018 Men's and Women's fashion shows were donated and found a second life. In addition, during the year it created several local streams to recycle leather scraps. Hennessy initiated a study to improve the management of plastic film and glass waste at its

PERCENTAGE OF WASTE CONVERTED
(as a %)



La Vignerie packaging site with the goal of optimizing and securing internal and external streams. The House, which is also very active, pursued the production of SRF (solid recovered fuel) from non-hazardous industrial waste and household waste collected at all its sites, deployed 21 waste sorting units in several departments, and installed eco-fountains in meeting rooms to limit the use of plastic bottles. Hennessy thus now has new resources to achieve its goal by 2020: 100% of waste recycled.

TOOLS



The CEDRE platform.

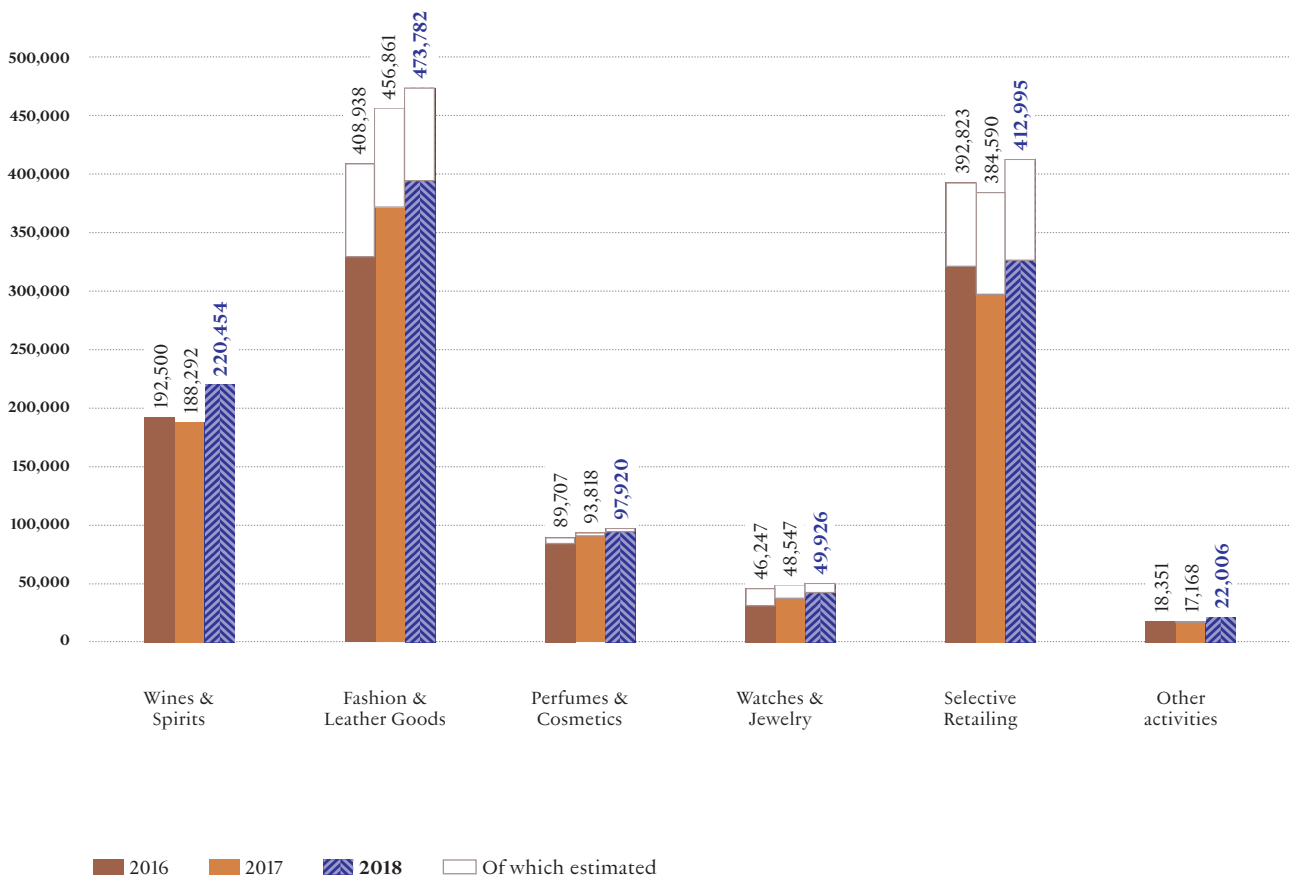
2018: 91% of waste has been recycled, converted to energy, or reused.

Appendices



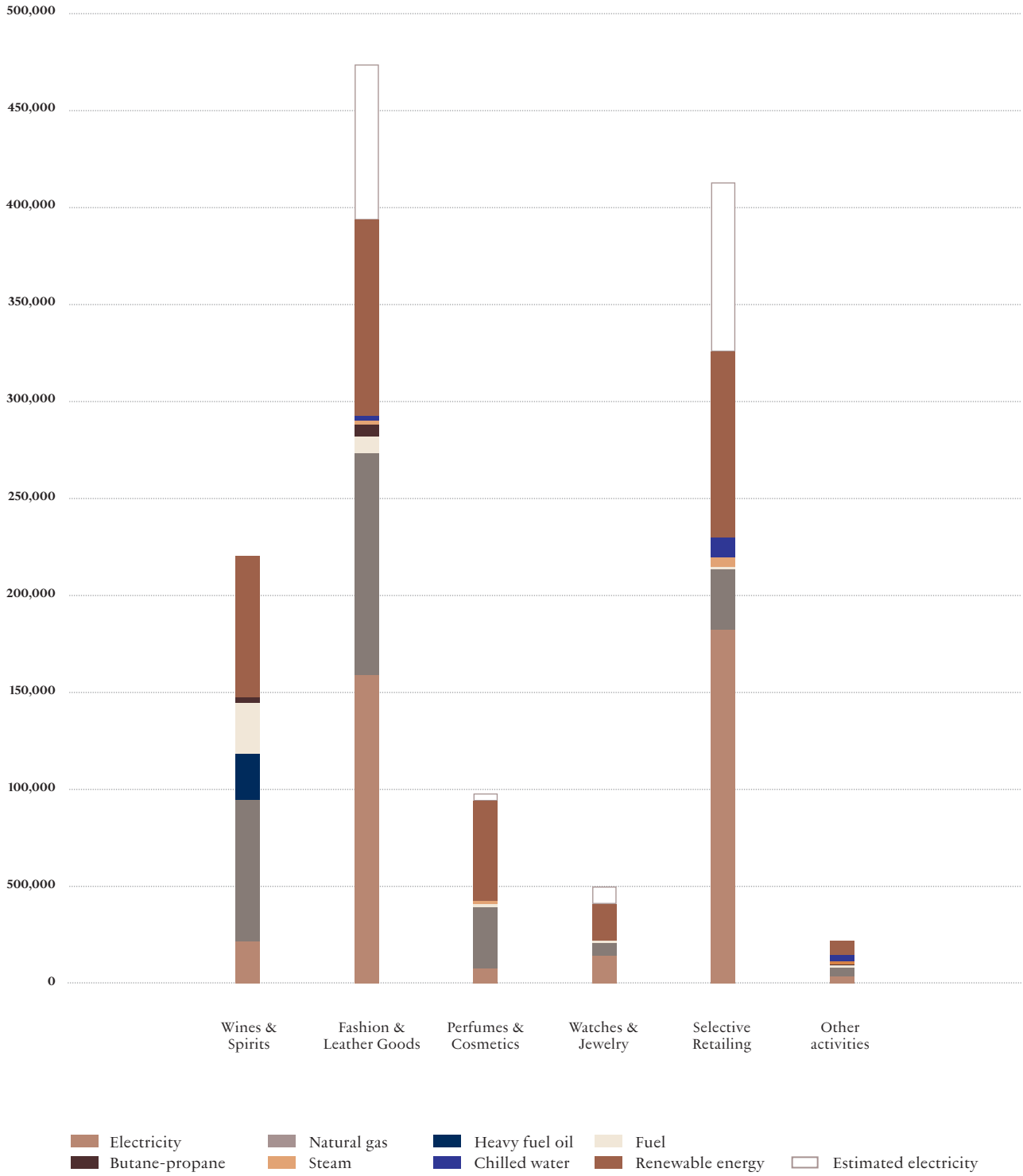
ENERGY

CHANGE IN ENERGY CONSUMPTION BY BUSINESS GROUP
(in MWh)





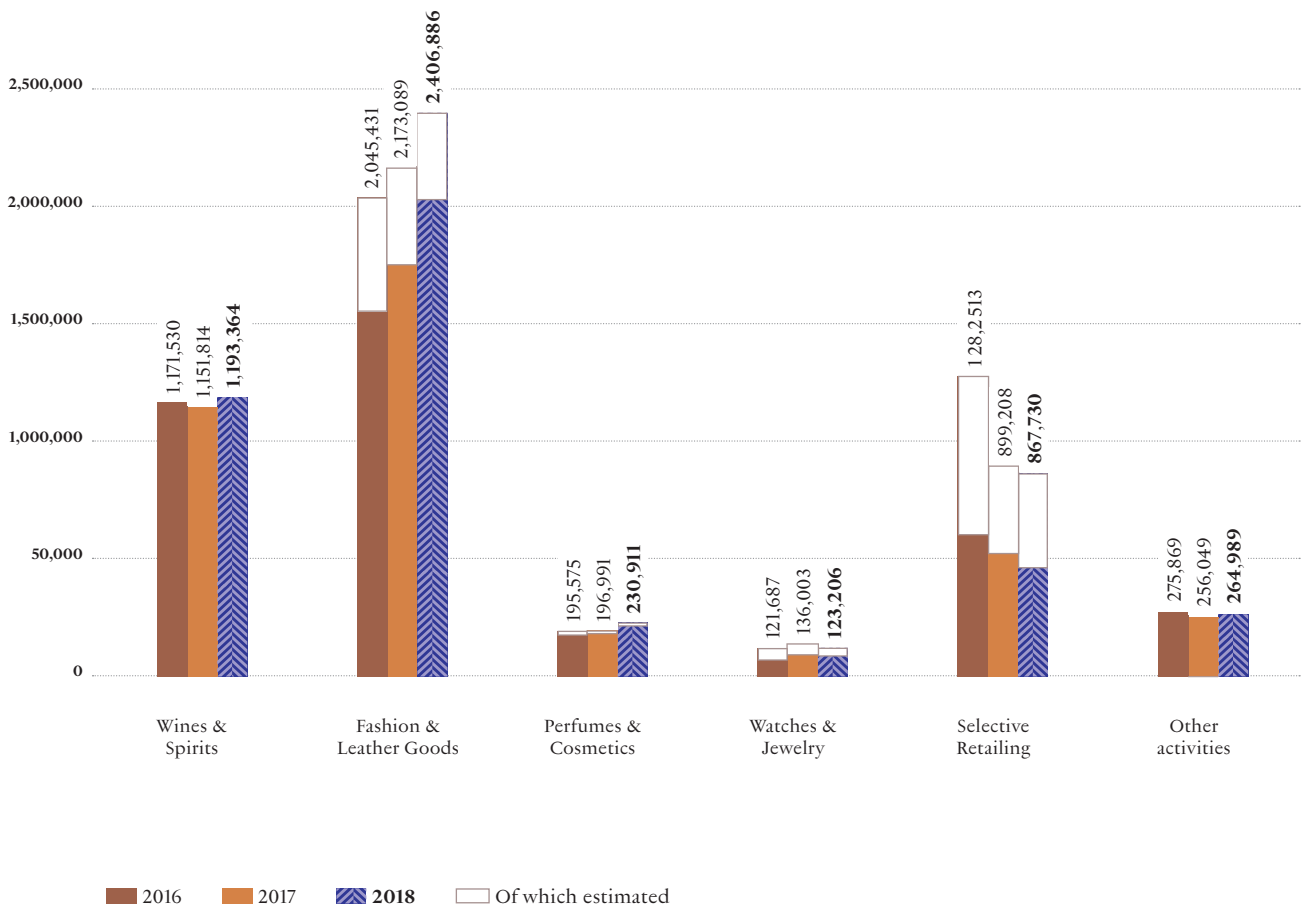
ENERGY CONSUMPTION BY SECTOR AND BY SOURCE IN 2018
(in MWh)





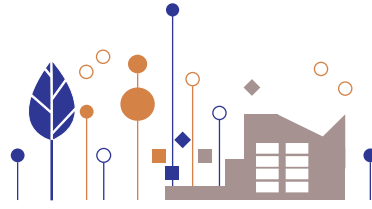
WATER

CHANGE IN WATER CONSUMPTION BY BUSINESS GROUP
(in m³)



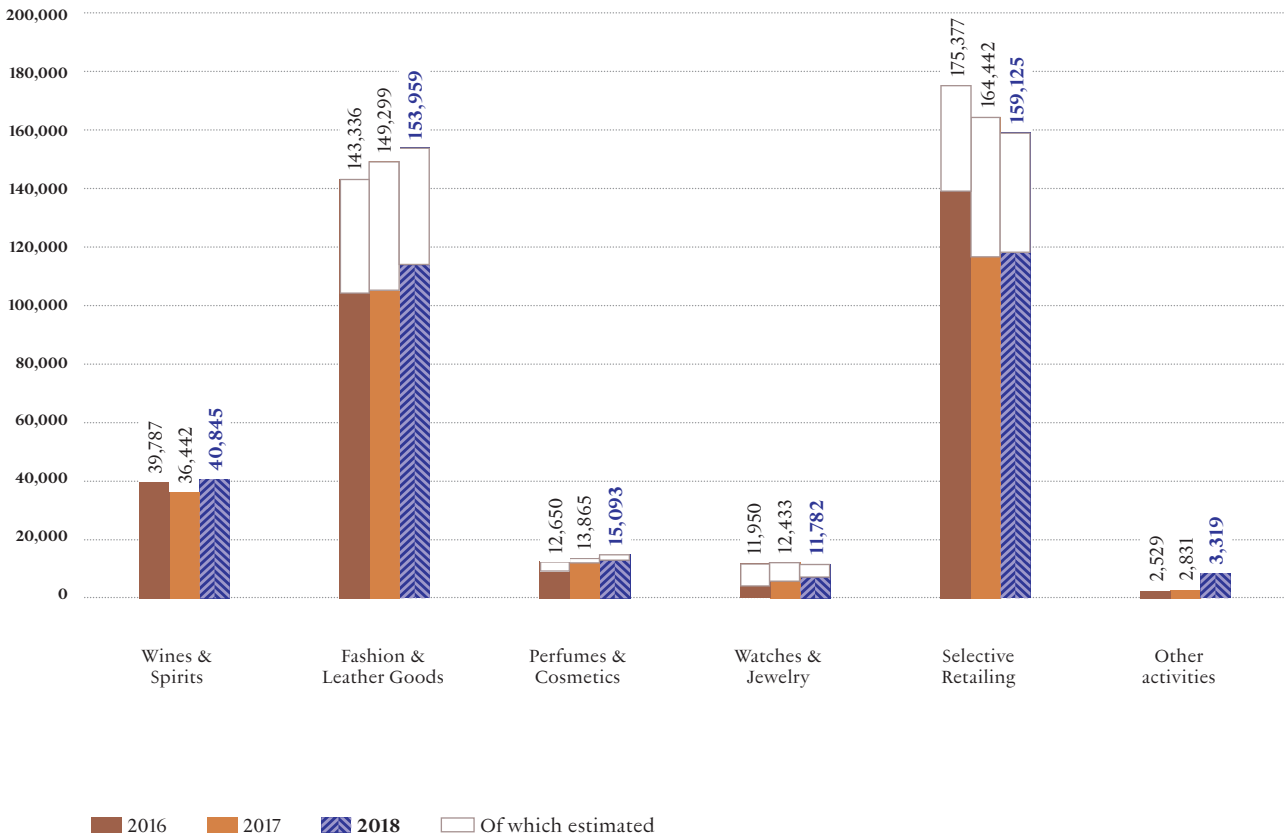

COD AFTER TREATMENT
 (in metric tons per year)

Sector	2018	2017	2016
Wines & Spirits	1,066	1,611	3,195
Fashion & Leather Goods	64	39	152
Perfumes & Cosmetics	10	9	7
TOTAL	1,140	1,659	3,354



CO₂

CHANGE IN GREENHOUSE GAS EMISSIONS BY BUSINESS GROUP
(in metric tons of CO₂ equivalent)



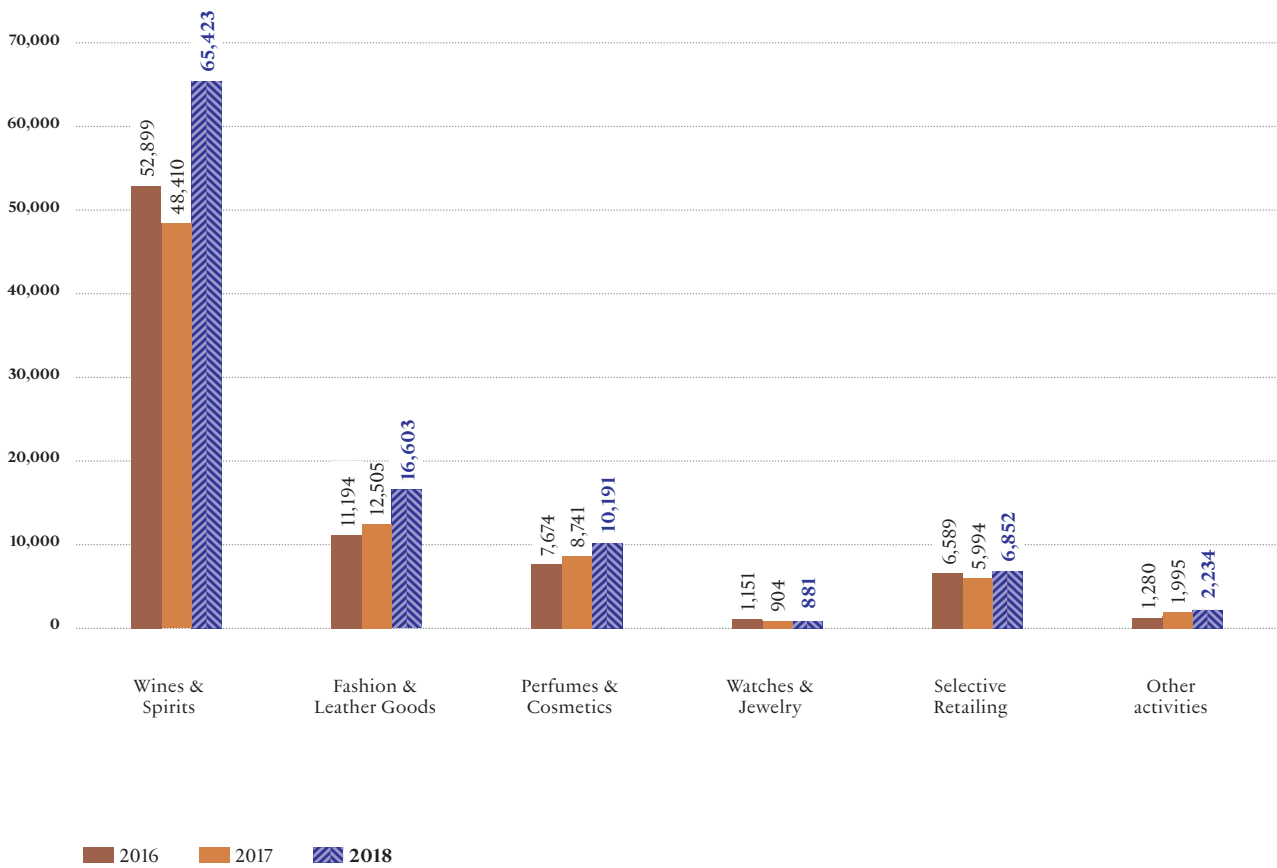
BREAKDOWN OF DIRECT AND INDIRECT EMISSIONS PER YEAR

	2018			2017			2016		
	TOTAL	% of direct emissions	% of indirect emissions	TOTAL	% of direct emissions	% of indirect emissions	TOTAL	% of direct emissions	% of indirect emissions
Wines & Spirits	40,845	72	28	36,442	69	31	39,787	68	32
Fashion & Leather Goods	153,959	24	76	149,299	25	75	143,336	17	83
Perfumes & Cosmetics	15,093	54	46	13,865	55	45	12,650	50	50
Watches & Jewelry	11,782	24	76	12,433	32	68	11,950	16	84
Selective Retailing	159,125	6	94	164,442	2	98	175,377	2	98
Other activities	3,319	38	62	2,831	33	67	2,529	29	71
TOTAL	384,123	25	75	379,312	23	77	385,629	17	83

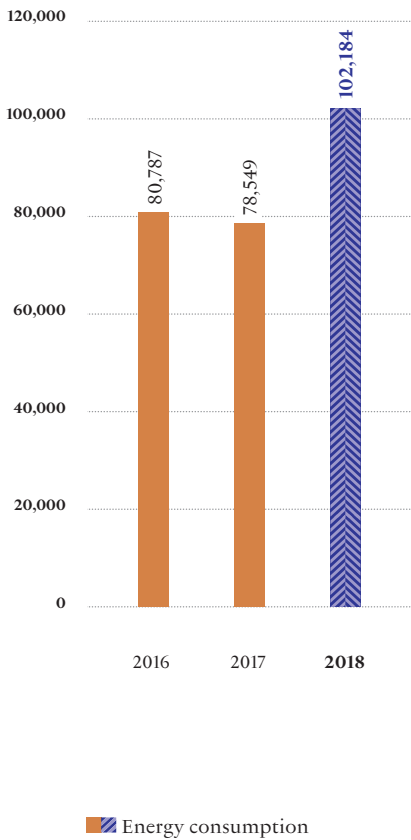


WASTE

CHANGE IN WASTE PRODUCED BY EACH BUSINESS GROUP
(in metric tons)



GROUP WASTE PRODUCTION
(in metric tons)

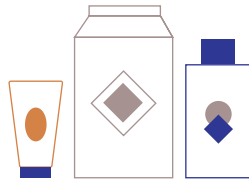


CHANGE IN THE HAZARDOUS WASTE PRODUCED BY EACH BUSINESS GROUP
(in metric tons of CO₂ equivalent)

	2016	2017	2018
Wines & Spirits	573	287	646
Fashion & Leather Goods	1,091	1,072	3,150
Perfumes & Cosmetics	1,422	1,609	2,347
Watches & Jewelry	151	197	214
Selective Retailing	39	121	8
Other activities	78	71	106
TOTAL	3,354	3,357	6,471

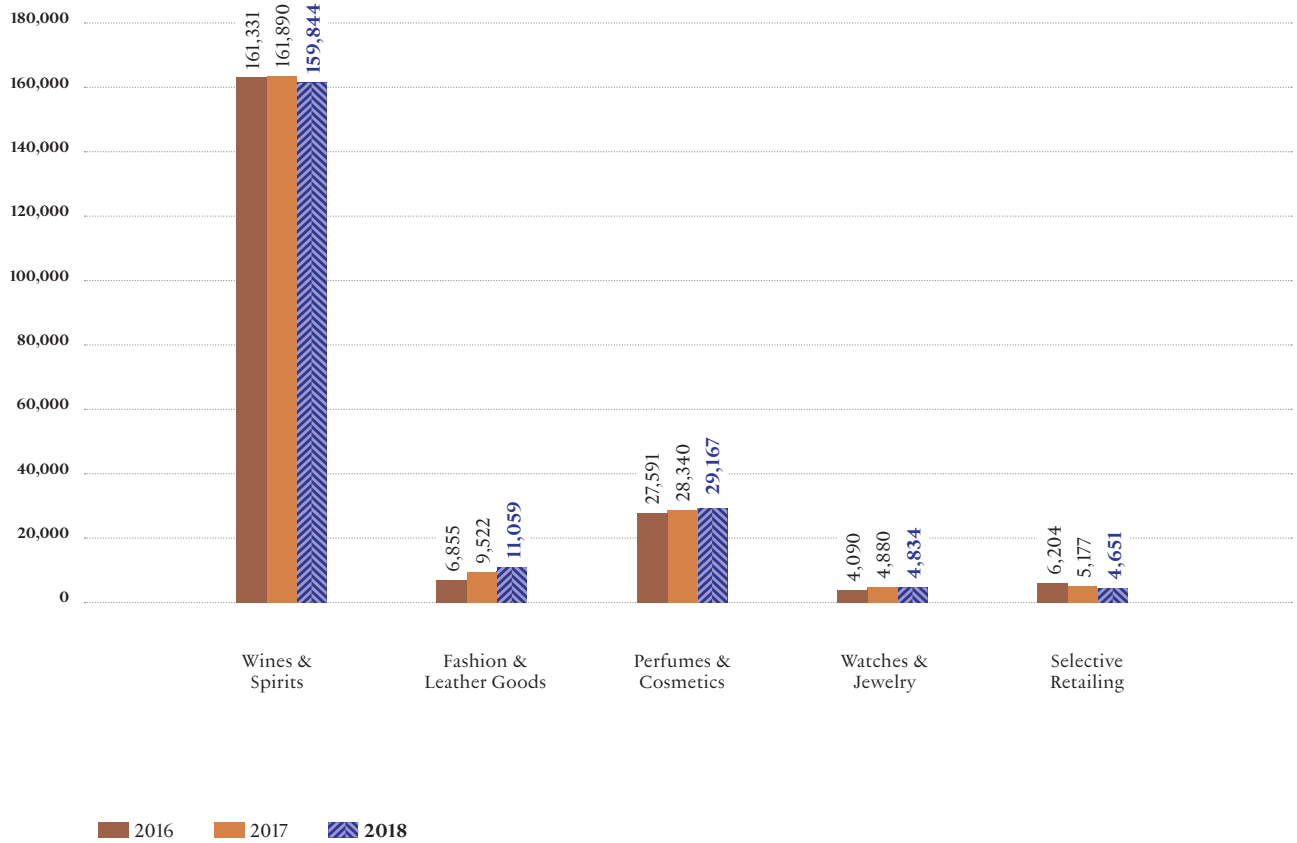
RECOVERY OF THE WASTE PRODUCED BY GROUP SITES
(in metric tons)

	% of recovered waste			TOTAL RECOVERED
	Reused	Materials	Energy	
Wines & Spirits	4	88	6	98
Fashion & Leather Goods	2	37	32	71
Perfumes & Cosmetics	1	70	24	95
Watches & Jewelry	12	34	33	80
Selective Retailing	4	44	32	79
Other activities	4	10	79	93
TOTAL (in metric tons)	3	73	15	91



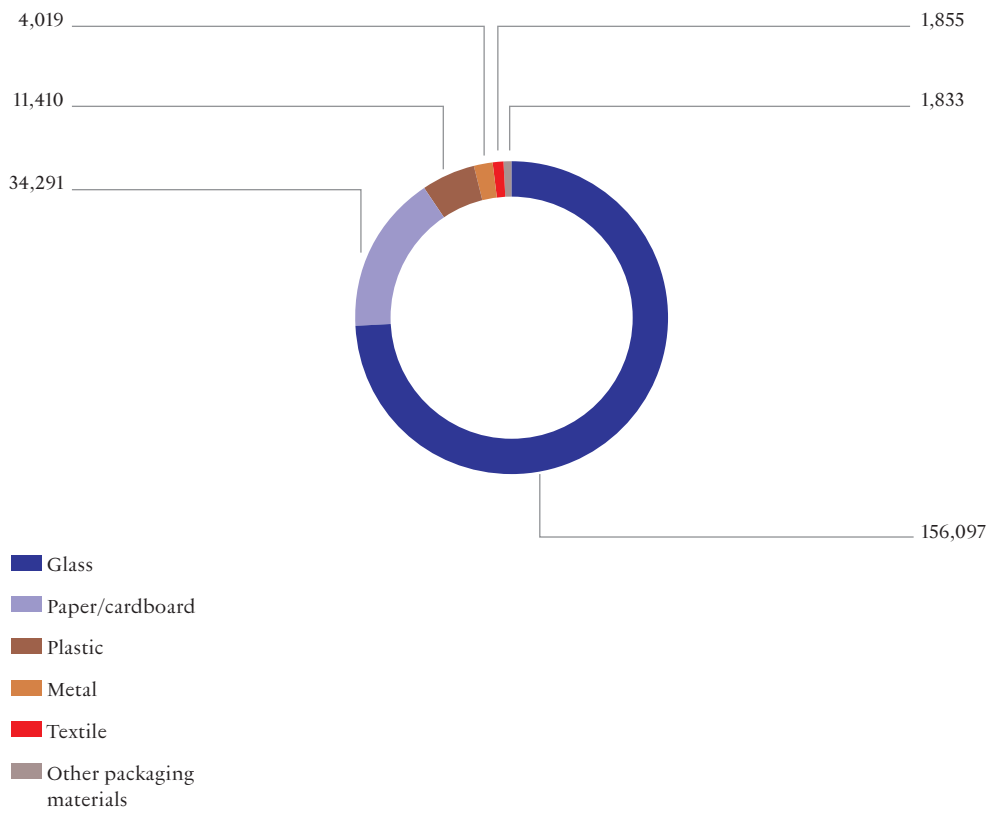
PACKAGING

PACKAGING GIVEN TO CUSTOMERS IN 2018
(in metric tons)





PACKAGING GIVEN TO CUSTOMERS IN 2018
(in metric tons)



NOTE ON THE METHODOLOGY OF ENVIRONMENTAL REPORTING

The LVMH Group has been consolidating its environmental indicators since 1999, and has been publishing them since 2001. They have been verified by one of the Statutory Auditors' specialist teams since 2002. These indicators are published in the Registration Document, and in the Group's Environmental Report.

Protocol

All consolidation and calculation rules are defined in the LVMH environmental reporting protocol, which is updated annually and is made available for public consultation by the Environment Department. Any request to consult the document may be sent to the following address: contact_environment@lvmh.fr.

Scope

Reporting on the environmental indicators covered the following scope in 2018:

PRODUCTION, WAREHOUSE, AND ADMINISTRATIVE SITES (number)	2018
Covered sites	266
Sites not covered ⁽¹⁾	127
TOTAL NUMBER OF SITES	393

(1) Of which, mainly: certain regional administrative sites for Louis Vuitton and Moët Hennessy, as well as administrative sites with few employees.

Some 97% of production sites are covered. The industrial, logistics and administrative sites that are not covered by the environmental report are essentially excluded for operational reasons, and are not material. A plan to gradually include them is underway.

Sales floor areas included in the scope, per indicator

The surface areas included in the calculation of energy consumption, greenhouse gas emissions and water consumption are as follows, presented as a percentage of the Group's total sales floor areas:

TOTAL GROUP SALES FLOOR AREA (as a %)

	% of the Group's sales floor areas taken into account for energy consumption and greenhouse gas emissions ⁽¹⁾	% of the Group's sales floor areas taken into account for water consumption ⁽¹⁾		
	2018	2017	2018	2017
TOTAL GROUP	70	69	19	19

(1) The reporting scope does not include the franchise stores operated by the Fashion & Leather Goods, Perfumes & Cosmetics, and Watches & Jewelry business groups.

The surface areas of the main Houses included in the calculation of energy consumption, greenhouse gas emissions, and water consumption, as a percentage of each House's total sales floor area, are as follows:

▀ **TOTAL FLOOR AREAS OF EACH HOUSE**
(as a %)

	% of the House's sales floor areas taken into account for energy consumption and greenhouse gas emissions		% of the House's sales floor areas taken into account for water consumption	
	2018	2017	2018	2017
DFS	77	87	52	54
Louis Vuitton	69	66	16	–
Sephora North America and Latin America	59	71	–	18
Sephora Europe and Asia	80	74	9	8
Le Bon Marché	100	–	100	–
Christian Dior Couture	74	–	22	–

The following are also taken into account for calculating the energy consumption and greenhouse gas emissions: all the French stores owned by Berluti, Givenchy, Guerlain, Kenzo, and Make Up For Ever; and some stores owned by Acqua di Parma, Benefit, Bvlgari, Celine, Chaumet, Fendi, Fred, Hublot, Loewe, Loro Piana, Marc Jacobs, Parfums Christian Dior, Pucci, TAG Heuer and Pink Shirtmaker.

The following are also taken into account for calculating water consumption: certain Berluti, Bvlgari, Chaumet, Fendi, Guerlain, Kenzo, and Loewe stores. 19% of the store surfaces taken into account consume 543,000 m³ of water.

Where the production of waste is concerned, only the DFS, Le Bon Marché, and some Acqua di Parma, Berluti, Bvlgari, Christian Dior Couture, Givenchy, Louis Vuitton and Sephora Europe stores are included in the scope. 17% of the store floor areas taken into account produce 4,760 metric tons of waste.

Reporting tool and methodology

The system used for the environmental reporting process is an in-house Web-based tool consisting of three kinds of questionnaire:

- one questionnaire for compiling corporate data: training, packaging, etc.;
 - a raw materials questionnaire;
 - one (or more) questionnaire for compiling data specific to the manufacturing sites: water and energy consumption, waste generation (quantity and types of waste), and the treatment of waste, etc.
- In total, each House collects some 100 pieces of information. The data is then checked and automatically consolidated in a central file. This file has many control and warning mechanisms (abnormal data and consistency problems, etc.).

Internal and external assessments

Consistency controls are performed by the sites (the data is compared with the data for the previous year), and when the data is being consolidated by the LVMH Environment Department (abnormalities, and comparisons with the previous year, etc.).

The key qualitative and quantitative information in the following list has been carefully audited to obtain reasonable assurance (marked by an asterisk) by EY as part of its non-financial rating report.

Environmental information considered to be the most important

Quantitative information (including key performance indicators):

- percentage of industrial sites with ISO 14001 certification (%)*;
- total energy consumption (MWh)*;
- greenhouse gas emissions due to energy use (metric tons of CO₂ equivalent)*;
- total water consumption for "process" purposes (m³)*;
- chemical oxygen demand (COD) after treatment (metric tons/yr)*;
- total waste produced (metric tons)*;
- total hazardous waste produced (metric tons)*;
- percentage of waste recovered (%)*;
- total packaging sent to customers (metric tons)*;
- EPI of packaging (value);
- proportion of grapes (in kg), from its own vineyards or purchased, products certified as sustainable viticulture (%);
- proportion of palm oil derivatives (in kg) certified RSPO Mass Balance or Segregated (%);

- proportion of leather (in m²) from LWG-certified tanneries (%);
- proportion of gold (in kg) purchased that is RJC COP or CoC certified;
- proportion of diamonds (in carats) purchased that are RJC COP certified;
- proportion of cotton (in metric tons) purchased that is BCI certified (%);
- greenhouse gas emissions avoided per year by projects carried out under the carbon fund (metric tons of CO₂ equivalent avoided).

Qualitative information (actions or results):

- organization of the environmental initiative, in particular governance and commitments, including the LIFE program;
- environmental impact of packaging and monitoring of the LIFE “Product” objective;
- the environmental standards taken into account in the procurement and monitoring of LIFE “Sector” objective;
- the fight against climate change and monitoring of the LIFE “Climate change” objective;
- environmental management of sites and monitoring of LIFE “Sites” objective.

Selection and appropriateness of indicators

The purpose of the published environmental indicators is to report to stakeholders on the Group’s annual environmental results. They provide information on the environmental issues and indicators specified in the Decree of April 24, 2012, implementing Article 225 of Law No. 2010.788 of July 12, 2010 regarding the national commitment to the environment (also known as the Grenelle II Law).

Raw materials

A set of indicators for measuring the quantities (in metric tons) of raw materials used to manufacture products:

- Wines & Spirits: grapes;
- Fashion & Leather Goods: leather, wool, cotton, viscose, etc.;
- Watches & Jewelry: gold, diamonds, colored stones, metals, etc.;
- Perfumes & Cosmetics: palm oil derivatives, etc.

Water consumption

Water consumption is expressed in m³. This indicator enables the quantities of water consumed to be assessed by distinguishing between the following two requirements:

- agricultural requirement: measurement of the quantities of water used for irrigation (banned in France), and for sprinkling the vines (to prevent frost, etc.). The water volumes used are either measured directly or, more usually, estimated;
- processing requirement: this is the measurement of all non-agricultural requirements (industrial and sanitary processes, cleaning, and the watering of green spaces, etc.). These types of water consumption are almost always measured.

Water pollution

Water pollution is expressed in metric tons of COD. This indicator reflects the total annual flow discharged into the natural environment by the sites, after treatment either at, or downstream from, the facility. The only sectors concerned by this parameter are Wines & Spirits, Fashion & Leather Goods and Perfumes & Cosmetics, where the discharges of organic matter and other pollution from effluents are significant and directly related to their operations.

Production of waste

All the waste produced is measured in metric tons. The waste taken into account is the hazardous and non-hazardous waste removed from the sites during the reporting period. The treatment method for each kind of waste is also identified so as to calculate a recovery ratio. The various channels for recycling waste are:

- reuse: using the waste for the same purpose as the one for which the product was initially intended;
- the recovery of materials, which includes:
 - recycling: waste is directly reintroduced into the production cycle from which it came, in order to partially or completely replace a virgin raw material, e.g. paper and cardboard, and some plastics, etc.;
 - organic recovery: composting and controlled spreading of organic waste in order to fertilize soil, etc.;
 - energy recovery: incinerating and recovering the energy generated by the combustion process in the form of electricity or heat.

Energy consumption

Energy consumed is expressed in MWh, and represents all the types of energy used by the company’s sites (electricity, natural gas, heating oil, heavy oil, steam, chilled water, butane-propane, and renewable energy) and company cars.

Greenhouse gas emissions

This indicator is expressed in metric tons of CO₂ equivalent and corresponds to the greenhouse gas emissions relating to the energy consumed by the sites. It

covers direct and indirect greenhouse gas emissions.

Upstream and downstream transportation

This indicator is expressed in metric tons per kilometer and in metric tons of CO₂ equivalent. A distinction is made between upstream and downstream transport:

- upstream transport: this is the number of kilometers traveled by the raw materials and components from the initial supplier site to the first delivery site. At the very least the assessment is performed on the main components and products:
 - Wines & Spirits: bottles, cases and caps, etc.;
 - Perfumes & Cosmetics: bottles and pouches, etc.;
 - Fashion & Leather Goods: leathers, metal parts, packaging and ready-to-wear, etc.;
 - Watches & Jewelry: pouches, boxes, and cases, etc.;
 - Selective Retailing: store bags, envelopes and boxes, etc.
- downstream transport: this concerns the number of kilometers traveled by all finished products from the manufacturing site to the first platform belonging to the wholesale customer or to the stores (for the selective retailing businesses and for the brands that own boutiques).

Packaging given to customers

This indicator is expressed in metric tons of material. It includes the primary and secondary packaging introduced to the market by all the Group's Houses. The packaging used for shipment during transportation is excluded from this indicator.

Training and awareness sessions

This indicator is expressed in hours. It includes all training and awareness-raising sessions fully or partly dedicated to the environment, specifically:

- training employees in order to reduce their impact on the environment (energy consumption, handling of hazardous products, training on environmental regulations, training for health, safety and environment officers, training on environmental audits, water management, waste management, and sustainable viticulture, etc.);
- training on, and/or raising general awareness of, the environment (the major challenges include greenhouse gases, biodiversity, and raising the awareness of grape harvest workers, etc.) or on environmental

management systems (ISO 14001, etc.);

- company (orientation seminar for new managers, attendance at the Environmental Committee, and involvement of the LVMH Environment Department in Executive Committees or other meetings, etc.).
- the hours spent by in-house environmental trainers (Sustainable Development Week, World Water Day, and health, safety and environment officers who conduct training/awareness sessions, etc.).

Expenses and investments incurred in order to prevent the effects of business activity on the environment

This indicator is expressed in thousands of euros. It includes the following expenditure incurred and investments made, to avoid a business activity having an impact on the environment:

- expenditure on the protection of the ambient air and the climate;
- expenditure on the management of waste water;
- expenditure on the management of waste;
- expenditure aimed at preventing noise and vibrations (not including the protection of the workplace);
- expenditure aimed at protecting biodiversity and the landscape;
- research and development expenditure;
- expenditure on other environmental protection activities.

Photographs

Cover photos: Maison Ruinart, © Liu Bolin – p. 2 : © Magali Delporte
– p. 4, 5 : Louis Vuitton Malletier, © Adrien Millot – p. 7 : © Jean-François Robert, © Ivan Guilbert
– p. 21 : © Pierrick Jégou – p. 35 : © Dean Sewell, agence VU – p. 37 : © Michel Jolyot
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Other photos: Photo libraries of LVMH & Group Houses.

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