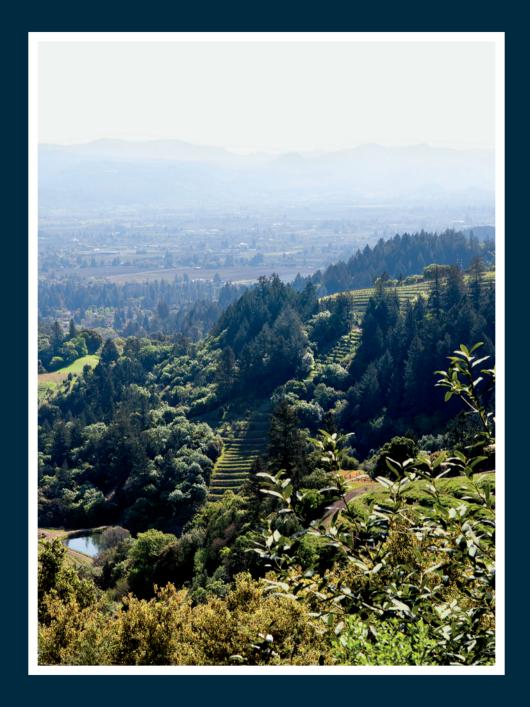
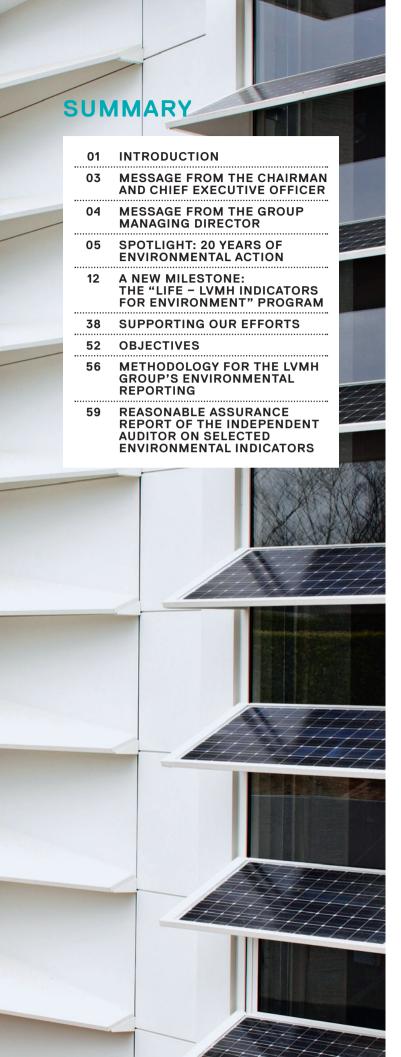
### LVMH 2012 — ENVIRONMENTAL REPORT



LVMH MOËT HENNESSY, LOUIS VUITTON





### —Introduction

The year 2012 marked 20 years since Bernard Arnault's decision to create the LVMH Environmental Department, demonstrating that our Group's Houses have long been taking environmental concerns into account. The idea that the design of luxury products must incorporate not only innovation, creativity and excellence of execution but also environmental performance is in the minds of our customers and partners. The values that stem from the unique heritage of our Houses are embodied in the expertise and commitment of our teams responsible for environmental issues.

This 20<sup>th</sup> anniversary also corresponds to the gap between the two Rio Earth Summits in 1992 and 2012. Obviously this time span has not been enough to completely address the major environmental challenges. But like all stakeholders, businesses must be ready to play their part, and at LVMH we are determined to continue all of the initiatives we have undertaken with our partners. In 2013, we will be introducing a new milestone in our efforts to safeguard the environment through our "LIFE – LVMH Indicators for Environment" program, which is an integral part of the Group's strategy.



### A LONG-TERM VISION

LVMH comprises a family of iconic brands that cultivate their magic and perpetuate exceptional know-how, a consistent strategy and an exceptionally broad, high-quality retail network. In addition to the intrinsic stability and financial strength of our company, our brands have been patiently built up over time.

They take into account issues that are inseparable from our long-term strategy, namely the safeguarding of the natural environment, to which LVMH owes so much, corporate social responsibility, and strict ethical standards which we share with our suppliers, customers and shareholders.

This intangible capital is paramount to our future success.

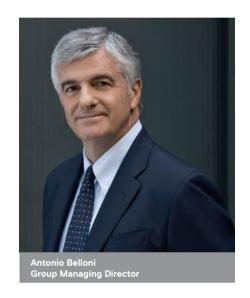
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**Bernard Arnault** 

Chairman and Chief Executive Officer

Message from the Group Managing Director

# AMBITIOUS POLICY AND INITIATIVES IN KEEPING WITH LVMH VALUES



In addition to heritage and legacy, quality and creativity are today more than ever our Houses' key strengths. Our customers are highly knowledgeable and passionate, and now have increasingly high levels of expectations as they turn toward products that are rare, exclusive and exemplary. Most notably, they expect our products to reflect best practices in terms of sustainable development.

Our Environmental Department, which celebrated its 20th anniversary in 2012, is tasked with meeting these expectations. It defines our environmental strategy and helps the Houses implement their own initiatives. This past year was characterized by the progress of the "LIFE – LVMH Indicators For Environment" program, designed to identify key areas in which

to strengthen the management of the brands' environmental challenges. De Beers, Belvedere, Glenmorangie and Loewe have joined the program, which was implemented by seven pilot Houses in 2012. The goal is gradually to extend the program to all Houses.

Mention must also be made of our other flagship projects: "Improving, from upstream to downstream, the footprint on biodiversity of LVMH activities," which received official recognition from the French Ministry of Ecology for its contribution to France's National Strategy for Biodiversity; the launch of the Edibox tool designed to assess the environmental performance of new packaging, particularly for the Perfumes & Cosmetics and Wines & Spirits Houses; construction of the new "high environmental quality" facility at Mont Aigu, Moët & Chandon's new fermenting cellar; and the gradual roll-out of more energy efficient lighting in our stores. Other initiatives are also presented in this report.

Our brands' products are particularly sought after since they embody the highest ethical and sustainable development standards, from design and sourcing to distribution and supplier partnerships. This responsible approach is a critical factor in perpetuating the success of LVMH and our Houses.





**20 YEARS OF ENVIRONMENTAL ACTION** 

### **LOOKING FORWARD**

### A COMPANY READY TO MEET ITS CHALLENGES

Meeting sustainable development challenges is a long-term undertaking that will strongly influence the Group's operations, shape our markets' future challenges, and identify opportunities to grow our brands. Developing and strengthening LVMH's environmental strategy has increased our understanding of this reality within our company and enabled us to share with our partners the requirements and restrictions relating to how we conduct our business.

### **MULTIPLE INTERACTIONS**

During these past 20 years, we have noticed that the commitment and convictions of our stakeholders, even though we are all moving in the same direction, have not been advancing at the same pace as ours, and have revealed a number of vulnerable areas. We now have greater insight into a whole range of dynamics regarding values and commitments, and are better able to take them into account.



### THE GREAT DIVERSITY OF OUR BUSINESSES

The great diversity of LVMH businesses is a characteristic of our Group. It is both an asset and a challenge. Unlike all of our competitors, LVMH is the only group to bring together such a broad array of businesses. Despite their marked individuality, the five LVMH business groups – Wines & Spirits, Fashion & Leather Goods, Perfumes & Cosmetics, Watches & Jewelry and Selective Retailing – are linked by a shared vision of environmental challenges. Some issues apply group-wide and are monitored in a very specific way. These include consumer health and safety, responsible sourcing and biodiversity, eco-design and product quality, reducing the environmental impact of manufacturing facilities, lower energy consumption, and supplier quality and responsibility.

In addition to shared concerns, the Houses impact the environment in various ways and to varying degrees, depending on the sector and business line, within which operating challenges are clearly identified.

### A WELL-ADAPTED ORGANIZATION

Consistent with our history, our size as a major international group, and the very specific nature of our businesses, LVMH is both decentralized and unified. Decentralized because the risks and opportunities resulting from environmental considerations must be individually managed by each business group, House and region.

But unified because we have consolidated our development around shared principles of responsibility, methodologies and action plans.

Against this backdrop, we have learned to constantly adapt our environmental goals and projects according to local challenges and particularities, while still creating cross-functionality and synergies between Houses and business groups, which often experience the same problems and can teach the same lessons.

### THE GROUP'S ABILITY TO MANAGE RISKS AND OPPORTUNITIES WITH REGARD TO ENVIRONMENTAL PROTECTION

Planet
More efficient and innovative processes and products reflecting environmental and biodiversity considerations

Employees
Well-informed
employees, aware of
environmental issues
and motivated to take
action

Partners and suppliers Top suppliers selected and our approach shared with partners Customers
Meeting customers'
expectations, in terms
of the information
they require, and their
values with regard
to the environment,
health and safety

Society
Being committed
to the community
and promoting
a responsible
production and
consumption model

### THE GROUP'S VALUES

Sustainable development is inseparable from LVMH's strategy because there is a natural link between luxury and sustainable development.

- Employee know-how and product quality are a fundamental part of our brands' intangible capital. The environmental aspect of our products is more important than ever, including in emerging markets. Customers can more easily justify their consumer choices if they know they are investing in products that have stood the test of time. A brand is even more desirable if its products embody high standards of materials, safety, quality and shipping.
- The environmental aspect of our products and the management of our facilities also serve to strengthen our Houses' social relevance. Their workshops and production sites are firmly established in their respective local regions. Their heritage, know-how and innovations all incorporate environmental considerations, and their staff regularly participate in public and specialist debates.

 That said, the Houses are aware that there is room for improvement. The best practices presented in our 2012 Environmental Report attest to the initiative of our staff and the quality of the measures that will continue to be strengthened.



### **BUSINESS GROUPS' MAIN CONCERNS**

	Wines & Spirits	Fashion & Leather Goods	Perfumes & Cosmetics	Watches & Jewelry	Selective Retailing
Saving energy resources and combating climate change	Packaging production.     Distillation.     Transportation of product shipments.	Store lighting and air-conditioning.     Transportation of product shipments.	Packaging production.     Transportation of product shipments.		Store lighting and air-conditioning.     Transportation of product shipments.
Protecting and saving water resources	Water consumption (irrigation of vines in Australia, New Zealand, Argentina and California).     Production of effluents containing organic matter during wine-making and distillation.		Protection and saving of water resources.		
Protecting ecosystems and natural resources	Especially plant resources (vines) required for production.	Especially plant resources (textile fibers) required for production.     Exotic leather.	Especially plant resources required for production.	Packaging. Stones and precious metals. Exotic leather.	
Waste recovery	Wine-making and distillation processes.			WEEE (waste from electrical and electronic equipment, such as batteries).	
Reducing the impact of production and transforming raw materials, particularly through eco-design	• Packaging.	Packaging. Cotton and other textiles, leathers. Tanning.	Packaging.     Constituents of perfumes and cosmetics.		

### **MILESTONES TO DATE**

### COMMITMENTS UNDERTAKEN AND UPHELD

International charters and agreements signed by LVMH provide the framework for the initiatives led by the Group and its Houses. In 2003, Bernard Arnault joined the United Nations Global Compact and in August 2007 ratified Gordon Brown's Millennium Development Goals. LVMH also supports the Universal Declaration of Human Rights, the OECD Guidelines, the basic conventions of the International Labor Organization, and Caring for Climate (a program of voluntary initiatives that supplement the UN Global Compact).

In 2005, the LVMH Watches & Jewelry business group joined the Responsible Jewellery Council (RJC). Now every House in the

Watches & Jewelry business group is a member of the RJC and has been since 2011.

Our Environmental Charter, signed by Bernard Arnault in 2001, defines the LVMH Group's goals and dynamics. Our Supplier Code of Conduct, adopted and implemented in 2008, and the LVMH Code of Conduct, adopted and circulated to all Group employees since May 2009, complement this Charter with a reminder that compliance with laws, regulations, and national and international decisions, particularly with regard to the environment, is absolutely essential if we are to ensure that our approach is credible. We believe that success is not possible without taking into account the major concerns of the human environment, which means being engaged in a way that is useful and constructive. Consequently, our Supplier Code of Conduct sets out the requirements, particularly environmental ones, which must be followed by suppliers. The third of the six key principles of the LVMH Code of Conduct is devoted to environmental protection.

### AGREEMENTS SIGNED

- United Nations Global Compact (2003)
- Gordon Brown's Millennium Development Goals (2007)
- Watches & Jewelry Houses members of the Responsible Jewellery Council (RJC) since 2011

### **Environmental Charter (2001)**

- Aim for a high level of environmental performance.
- Encourage collective commitment.
- · Control environmental risks.
- Design products by integrating environmental innovation and creativity.
- Make commitments outside the company.

### INTERNAL CHARTER AND CODES OF CONDUCT

### Supplier Code of Conduct (March 2008)

 Environmental requirements and responsibilities.

### LVMH Code of Conduct (May 2009)

- Commit to safeguarding the environment (3<sup>rd</sup> principle).
- Promote collective commitment.
- Safeguard natural resources and incorporate environmental considerations into products.
- Control environmental risks.

In 2012, the LVMH Group was included in the following key indices based on responsible investment criteria:

### DJSI World



LVMH was distinguished in the 2012 SAM Sustainability Yearbook in the "Clothing, Accessories & Footwear" category as a member of the "SAM Bronze Class".

#### FTSE4Good Global 100



#### ASPI Eurozone



ESI (Ethibel Sustainability Indices) Europe





On June 10, 2012, Forum Ethibel renewed its award of the "Ethibel Excellence" label, which recognizes companies most committed to CSR and which may be included in the Ethibel sustainable investment register.

Other assessments and classifications include:



A score of 65/100 in the "Carbon Disclosure Project 2012" (November 2012) LVMH also responds to the CDP Water Disclosure.



A rating of 65.9/100 for 2011 awarded by the French Center for Company Information (CFIE) as part of the "2012 Annual Study on Social and Environmental Information in Corporate Annual Reports" (November 2012).



LVMH has responded since its founding to the Forest Footprint Disclosure.



LVMH is a signatory to the UN Global Compact and published its CoP (Communication on Progress) at the "GC Advanced" level in November 2012.



## RECOGNITIONS OBTAINED

The commitment of the LVMH Group is recognized in France's National Strategy for Biodiversity (SNB).

LVMH committed to the National Strategy for Biodiversity 2011-2020, presented by the French government in May 2011. This strategy is France's version of the Strategic Plan for Biodiversity 2011-2020 for the planet, adopted at the Convention on Biological Diversity in Nagoya in October 2010.

In October 2012, the French Ministry of Ecology, Sustainable Development and Energy awarded LVMH "National Strategy for Biodiversity Recognition" for its project described as "Improving, from upstream to downstream, the footprint on biodiversity of LVMH activities, with the goal of having a positive impact on biodiversity." (See page 19.)

1992

### CREATION OF THE ENVIRONMENTAL DEPARTMENT

The creation of the environmental department in 1992 marks a key date in the Group's environmental commitment. This is the department that imbues the Houses with a shared strategic vision and helps them implement their own initiatives. This formal structure is part of the ongoing sustainable development action in which the Research and Development departments and various businesses (Wines & Spirits and Perfumes & Cosmetics) have always been involved.

### FIRST ENVIRONMENT COMMITTEE

This same year, an Environment, Health and Safety Committee was created, comprising around a dozen House representatives. Today the Group's Environment Committee has more than 50 environment representatives, who meet every year to share their House's best practices.





### ISO 14001 CERTIFICATION OF HENNESSY

In 1998, Hennessy became the first spirits company in the world to be awarded ISO 14001 certification. Since then, the certification has been renewed every three years. Many other LVMH Houses have followed this example and obtained environmental management certification at their sites, specifically Veuve Clicquot, Louis Vuitton, Krug, Moët & Chandon, Cape Mentelle, Belvedere, Domaine Chandon Australia, Guerlain, Parfums Christian Dior, Glenmorangie, and TAG Heuer.

### 2001

### SIGNATURE OF THE ENVIRONMENTAL CHARTER

Signed by Bernard Arnault in 2001, the LVMH Environmental Charter is a serious undertaking that involves each House chairman and requires a system of environmental management to be put in place. It is the starting point of an ambitious strategy divided into five areas:

- a high level of environmental performance;
- collective commitment;
- control of environmental hazards;
- products that integrate environmental innovation and creativity:
- commitments outside the company.

#### FIRST ENVIRONMENTAL REPORT

While taking action is essential, imparting knowledge is equally important. In 2001, well before the "NER" decree of February 20, 2002 regarding the inclusion of environmental and social information in the reports of listed companies, the Group published full details of environmental initiatives in its annual report, supplemented by a separate environmental report. The Environmental Report for 2012 is now the twelfth such report.

### 2002

### FIRST CARBON FOOTPRINT® COMPLETED AT VEUVE CLICQUOT

In 2001, Veuve Clicquot, Parfums Christian Dior and Hennessy produced an analysis of their greenhouse gas emissions and defined a strategy to reduce them, proving forerunners to the decree of July 11, 2011 requiring companies with more than 500 employees to report their greenhouse gas emissions. This process would eventually be refined and result in the creation of the Carbon Footprint\* tool of the French environment and energy management agency ADEME. The tool would be rolled out in 2004 at Louis Vuitton, Moët & Chandon, Guerlain, Parfums Kenzo, Parfums Givenchy, Givenchy Couture, Make Up For Ever, DFS, Sephora and Le Bon Marché.

### 2004

### FIRST TRENDS BOOK AND MATERIALS REFERENCE LIBRARY

Every year since 2004, the Environmental Department has published an Eco-Material Handbook which gives designers and House marketing teams suggestions on high-quality materials that offer the kind of environmental performance required for the Group's products.

In 2012, Louis Vuitton created a Materials Reference Library listing materials sourced by the Innovations & Environmental Department.

### 2006

### FIRST "HQE" BUILDING

Modern and eco-friendly, "Eole-Cergy 3", the new Louis Vuitton logistics platform in Cergy, was officially opened in 2006, becoming the first LVMH building to conform to France's high environmental quality (HQE) specifications. Since then, many other Houses around the world have pursued similar initiatives in the construction or refurbishment of their buildings, observing standards and certifications currently available, namely: HQE, Low Energy Buildings (BBC), BRE Environmental Assessment Method (BREEAM), and Leadership in Energy and Environmental Design (LEED).

### 2011

#### FIRST RJC CERTIFICATIONS

The LVMH Watches & Jewelry business group became a member of the Responsible Jewellery Council (RJC) in 2005. Since 2011, all Houses in the Watches & Jewelry business group have been RJC members. The RJC has developed a certification system for members involved in gold and diamond work which requires audits by accredited independent auditors. Between 2011 and September 2012, all Watches & Jewelry Houses obtained RJC certification. These include Bulgari, Chaumet, Christian Dior Couture, Fred, Hublot, TAG Heuer (and retail subsidiaries in the United Kingdom, Japan and the United States) and the jewelry business of Louis Vuitton and Zenith.





### A NEW MILESTONE FOR LVMH: THE "LIFE - LVMH INDICATORS FOR ENVIRONMENT" PROGRAM



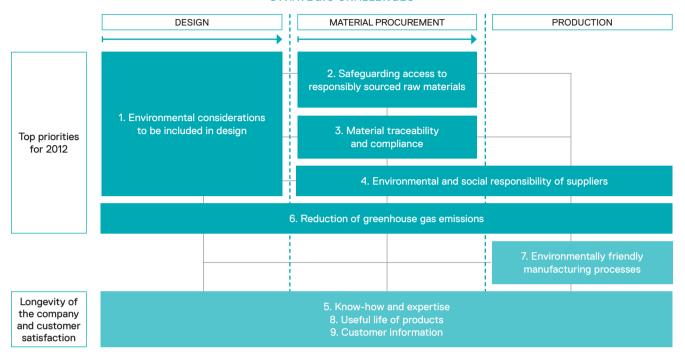
In 2011, LVMH initiated a strategic plan to identify the key areas that would strengthen the management of the environmental challenges facing the Group and its Houses. Implemented by the Management Committees of seven pilot Houses and overseen by the LVMH Executive Committee, the work led to the definition in 2012 of the "LIFE – LVMH Indicators for Environment" program, which is based on nine key aspects of environmental performance:

- eco-design;
- responsibly sourced raw materials and supply chains;
- material traceability and compliance;
- supplier relationships;
- know-how and expertise;
- reduction of greenhouse gas emissions;
- environmentally friendly manufacturing processes;
- lifespan of products;
- customer information.

The seven pilot Houses taking part in the

initiative belong to the five LVMH business groups and are therefore representative of the broad range of challenges encountered. Each House has defined an action plan illustrating and prioritizing its strategic areas of focus, and established indicators to monitor their performance. This methodological approach distinguishes between specific indicators and shared indicators, while creating a more in-depth model that groups together the environmental challenges common to all Houses.

#### STRATEGIC CHALLENGES



For example, levers such as the use of nonair transportation or the evaluation of the environmental performance of packaging based on an Environmental Performance Index (EPI) could be pursued by all Houses in a similar fashion. On the other hand, the operating procedures specific to each business require special thought with regard to supplier-related challenges and practices, and issues of material traceability and compliance.

Consequently, the "LIFE" program represents a new form of information

exchange and strategic planning within the Group. The information generated will be shared with all teams across all businesses, and the program will gradually be rolled out to include the other Group Houses. The program has been designed in such a way as to make the environment a more integral part of managerial processes, facilitate the development of new management tools, and take into account changes and ideas for improvement resulting from the Houses' own innovative practices.

Seven pilot Houses are taking part in this program:

Wines & Spirits	Fashion	Perfumes	Watches	Selective
	& Leather Goods	& Cosmetics	& Jewelry	Retailing
Hennessy MHCS	GIVENCHY	GUERLAIN	CHAUMET PARIS	SEPHORA

### SUSTAINABLE DEVELOPMENT AT LOEWE

In 2012, Loewe introduced a sustainable development program featuring more than 25 action points in six different areas of the value chain: product durability (design), supply and production of durable leather, responsible and cost-effective logistics, responsible retailing, employee engagement, and dialogue with stakeholders. These actions fall within the framework of the "LIFE" strategic program.

Each area is managed by a senior company executive who sits on a sustainable development executive committee that meets twice a year to monitor and support the program's progress. In addition, an operating committee meeting for each area is held quarterly and attended by the developer of the action points and all others involved.

### Profile of an employee



Sandrine Noël, Louis Vuitton Environmental Manager

Sandrine Noël joined Louis Vuitton in 1999 and likes to think of herself as a self-taught environmentalist. She has not stopped learning about this field since 2005, when she was appointed Environmental Manager. Summing up her job today, she emphasizes that her multi-disciplinary task is to come up with fresh ideas. "How can we anticipate future risks and opportunities? What are the House's sustainability conditions with respect to the luxury sector's future economic models? The role of the environmental department in this context is to support our operations, help them progress, and protect today's values while seeking ways of promoting future growth. We are also tasked with developing an optimistic vision and fresh excitement that necessarily involve environmental responsibility."

Her main asset in a House of more than 18,000 employees worldwide is the permanent 100-strong collaborative network she has set up and which applies the company's environmental strategy to every area of operation. "Louis Vuitton is a completely integrated brand. From raw material procurement to retailing, we work with the entire value chain so that the environment is consistently present at every stage."

The three successive Carbon Footprints\* produced between 2004 and 2010 placed particular focus on the carbon dioxide impact of our operations. Little by little, our vision became more specific and ended in the development of the "LIFE"

strategic project, of which Louis Vuitton is one of the pilot Houses. The true strength of Louis Vuitton within the Group is having access to all the levers required to drive and control its projects, from store architecture to real estate and purchasing. "One of the most noteworthy examples at Louis Vuitton is the way in which the Logistics Department has incorporated the environment into its practices and processes, such as developing maritime transport, green construction, ISO 14001 certification within the Leather Goods supply chain – which is a first – and environment-focused transport tenders."

At the end of our interview, Sandrine Noël leaves us with a message that is a good summary of the House's approach: "Louis Vuitton does not look at the environment from a marketing perspective. Internally, the environment is a land where there is no focal point. This kind of a challenge leads us to engage in ongoing dialogue with everyone involved, not just the business groups, the Group's Environmental Department and the smaller Houses who are often very proactive, but also all other industry sectors. In the end, we all face the same issues. We share the load and are all committed to a sustainable future."

### INCORPORATING ENVIRONMENTAL CONCERNS INTO DESIGN

**Education and processes** 

Reduction in materials and packaging (eco-design)

**Environmental labeling** 



The Houses have a variety of tools and customized training programs that allow them to incorporate environmental concerns into the design of their products and packaging as much as possible. Eco-design involves reducing packaging weight and volume, choosing specific components and raw materials, and employing more energy-efficient production processes. Informing the public about a product's environmental impact is a growing challenge that has led the French government, for example, to embark on an initiative in this regard. The LVMH Group is actively participating in this work, particularly for the Perfumes & Cosmetics and Fashion & Leather Goods business groups.

### LIFESPAN OF PRODUCTS



The lifespan of products is one of nine key aspects of environmental performance listed in the LVMH "LIFE" program.

It is intimately linked to product quality, which is one of the hallmarks of a luxury

product. Prompted by the increasing scarcity and rising price of raw materials, governments and companies are now more than ever questioning how consumer goods are designed and manufactured.

The LVMH Group's approach to these issues involves a combination of upstream action regarding eco-design and impact and product lifecycle analyses, and downstream action regarding maintenance, reparability and recycling. LVMH aims to reaffirm the specific nature of its model, which is based on producing exceptional goods whose durability is validated by their transfer value and premium quality.

### **EDUCATION AND PROCESSES**

As part of the five-year partnership between LVMH and CIRAIG (Interuniversity Research Center for the Life Cycle of Products, Processes and Services, based at the École polytechnique de Montréal), Loewe is working on a project to assess the environmental performance of the leathers used in fine leather goods.

In December 2012, Loewe set up a working group comprising the studio, buyers and marketing teams. The goal was to raise awareness about environmental and social issues and engage in some brainstorming about eco-design.

### ECO-DESIGN AT LOEWE

- To ensure that is has a sufficient supply of high quality leathers to carry out its five-year strategic plan, Loewe works closely with breeder associations, such as Casa de Ganaderos the oldest breeder in Europe, founded in 1218 on the variables that may affect the quality and traceability of leather.
- In Madrid, reusable boxes have replaced the cardboard boxes used for store deliveries, saving 1.7 metric tons of cardboard every year. An action plan has been set up so that this practice can be extended to other sales locations whenever possible.

### BEST PRACTICES PACKAGING

- Moët & Chandon has developed
  a new range of cases, providing suppliers
  with Forest Stewardship Council
  (FSC)-certified shipping crates.
  As part of a comprehensive project
  to develop the brand's visual identity,
  the Dom Pérignon box designed by MHCS
  has been completely revised to incorporate
  aspects of eco-design. The box is
  manufactured in France to limit the
  environmental impact related to
- transportation and to showcase French manufacturing know-how. The box is made of cardboard and fine paper produced from wood from sustainably managed FSC-certified forests. The inserts that support the bottle inside the box are made from 100% recycled plastic. The synthetic materials typically used to give a silky feel have been replaced by 100% natural eucalyptus fibers. These inserts can be completely removed so that the consumer can either keep the box for another purpose or recycle it.



### BEST PRACTICES ECO-DESIGN

The challenge of eco-design is directly linked to the transfer ideal, which is central to our brands' commitment.

- In 2012, Louis Vuitton introduced a new design of overall, eco-designed in its studios and featuring improved ergonomics, style and environmental impact. It set up a facility where used overalls could be recycled through a defibering process.

The project was launched at two pilot sites in France, Sainte-Florence and Saint-Pourçain-sur-Sioule, and the aim is to roll it out more widely in 2013.

The Group is also optimizing the use of materials. Louis Vuitton's "Extenso" project, for example, aims to reduce the amount of material used and destroyed by improving cutting techniques.

– Guerlain has played an active role in

revising the EPI calculation tool.
EPI has been used for every new project
since 2008, the goal being to make
improvements to every new product.

The huge 140 m² La Petite Robe Noire advertising banner erected in place
 Blanche in Paris in May 2012 was passed on to Bilum, a company specializing in the repurposing and recycling of materials. It was subsequently transformed into
 120 collector's bags (the Petite Robe Noire de Guerlain "It" collector's bag) by a
 French non-profit organization that helps disabled people return to the workforce (ESAT). Proceeds from the sale of these

bags were donated to the Guerlain Support Fund, created to provide assistance to the winners of the Montfermeil "Cultures et

Création" fashion show.

- Last but not least, as part of Guerlain's sponsorship of the European Institute for Packaging Technology (ESEPAC),
Guerlain's director of business development helped this school/business create a new teaching track that focused on cosmetics. He gives regular classes that include eco-design

principles.

 Loewe has implemented an action plan to improve the sustainability of its everyday purchases. Each department's consumption has been analyzed and a "green catalog" produced to meet staff needs.

### PACKAGING AND ENVIRONMENT HANDBOOK

In 2012, LVMH updated the Packaging and Environment Handbook, which is distributed to all Group Houses. The handbook recaps the questions, methodologies and technical tools relating to packaging design and management, eco-design processes, international regulations, and the environmental impact of materials.

### REDUCED USE OF MATERIALS AND PACKAGING

Eco-design involves reducing packaging weight and volume, choosing specific components and raw materials, employing more energy-efficient production processes and introducing initiatives to comply with REACH regulations. International and European regulations have led to more stringent environmental requirements in packaging design and manufacture. In particular, the volume and weight of packaging must not be what some regulations define as "excessive".

The Environmental Performance Index (EPI) created by the Perfumes & Cosmetics Houses in 2008 and applicable to packaging is based on the following criteria: separability of material, volume, weight, use of refills, and environmentally friendly material. Greenhouse gas emissions generated by packaging materials are also calculated. Since 2011, the EPI has been extended to other Group Houses such as Hennessy and the Champagne Houses. In 2012, the EPI Excel spreadsheet was replaced by Edibox (Environmental Packaging Performance Index) software, which involved some major adaptation and resulted in a significant improvement. The tool is now sustainable, reliable and universal. Edibox software was introduced in 2012 at Parfums Christian Dior, Guerlain, LVMH Fragrance Brands, Make Up For Ever, Louis Vuitton and Bulgari to integrate environmental criteria into the design of future packaging from the very earliest stages. The EPI rating, which is supplemented by CO2 emission data, is currently only calculated for packaging materials. Plans are in place to take account of other life cycle stages (transportation, production, etc.) and indicators (water consumption, consumption of non-renewable resources, etc.). In the case of MHCS, the EPI is applied to 32% of existing products and new projects, accounting for 90% of shipped volume.





### ENVIRONMENTAL LABELING

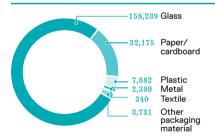
LVMH and Group Houses are supporting the work being done in France and around the world regarding environmental labeling, particularly for the Perfumes & Cosmetics, Fashion & Leather Goods, Watches & Jewelry and Wines & Spirits business groups.

– For instance, to better inform and educate consumers, Sephora and LVMH participated in an environmental labeling trial in France conducted between July 2011 and July 2012 using two of Sephora's flagship products: Shower Gel and Shower Cream. Information on greenhouse gas emissions and water consumption throughout the products' life cycle was posted on Sephora's website. Labeling was based on the template defined by the French Consumer Industries' Liaison and Studies Institute

(ILEC) and used by many companies.

– LVMH is also very involved in work currently being performed in France on environmental labeling guidelines for different sectors. It is a member of the working groups focusing on food/wines and spirits, beauty, textiles and leather, jewelry/watchmaking and hotels.

PACKAGING PLACED ON
THE MARKET IN 2012 (in metric tons)



### CHANGE IN PACKAGING PLACED ON THE MARKET BY BUSINESS GROUP

(in metric tons)	2012	2011	2010	2009	2012-2011 change (%)
Wines & Spirits	176,265	163,186	148,145	115,950	8
Perfumes & Cosmetics	6,367	6,100	5,711	4,764	4
Fashion & Leather Goods	19,900	23,798	21,974	20,800	-16
Watches & Jewelry	486	527	440	386	-8
Selective Retailing	1,548	1,563	1,327	1,327	-1
TOTAL	204,566	195,174	177,597	143,227	5(1)

(1) Berluti, Bulgari, Château Cheval Blanc, Chaumet, Hublot and Marc Jacobs are not included in this indicator.



## BEST PRACTICES ECO-DESIGN

- Case manufacturer Terracotta has designed a new limited edition case, Terracotta Azzura, in FSC-certified European beech with a water-based varnish. It is produced by a European supplier using a number of artisan techniques.
- In 2012, Guerlain launched Noir G, the first completely refillable mascara.
- Guerlain has also embarked on an ambitious eco-design initiative, such as introducing Orchidée Impériale refills, which have been on trial at some Paris stores since September 2011. Still available in the Sèvres and Passy stores in Paris, the refills are now available in Hong Kong and are expected to be marketed to further stores in Paris. The volume of packaging used for the cases has been reduced by 15% and more recycled materials are being used for the box and thermoformed inner trays.

A label on the back of the box provides customers with further information about Guerlain's commitment to eco-design.

### BEST PRACTICES PACKAGING AND TRANSPORTATION

Reducing the amount of packaging is an underlying transportation challenge. Less packaging means lower shipping costs and less impact on the environment. To this end, Louis Vuitton is paying special attention to packaging that accounts for the highest product volume. In 2012, it created a multi-disciplinary working group comprising the Logistics, Industrial, Purchasing, Environment and Quality Control departments to help the company reduce and streamline all of its customer and shipping packaging. This has led in particular to the elimination of certain packaging layers where possible. In terms of logistics, original packaging boxes are being used more frequently and optimally, particularly for small leather goods. Lastly, a number of other improvements have been made, such as modifying shoe box sizes so that they can be nested, resulting in a 50% reduction in the space needed for shipping and storage.

### BEST PRACTICES PACKAGING

Since 2012, plastic bags at Make Up
For Ever have been replaced by bags
made of recycled nonwoven fabric.
In 2012, Bodegas Chandon further reduced
the thickness of the plastic used to protect
palettes of finished goods. It has now been
reduced by 50% from 60 microns in 2011
to 30 microns in 2012.

### SAFEGUARDING ACCESS TO RESPONSIBLY SOURCED RAW MATERIALS AND PROTECTING BIODIVERSITY AT THE OUTSET

### Protected, critical raw materials

CITES Convention
 Exotic woods
 Eco-Material Handbook
 Work with the BSR, the RESP platform, and the LWG

Ethnobotany and sustainable viticulture



•••••

The LVMH Group has a specific strategy for sourcing and safeguarding raw materials. The choice of components and raw materials used in product manufacture is key to safeguarding the environment and precious resources.

### PROTECTED, CRITICAL RAW MATERIALS

### **CONVENTION CITES**

LVMH adheres to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), signed in Washington on March 3, 1973. In 2012, it adopted the Animal Sourcing Principles code of conduct for sourcing leathers.

### **EXOTIC WOODS**

In the Fashion & Leather Goods business group, Louis Vuitton consistently checks the origin of wood to ensure it comes from sustainably managed forests and always tries to select woods that have been certified by the FSC or PEFC (Programme for the Endorsement of Forest Certification) for store construction, window dressings, customer packaging and some of its exclusive products. In 2012, Louis Vuitton conducted a program to educate all staff involved in purchasing wood or wood products - such as for accessories, trunks, architecture, merchandising, writing implements, evewear and customs interface about the upcoming requirements of the EU Timber Regulation, which entered into force on March 3, 2013. This regulation describes the obligations of operators placing timber or timber products on the European market and in particular makes it illegal to place illegally harvested timber and timber products on the EU market. The Group is currently putting together a compliance methodology (register, due diligence system, etc.).

#### **ECO-MATERIAL HANDBOOK**

Designed as an operational tool, the "Eco-Material Handbook," which is distributed in-house, identifies about forty materials that offer the kind of environmental performance required for the Group's products. It explains how these materials can be used by each business. The materials are categorized by application: wrapping, packaging, textiles and leathers, communications and store fit-out.

### WORK WITH THE BSR, THE RESP PLATFORM AND THE LWG

Since 2011, LVMH has been a member of Business for Social Responsibility (BSR), through which it is involved in particular in working groups that aim to establish best practices in the sourcing of exotic leathers. LVMH is also continuing its involvement with the Responsible Ecosystems Sourcing Platform (RESP) by participating in a subworking group that focuses on the traceability of exotic leathers, colored stones and certain plant substances. In 2012, work was conducted under the auspices of the BSR on the application of "Sourcing Principles" to cattle hides and ostrich leather with the

goal of evaluating the supply chain challenges for each type of skin. Since early 2012, LVMH has also been a member of the Leather Working Group (LWG), a British trade association that has established an environmental rating system for tanneries. A sub-group has been set up specifically for companies dealing in luxury goods to introduce standards in tanneries that supply the luxury goods sector.

### ETHNOBOTANY AND SUSTAINABLE VITICULTURE

The Ethnobotanical Innovation Department of LVMH Recherche, Perfumes & Cosmetics has focused on ethnobotany for many years. The Department identifies plant species from around the world that could be used in cosmetics, and helps protect these species and develop local economies. In 2012, it co-organized with the faculty of sciences at the University of Antananarivo in Madagascar a "Forum on sustainable development and greater collaboration between partners". This forum



brought together stakeholders from LVMH Recherche supply chains in Madagascar and researchers from the Antananarivo Laboratory of General Pharmacology, Pharmacokinetics and Cosmetology (LPGPC). The goal was to share stories from the field, study the contribution of ethnopharmacology to conservation and sustainable development efforts, and discuss the implementation of the Nagoya Protocol and Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) in Madagascar.

At the same time, the LVMH Group, which had already financed a fact sheet at the end of 2011 prepared by the Foundation for Biodiversity Research entitled "ABS in all its forms", launched an in-depth and multi-disciplinary study of its cosmetics supply channels to give the Group's Houses an operational tool that met the obligations of the Nagoya Protocol.

### BIODIVERSITY A KEY AREA OF GUERLAIN'S COMMITMENT

– Guerlain's "sustainable development" event, which took place on June 14 and 15, 2012, was an opportunity to educate all Guerlain France employees about biodiversity issues and present the House's key initiatives: orchids and the orchidarium program, the natural raw materials saved by the House to create its perfumes, and efforts being made to protect biodiversity at its industrial sites.

- To better understand and therefore protect this biodiversity, Guerlain has conducted studies at its sites in Chartres, located at the heart of an industrial zone, and Orphin, ideally located between flat open countryside and forest, to produce a diagnosis of all species present. This led to a map of each site's biodiversity and the development of new initiatives and methods. For example, at Orphin, wildflowers have been planted on two areas of fallow ground and an area has been created for composting plant waste. A number of areas have also been designated for different mowing frequencies and the use of glyphosate has been permanently halted.



# COMMITMENT OF THE LVMH GROUP RECOGNIZED IN FRANCE'S NATIONAL STRATEGY FOR BIODIVERSITY (SNB)

In October 2012, the French Ministry of Ecology, Sustainable Development and Energy awarded LVMH "National Strategy for Biodiversity Recognition" for "improving, from upstream to downstream, the footprint on biodiversity of LVMH activities, with the goal of having an actual positive impact on biodiversity." The SNB followed France's ratification of the United Nations Convention on Biological Diversity (CBD). The commitment covers the period from 2012 to 2014.

The first measures undertaken involve:

- identifying priority areas for diagnosis of the impact (known or potential) on biodiversity;
- starting an audit of these areas involving the pilot Houses that use targeted raw materials;
- promoting and disseminating effective initiatives already under way in these areas, if they are having a positive impact on biodiversity or the population;
- assessing the impact of the implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) for the supply channels affected.

– Lastly, Guerlain is a partner in the Tianzi Mountain Nature Reserve in China under a 10-year sustainable development sponsorship program. (See "Environmental sponsorship and NGOS", on page 51.)

### PROMOTING SUSTAINABLE VITICULTURE

In recent years, the Wines & Spirits Houses have been committed to reducing the use of phytosanitary products.

Hennessy is pursuing an initiative to reduce the use of phytosanitary inputs. In January 2011, a 12-hectare vineyard managed by its Cognac-based wine-growing subsidiary, SODEPA, was chosen to join a network of gold standard farms established by the French government under the 2018 Écophyto Plan. An action plan was established for the vineyard that included the trial of a new Bertoni mist sprayer equipped with recuperator panels that reduces the amount of fuel and treatment products used by 30%. For the last three years, the vineyard has been trialing the mating disruption method to protect the vines against vine moths and avoid the use of insecticides. Hennessy has also planted flowers on fallow land and conducted studies on flora and fauna at other sites.

To publicize its initiatives and set an example in the region, the House has sent all of its suppliers a copy of a guide called "Viticulture durable des Charentes" (Sustainable Viticulture in the Charente Region) which summarizes its environmental commitment.

### THE CHALLENGE OF PROTECTING BEES

For several years, the Houses have been supporting initiatives to protect bees, which are the health sentries of our ecosystems. Two Houses which have a historical association with bees are Chaumet, which has supported the Terre d'Abeilles (Land of Bees) association since 2002, and Guerlain, which has entered into an environmental sponsorship agreement with the Ouessant Black Bee Conservatory (ACANB).

To spotlight the lessons and initiatives of the bee protection project, in 2012 Guerlain participated in the third Corporate Philanthropy Awards for the Environment and Sustainable Development, organized by the French Ministry of Ecology, Sustainable Development and Energy. Like Guerlain, Louis Vuitton has set up hives at some of its sites (its corporate headquarters at Pont Neuf in Paris, the Cergy-Pointoise logistics sites and its Hong Kong warehouse), and in 2011 signed a three-year study and research partnership agreement with the French National Center for Scientific Research (CNRS) on the topic of "Bees in cities - Bees in fields," which aims to understand why bees are healthier in urban environments than in rural ones.

To help preserve the black bee, the CNRS Honeybee Evolution and Behavior Team (EVOLBEE) is conducting a project entitled "Comparative Activity of Bees in the Black Bee Conservatory in the Urban and Agricultural Zones of Île-de-France". The goal is to analyze and compare the differences observed between urban colonies of black bees and colonies at the Île-de-France Black Bee Conservatory (CANIF), located in the Haute Vallée de Chevreuse regional nature reserve. Data collected is cross-referenced with external data such as temperature, rainfall, and lighting times.

Hennessy has also installed two hives at its site in Bagnolet, in the Charente region, and has planted flowers on a fallow area at its Haut-Bagnolet site.

# ON THE FUTURE OF RAW MATERIALS

The topic of the 12<sup>th</sup> LVMH Scientific Symposium held in Paris on September 12, 2012 was: "Natural Resource Depletion and Cosmetic Raw Materials: What Strategies Should We Adopt for the Future?"

The depletion of resources is now not only known and acknowledged, it is also the cornerstone of discussion among cosmetics manufacturers.

#### **BEST PRACTICES**

- One of the three Château Cheval Blanc estates. Château Quinault L'Enclos, a Saint-Émilion Grand Cru, was awarded an "organic farming" label after the 2012 harvest. This label recognizes the major efforts made toward sustainable development since the estate was acquired in 2008: reduction in phytosanitary products, planting of hedgerows, and accreditation for "responsible viticulture" based on specifications of the non-profit organization Terra Vitis. - In Poland, Belvedere is spearheading a long-term partnership program with its pure alcohol supplier that focuses on cereal cultivation and the distillation process. The work performed in June 2012 concerned alcohol analysis, eco-production and the implementation of the REACH regulation. In November, a seminar was held to raise awareness about quality challenges and CSR, and brought together sector producers and a panel of university experts.



"The gradual closing of refineries requires us to change," says Claude Martinez, CEO of Parfums Christian Dior.

These various impasses have given rise to collaborative intelligence, new consumption patterns, and consumers' demand for authenticity which is being intensified by regulatory requirements. The combination has prompted a major stampede toward "natural" cosmetics. "The transparency of supply chains has to be updated," says Patrice André, Head of the Product Innovation Department for LVMH Recherche.

## MATERIAL TRACEABILITY AND COMPLIANCE

**REACH regulation** 

Regulations on cosmetic products



To ensure a high level of protection of human health and the environment against the risks that can be posed by chemicals, LVMH anticipates and implements regulations that apply both to the operation of its sites and to the manufacture of its products.

# THE ABILITY TO ANSWER CUSTOMERS' QUESTIONS ABOUT THE ENVIRONMENT AND HEALTH



The ability to answer customers' questions about the environment is one of nine key aspects of environmental performance included in the LVMH "LIFE"



program. Polls and studies have shown us that the ability of our Houses to operate in compliance with the strictest environmental standards is a growing expectation of customers around the world. The environmental aspect of our products is more important than ever. Our Houses and their in-store associates must be able to provide customers with full technical environmental data of a product or process.

 The Perfumes & Cosmetics business group, for example, is particularly focused on health and safety issues related to the quality of cosmetic products, not only when they are placed on the market, but also while they are being marketed. A customer relations network has been set up to review all consumer complaints and carry out cosmetic vigilance of our products. Any claim, whether an intolerance or a severe irritation, is reviewed by a specialized team and assessed by a professional. A consultation with a dermatologist may be offered to the consumer. By analyzing these complaints and exercising cosmetic vigilance, we can explore new avenues of research.

– In 2012, Louis Vuitton revamped the Environment pages of its website at the same time as it published an updated report of its greenhouse gas emissions. The REACH process is explained in guides given to sales associates in stores so that they know exactly how to answer customer questions.

About a dozen CSR ambassadors have been appointed in Japan, tasked with answering questions and providing customers with information on environmental topics.

Presentation kits (display stands and sales briefs) are currently being prepared following the award of RJC certification in September 2012.

 Responsible drinking: in 2012, Moët Hennessy stepped up its commitment to responsible drinking.

Its initiatives were aimed at employees, consumers, guests and visitors.

An in-house campaign entitled "Responsible drinking at Moët Hennessy" and aimed at 6,500 Moët Hennessy employees was expanded around the world. It relies on training, a website promoting responsible drinking, an e-learning module and a questionnaire to enable everyone to assess their alcohol consumption privately and anonymously.

With regard to consumers, and in addition to strict compliance with local regulations, Moët Hennessy practices

2012 SPOTLIGHT ON THE HOUSES' REACH PRACTICES

- As a result of the tightening of the REACH regulation following the registration of new substances subject to authorization and the requirement to share information between users of substances and their suppliers, the Houses have been following up with their suppliers. - For example, Givenchy Couture has implemented a variety of training and information initiatives to facilitate the job of the operational managers and help suppliers and manufacturers better monitor product returns. It has also launched a program to test raw materials and verify their compliance. - Louis Vuitton has prepared a catalogue of the safety data sheets for all the chemicals it uses and has created an internal tool to share this information with workshops. A cross-disciplinary working group has been set up to facilitate on-site management of chemicals. Compliance with REACH and all other regulations is centrally coordinated as part of the "SAFE" project for effective monitoring and greater sharing of best practices between all Louis Vuitton businesses.

self-regulation, particularly for information and communications, such as its Code of Best Practices for Marketing and Communications, guidelines on website communication, and filtering of minors on websites. Every year, staff train hundreds of people around the world in the ritual of tasting the products, explaining their esthetic, cultural, gastronomic and historical aspects.

With regard to labeling, all wine bottles sold in the EU (except in France for regulatory reasons) carry the website address www.wineinmoderation.eu. Likewise, all spirits mention www.responsibledrinking.eu. Lastly, Moët Hennessy is an active supporter of numerous responsible drinking programs throughout the world, such Wine in Moderation and ICAP programs.

### REACH REGULATION

The REACH regulation streamlines and improves the former legislative framework of the European Union governing chemicals. The main aims of REACH are to ensure a high level of protection of human health and the environment against the risks that can be posed by chemicals, promote alternative test methods, ensure the free movement of substances on the internal market, and enhance competitiveness and innovation.

All Houses have incorporated REACH regulatory requirements in their contractual documents so as to involve all suppliers in this effort. They also carry out laboratory tests to certify the absence of potentially harmful substances in consumer goods placed on the market. Experts from the various Houses meet regularly as part of a REACH working group to anticipate future phase-outs and share best practices. The LVMH Group also holds specific training courses on REACH implementation.

The Group and its Houses also actively follow and implement changes in similar types of legislation in other countries, such as Proposition 65 in California.

Since April 2012, the Houses have been sending their suppliers new letters of commitment specifying their requirements for chemical substance management. Suppliers are requested to ensure that the substances used are registered under the REACH regulation, or regulations similar to REACH in the case of suppliers outside Europe. They are also requested not to use any substances listed in the Group's monitoring tool. This Internet-based tool, available to suppliers, lists 132 substances that are subject to restrictions or authorization based on REACH, as well as other substances of very high concern (SVHC). The tool aims to help Houses suppliers better identify the potential use of these substances and the materials in which they may be found. By working to eliminate SVHCs from the supply chain, the Group's goal is to go a step further than the REACH regulation, which does not ban SVHCs. The impact of SVHCs on health and the environment is currently being studied by European specialists who will decide whether or not these substances should be added to Annex XIV of REACH (substances subject to authorization).

### REGULATIONS ON COSMETIC PRODUCTS

- The LVMH Group has a clear policy on the sensitive issue of using animals to test the safety of finished products: the goal is to ensure the safety of the consumer of our products while still taking account of animal welfare. For this reason, since 1989, companies in the Perfumes & Cosmetics segment have no longer been conducting animal testing on the products they place on the market, a practice that began well before the official ban in the European Union in 2004. Developing alternatives to animal testing is a genuine scientific challenge and the LVMH Group continues to be extremely active in this field.

- The EU regulatory framework for cosmetics products changed with the

adoption on November 30, 2009 of European Regulation (EC) 1223/2009 of the European Parliament and the Council of the European Union. The legislation will take full effect in July 2013 and will replace Directive 76/768/EEC. The Commission's main goal with this new regulation is to raise the already high level of safety for cosmetics consumers by:

- increasing manufacturer responsibility through clarification of minimum requirements for assessing product safety; and
- increasing the level of monitoring on the market through the requirement to notify the competent authorities of any serious adverse effects.

The LVMH Group has implemented measures in readiness for the entry into force of the new regulation in July 2013. These measures are all the more crucial given the increase in legislation around the world as a result of cosmetics regulation.

Other European regulations that have entered into force, including the most recent, have been incorporated into LVMH procedures. These include:

- the Globally Harmonized System of Classification and Labelling of Chemicals (GHS); and
- the REACH regulation, which streamlines and improves the former legislative framework of the European Union governing chemicals. The main goals of REACH are to ensure a high level of protection of human health and the environment against the risks that can be posed by chemicals, promote alternative test methods, ensure the free movement of substances on the internal market, and enhance competitiveness and innovation.
- The LVMH Group is particularly vigilant in complying with statutory texts, the opinions of scientific committees, and the recommendations of professional bodies. It also abides by strict internal rules for the development of new products rules that are also imposed on LVMH suppliers.

The Group has held true to this commitment for several years and backs

this policy with an approach designed to anticipate changes in international regulations. This anticipation is made possible by the efforts of our experts who regularly participate in the working groups of authorities in France and the rest of Europe and are very active in professional bodies. The work done by our experts in monitoring all the new regulations and changes in scientific knowledge has led the LVMH Group to ban the use of certain substances and to work toward reformulating certain products.

This very stringent requirement guarantees the safety of our cosmetics, not just at the time they are placed on the market, but also while they are being marketed. A customer relations network has been set up to review all consumer complaints and carry out cosmetic vigilance of our products. Any complaint, whether relating to an intolerance or a severe irritation, is reviewed by a specialized team and assessed by a professional. A consultation with a dermatologist may be offered to the consumer. Lastly, by analyzing these complaints and exercising cosmetic vigilance, we can explore new avenues of research and improve the quality of our products.

# ENVIRONMENTAL AND SOCIAL RESPONSIBILITY OF SUPPLIERS AND SUBCONTRACTORS

Principle and audits

Suppliers support



For LVMH, purchasing and supplier relationships are a crucial aspect of our

responsibility, risk management and competitiveness. We must therefore be careful in our choice of suppliers and in the nature of our relationships with them. The supplier chain is a key component of our strategy, enabling us not only to safeguard supplies, ensure compliance with regulations and guarantee long-lasting, traceable products, but also to set up new types of collaboration all along the chain in matters of eco-design, product life cycle analysis and waste management.

### PRINCIPLES AND AUDITS

As part of its supplier relationships,
 LVMH requires its partners to subscribe to its Supplier Code of Conduct by virtue of which it reserves the right to conduct compliance audits at any time and without notice.

Every year, the Houses perform preliminary evaluations of their suppliers. For example, Louis Vuitton has an evaluation chart for its Leather Goods suppliers. The environmental portion of the SA 8000 standard has been included in supplier audits since the last quarter of 2012. A questionnaire is sent to window dressing suppliers to learn more about their standard of management. In another example of the type of measures applied by the Houses to assess and obtain information about their service providers, Loewe has developed a new supplier assessment and approval process to extend the validity and quality of the standard criteria taken into account when selecting a supplier.

More specifically, suppliers of exotic leathers and furs are sent the Animal Sourcing Principles code of conduct, which was developed and adopted in February 2011 by the founding members of the BSR Sustainable Luxury Working Group (SLWG). From 2013, compliance with these guidelines will be an integral part of the supplier assessment and approval process.

The House will also be making public Loewe's Animal Sourcing Policy adopted

at the end of 2012 and that will be distributed to stores and posted on Loewe's website as part of its sustainable development message.

• In 2012, more than 650 social and/or environmental audits were carried out, almost 80% of them by independent experts, at 546 of the Houses' suppliers. The Group's Purchasing Department provided all Houses with a decision-making tool for social and environmental supplier audits and set up a database to share the results of these audits.

INITIATIVES TO HELP SUPPLIERS

Local sourcing is an important aspect of our relationship with suppliers. Louis Vuitton's service providers, who are encouraged to include environmental goals in their contracts, are selected as much as possible for their geographical proximity to the site in question. The workshop in Barbera, Spain, for example,

has increased its local purchases by 50% and now buys its leather from six local tanneries located within a 60-km radius. The footwear manufacturer in Fiesso d'Artico, Italy, also buys most of its components and raw materials locally.

As part of a circular economy, waste management is another major criterion in supplier relationships. Louis Vuitton and its suppliers share best practices with regard to material recovery.

A number of different material recovery channels have been set up, such as the collection and recovery of waste from electrical and electronic equipment (WEEE) by APR2, a company created as part of France's "ESAT" initiative, which aims to help people with disabilities return to work. LVMH also has its own recycling platform, CEDRE (recycling platform). In Italy, the shoe manufacturing unit in Fiesso d'Artico, like other leather goods workshops, collects and recycles offcuts of leather and plastic from local subcontractors.

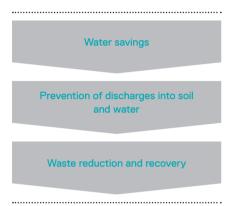
## BEST PRACTICES SUPPLIERS

- Belvedere audits its suppliers' dry solids and pure alcohol as part of its safety and environment control process. Suppliers have made a number of improvements, such as installing a new pure alcohol distillery boiler, replacing coal, and reducing fuel consumption by 40%. - Hennessy has pursued a strategy of dialogue with all its dry solids suppliers and performed environmental audits since 2008. In 2012, in addition to on-site audits, it audited 24 packaging suppliers. Hennessy also conducts awareness campaigns about the REACH regulation with its purchasing, quality control and development departments.



Guerlain vetiver harvest.

# ENVIRONMENTAL EXCELLENCE OF INTERNAL PRODUCTION PROCEDURES AND SUBCONTRACTORS





The reduction in emissions and discharges is largely the result of efforts made to limit the amount of resources used to run sites, workshops and stores, and in the care taken in the design and management of a product's life cycle. (Air emissions are examined separately in the section "Energy management and the reduction of the impact of  $\mathrm{CO}_2$ ", on page 30).

### EFFORTS TO SAVE WATER RESOURCES

Water is a critical resource for the LVMH Group's operations, particularly in Wines & Spirits and Perfumes & Cosmetics. Water is required for two very distinct purposes: agriculture and manufacturing. This challenge has given rise to a broad range of initiatives, including the establishment of measuring protocols, improved consumption management and monitoring, storm water recovery, and optimal methods for irrigating vineyards and green spaces. In 2012, the Group's Houses used 6,424,228 m³ of water for agricultural purposes, primarily

vine irrigation (versus 6,618,614 m³ in 2011). In 2012, "processing" requirements accounted for 1,927,065 m³ of water (versus 1,816,716 m³ in 2011). It should be noted that 76% of sales areas (Selective Retailing, Fashion & Leather Goods, Perfumes & Cosmetics and Watches & Jewelry) are excluded from the reporting scope, but their water consumption is estimated at 760,000 m³. LVMH has also responded to the CDP Water Disclosure questionnaire since it was first established.

The Wines & Spirits Houses are particularly committed to water management initiatives. As part of its 2012 campaign, Hennessy conducted a study on optimizing the amount of water used to clean wine-production equipment. At its site in Saint-Jean-de-Brave in France, Parfums Christian Dior installed an analyzer at its stormwater basin as well as a water loop system to feed room temperature water to the latest manufacturing equipment that previously ran on waste water. This equipment has generated water savings of 10,000 m3 per year, almost 10% of the site's current consumption. For its part, Louis Vuitton is conducting awareness campaigns on saving water. In Japan, for example, these campaigns have led to a 14% reduction in water consumption compared with 2011.

## PREVENTION OF DISCHARGES INTO SOIL AND WATER

The most significant, relevant emissions reported are discharges by the Wines & Spirits and Perfumes & Cosmetics business groups of substances that contribute to eutrophication. Other Group activities only have a very small impact on water quality. Eutrophication is the excessive growth of algae and aquatic plants caused by excess nutrients in the water (particularly phosphorous), leading to oxygen depletion in the water, which is harmful to the environment. The parameter used to measure eutrophication is chemical oxygen demand

(COD), calculated after the effluents have been treated at the Group's own plants or at independent plants with which a site has an agreement.

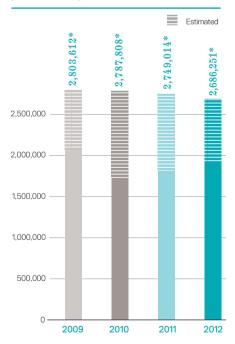
"Treatment" refers to clean-up by local authorities, self-clean-up in aeration tanks, or land spreading operations. In 2012, COD discharges increased by 26%. Studies are under way to identify opportunities to reduce this discharge in the Wines & Spirits Houses.

### THE CHALLENGE OF SUSTAINABLE VITICULTURE

Doubly committed to sustainable viticulture for historic and strategic reasons, the Wines & Spirits Houses concerned are carrying out a number of initiatives based on responsible or organic farming to reduce substantially the need for environmentally harmful phytosanitary products. (See paragraph "Ethnobotany and sustainable viticulture" on page 19.)

#### **CHANGE IN WATER CONSUMPTION**

(in cubic meters)



\* Estimates of water consumption for sales areas excluded from the reporting scope and audit (76% in 2012, 74% in 2011, 83% in 2010 and 72% in 2009) are shown separately:  $760,000 \text{ m}^3$  in 2012,  $932,298 \text{ m}^3$  in 2011,  $1,053,469 \text{ m}^3$  in 2010 and  $729,243 \text{ m}^3$  in 2009.

### **BEST PRACTICES CEDRE**

- In 2012, Guerlain stepped up its use of the CEDRE platform, sending returns to the platform from its headquarters in Levallois-Perret and from employee stores at the Chartres and Orphin sites. It also has arrangements for customers to drop off returns at its Paris stores. Employees can therefore collect their empty bottles and pots for recycling. Obsolete point-of-sale (POS) advertising and unusable office furniture at the Levallois headquarters are also recycled at this platform. At the Orphin site, a waste map has been drawn up identifying the types of waste generated. Green waste is now composted, and laboratory glass waste and waste tracking documents are managed optimally.

### WASTE REDUCTION AND RECOVERY

In 2012, 76% of waste was recovered (versus 89% in 2011). At the same time, waste production in 2012 increased by 28%. The decline in the recovery rate and the overall increase in waste production are primarily due to the inclusion of Wenjun, which produces a high quantity of non-recovered waste. Since 2010, the Perfumes & Cosmetics Houses and Sephora, and since 2011, Louis Vuitton, have been using the CEDRE platform, which is dedicated to the sorting and recycling, packaging, and distribution of cosmetic products. This recycling platform accepts several types of waste: obsolete packaging, obsolete alcoholic products, promotional materials, testers used in stores, and empty packaging returned to stores by customers. In June 2012, the LVMH Group sent its Houses the latest version of its

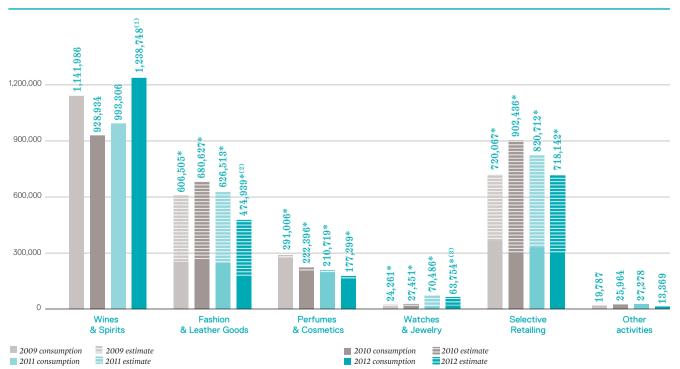
"Vademecum", a checklist of all types of waste related to Perfumes & Cosmetics that can be recycled at CEDRE.

- In 2012, the CEDRE platform processed some 1,625 metric tons of waste, up 25% over 2011, when 1,300 metric tons were processed. The platform was also able to resell some of the materials, such as glass, cardboard, wood, metal, plastic, alcohol and cellophane, to a network of specialist recyclers.
- Guerlain allows its customers to return their empty products to its Paris stores for forwarding to the CEDRE platform for sorting and reprocessing.

Customers are given information about this eco-initiative, which is also promoted on designated display stands in stores.

 A variety of recycling solutions have been introduced, such as reselling all types of leather offcuts. By the end of 2013, Louis Vuitton expects to be able to use the CEDRE platform to recycle some

### CHANGE IN WATER CONSUMPTION BY BUSINESS GROUP (in cubic meters)



<sup>\*</sup> Estimates of water consumption for sales areas excluded from the reporting scope and audit (76% in 2012, 74% in 2011, 83% in 2010 and 72% in 2009) are shown separately.

<sup>(1)</sup> Change mainly related to the inclusion of Wenjun and the increase in business of the other Wines & Spirits Houses.

 $<sup>(2) \</sup> Change \ mainly \ related \ to \ the \ increased \ reliability \ of \ data \ for \ one \ of \ the \ Houses.$ 

<sup>(3)</sup> Change due to the inclusion of Bulgari manufacturing sites.

#### **COD AFTER TREATMENT**

(in metric tons/year)	2012	2011	2010	2009	2008
Wines & Spirits	2,790.9(1)	2,227.3	2,107	3,291.2	1,395.9
Perfumes & Cosmetics	$23.2^{(2)}$	13.6	18.3	14.2	16.1
TOTAL	2,814.1	2,240.9	2,125.3	3,305.4	1,412

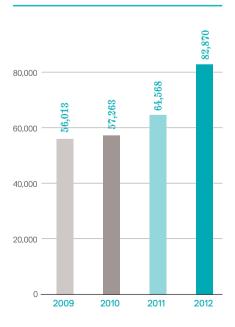
- (1) Change mainly related to increased business at Glenmorangie.
- (2) Change related to the introduction of more regular discharge monitoring at Parfums Givenchy.

of its advertising waste and specific waste such as work overalls, obsolete packaging, and scraps generated in France. Further avenues are currently being explored to allow other Group Houses to dispose of such items as obsolete skincare products, work overalls, and scraps of cloth and ready-to-wear. Louis Vuitton carried out a number of initiatives in this regard in 2012. For example, an initial trial at the Ducey workshop led to the recycling of 440 overalls by defibering, while a campaign conducted for the first time in Northern Europe resulted in the

reprocessing of 1,600 sales-associate uniforms, also by defibering. In 2012, a trial to recycle rolls of fabric at the CEDRE platform made it possible to reprocess more than 9 metric tons of fabric. With regard to obsolete or damaged metal pieces, the recovery channel previously deployed only in workshops was extended to head office, the Cergy repair workshop and the logistics firm Deret. A total of 10 metric tons of obsolete metal pieces were reprocessed and 5 kilograms of gold recovered.

### PRODUCTION OF GROUP WASTE

(in metric tons)



#### **BEST PRACTICES**

- Domaine Chandon California and Newton practice the use of compost in their vineyards, a method that reduces the use of fertilizers and helps the drainage of vines planted in heavy clay soils.
   They have also implemented measures to control erosion.
- Numanthia, in Spain, also practices responsible vineyard management using organic instead of phytosanitary products and reducing the number of aisles in the vineyards. Numanthia conducted three studies during the year to gain more understanding about viticulture conditions in relation to soil quality and routine organic fertilization.
   Numanthia also began a formal process to obtain Organic Farming certification consistent with the Resource Manual for the Organic Food and Farming Industry prepared under the EU action plan for organic farming.

#### **BEST PRACTICES**

- Bodegas Chandon continued its involvement with the sustainable development commission of the professional body Argentina Wineries, launching a bottle recycling program in June that involved installing storage and recycling bins for glass bottles at various shopping centers. The money collected was donated to a local authority children's hospital. - Belvedere is trying to recover the energy value retained in waste matter generated by the fruit maceration process in alcohol production. The vodka production House is taking part in a European Union pilot project developed with the University of Gdansk and a waste treatment facility that involves seeking innovative alternative recovery solutions for the production of biogas and biofuel. - Bulgari has introduced measures to avoid raw material waste in leather and limit sources of pollutant emissions by reusing offcuts. In 2010, Bulgari began donating a portion of unused leather offcuts to Il Porto di Coenzo, a center for social and professional insertion for people with disabilities, that uses these materials to produce small leather goods and print greetings cards. - On November 1, 2012, La Grande Épicerie de Paris introduced a system for sorting and reprocessing organic waste. The waste will be recovered by methane fermentation and go on to produce biogas, electricity and fertilizer. Different categories of waste (organic waste, common industrial waste, oil, cardboard and glass) are sorted and processed according to their specific recovery channel.

As is the practice at a number of Houses,
Guerlain's legal department is currently
digitizing its archives to reduce paper
consumption and storage, a project that will
be extended to other departments.
For its part, Louis Vuitton has launched
an international campaign to reduce paper
consumption, encouraging employees
to reduce the amount of paper they use.

#### CHANGE IN HAZARDOUS WASTE PRODUCTION BY BUSINESS GROUP

(in metric tons)	Hazardous waste <b>2012</b>	Hazardous waste <b>2011</b>	Hazardous waste <b>2010</b>	Hazardous waste 2009
Wines & Spirits	346(1)	178	196	146
Fashion & Leather Goods	163	121	73	61
Perfumes & Cosmetics	980(2)	896	776	767
Watches & Jewelry	26	29	17	14
Selective Retailing	127(3)	64	17	17
Other activities	77	79	111	_
TOTAL	1,719	1,367	1,190	1,005

- (1) Change mainly related to the inclusion of Wenjun and increased business.
- (2) Some products excluded from the production cycle are classified as hazardous waste and processed through "hazardous waste" channels to avoid infringement.
- (3) Change related to the inclusion of Sephora France for the waste production indicator.

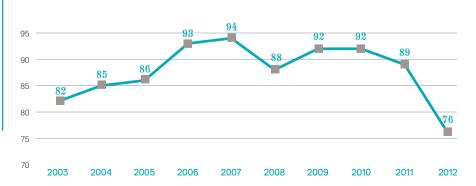
#### RECOVERY OF WASTE PRODUCED BY LVMH GROUP SITES IN 2012

Waste recovered

(as a %)	Reused	Recycled	Incinerated with energy recovery	Total recovered	
Wines & Spirits	3	64	3	70(1)	
Perfumes & Cosmetics	6	38	31	75	
Fashion & Leather Goods	4	66	27	97	
Watches & Jewelry	5	51	22	78	
Selective Retailing	3	37	50	90	
Other activities	-	86	14	100	
TOTAL	4	60	12	76	

<sup>(1)</sup> The decline in the recovery rate in 2012 is primarily due to the inclusion of Wenjun, which produces a large volume of non-recovered waste.

### PERCENTAGE OF WASTE RECOVERED



### Profile of an employee



### Eleonora Rizzuto, Director of Social and Environmental Responsibility at Bulgari

The partnership forged with the Bulgari family was a highlight of 2011 for the LVMH Group. The consolidation continued throughout 2012 and has now been formalized. It was against the backdrop of this major partnership that Eleonora Rizzuto joined Bulgari in June 2012 as Director of Social and Environmental Responsibility.

With more than 20 years' experience in the oil and gas industry, Eleonaro Rizzuto saw this as a natural and obvious progression in her career: "During the first part of my career, I focused on assisting major global industrial projects as Finance Manager. As a result of my experience in the extractive industries sector, I was particularly receptive to Bulgari's RJC certification, which it obtained in December 2011. I have to say that LVMH's commitment to the environment – which turned 20 in 2012 – was a decisive factor in my choice."

When it comes to the environment, the need for overlap within the LVMH Group quickly surfaced as a strategic challenge: "As part of our reporting, we investigate ways to improve energy efficiency and environmental protection. This means stepping up our involvement with stakeholders by monitoring the supply chain and improving the IT tools shared by our four divisions. Naturally this task must be carried out in close synergy with the Group's Environmental Department." The iconic Italian Watches & Jewelry House has introduced measures to avoid raw material waste in leather and limit sources of pollutant emissions by

reusing offcuts. Since 2010, Bulgari has been donating some of the unused leather offcuts to Il Porto di Coenzo, a social and professional insertion center for people with disabilities.

While sustainable development is a unifying force internally and a differentiator externally, each business has to define its own action points: "The success of my remit lies in understanding and integrating factors that will drive efficiency, cost reduction, innovation and creativity arising from environmental considerations. We have to apply the same commitment to excellence that governs our brand's reputation."

### ENERGY MANAGEMENT AND CO<sub>2</sub> IMPACT REDUCTION

### **BEST PRACTICES**

With regard to modal shift, Louis Vuitton's action plan is a combination of solutions: - in 2012, calls for tender for the selection of global carriers included a preliminary selection level based solely on a service provider's environmental commitment and the extent to which this had been developed; - given the major strategic challenge of transporting products to its 460 stores throughout the world, Louis Vuitton is working toward ISO 14001 certification of its downstream supply chain. In consideration of the results of its successive Carbon Footprints®, Louis Vuitton is constantly adapting its modes of transportation and entire logistics flows, introducing measures such as lower transported volumes and shorter distances for delivering products to stores; systematic selection of fleets with the lowest CO<sub>2</sub> emissions (trucks meeting the Euro V standard, new aircraft such as the Boeing 777 that reduce emissions by 20%, roll-out of electric trucks in Paris and New York): road chosen over air for short distances (saving 844 metric tons of CO<sub>2</sub> equivalent between France, Austria and Germany in 2011); and waterway and/or sea freight for supplies of packaging, window dressing elements and non-seasonal leather goods and accessories.

#### **Energy management**

Energy savings (transportation, site performance, store and workshop lighting) Renewable energy

Atmospheric emissions
Greenhouse gases
Volatile organic compounds (VOC)

Reducing CO<sub>2</sub> emissions is one of the nine key aspects of environmental performance listed in the LVMH "LIFE" program.

Consideration of climate change is enshrined in LVMH policy. The Group has been assessing the Carbon Footprint® of many of its Houses since 2002.

### **ENERGY MANAGEMENT**



Carbon Footprint® and energy audits provide insights that help develop appropriate energy-consumption reduction strategies.

The Houses have carried out a number of initiatives regarding store lighting and air conditioning, transportation, energy efficiency and the promotion of renewable energy sources.

Energy consumption refers to the sum of the primary energy (fuel oil, butane, propane and natural gas) and secondary energy (electricity and steam) sources used primarily for manufacturing processes and the air conditioning and heating of buildings. In 2012, subsidiaries included in the reporting scope consumed 663,232 MWh of energy, broken down by source as follows: 66% electricity, 19% natural gas, 6% heavy fuel, 5% fuel oil, 1% butane-propane, 1% steam and 1% renewable energies. Consumption was up 20% over 2011.

In descending order, consumption was attributable to Selective Retailing (33%), Wines & Spirits (28%), Fashion & Leather Goods (25%) and Perfumes & Cosmetics (10%); the remaining 4% was attributable to Watches & Jewelry and other Group operations.

The energy consumption of the sales areas excluded from the reporting scope (54% of the total sales area) is estimated at 310.000 MWh.

#### **ENERGY SAVINGS**

- Transportation: for some Houses, transportation is one of the biggest sources of CO2 emissions. As spotlighted in the Transport section published in the 2011 Environmental Report (pages 7 to 12), the Houses have devised measures specific to their own transportation challenges and local situation. As part of its Green Supply Chain project, Louis Vuitton has developed a tool to calculate CO<sub>2</sub> emissions and produce a real-time report of transport emissions related to the shipping of leather goods and accessories transiting through the Eole central warehouse. The tool, which has been up and running since January 2012, has been adapted for use at all relevant destinations and provides details as close to reality as possible for each journey made.

For medium- or long-distance shipments, the Houses seek above all to reduce the portion sent by air or road. When infrastructure allows, inland waterways are preferred over road transportation, as is the case with Parfums Christian Dior, which uses the waterway between the port of Gennevilliers and Le Havre prior to export. Make Up For Ever has also reduced its carbon emissions related to upstream transport by favoring maritime transport. For short-distance shipments,

European cities try to limit deliveries of goods within town centers and encourage clean forms of transport.

For example, Sephora has been working with transportation company Deret since December 2009 to deliver 80% of its shipments to its 250 stores by electric vehicle. Similarly, since January 2012, deliveries to Guerlain's Paris stores have been made by natural gas vehicles (NGVs), while an electric vehicle provides a daily shuttle service between the House's head office and the Paris stores.

With regard to business travel, although it is difficult to include the full impact in the Houses' Carbon Footprints®, it is nevertheless essential to seek alternative transport solutions and reduce business travel by holding conference-call meetings whenever possible. In 2012, Sephora Europe set up videoconferencing equipment at all of its main European offices. Guerlain, meanwhile, has developed a variety of measures under its Business Travel Plan. For the car fleet owned or leased by the House, it was decided that vehicles could emit no more than 130 g of CO<sub>2</sub>/km in 2012, compared with 140 g of CO<sub>2</sub>/km in 2011, but should aim for 120 g of CO<sub>2</sub>/km - a lower threshold than the European regulatory target of 130 g of CO<sub>2</sub>/km by 2015.

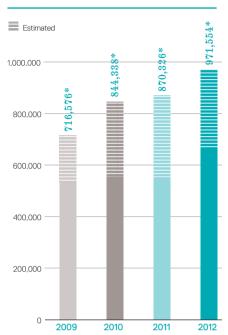
Management by objectives is a key condition to achieving the projected changes. Since 2008, Guerlain has been using a tool to monitor on a monthly basis the overall percentage of sea transportation for each geographic region and campaign. Results are reviewed by the House's Executive Committee. A report of costs and CO<sub>2</sub> emissions in comparison to the year's target is then sent to all entities.

The target ratio of 60% sea transportation was achieved in 2012, a 7% increase compared with 2011. For short distances, such as deliveries to its Paris stores, Guerlain issued a call for tenders at the end of 2011 for night transport and NGVs. At the end of 2012, almost 50% of messenger deliveries were made by bicycle for short distances.

- Energy performance of sites:
- Following the Carbon Footprint® produced for its businesses and activities, Louis Vuitton has identified a number of different solutions. Excluding freight,

#### **ENERGY CONSUMPTION**

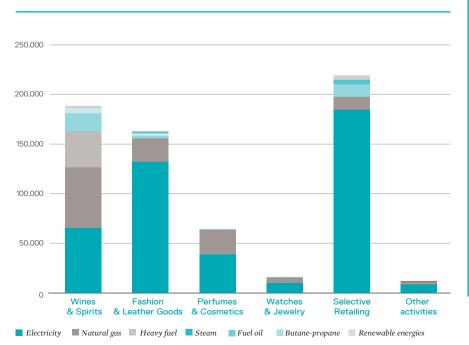
(in MWh)



\* Estimates of energy consumption for sales areas excluded from the reporting scope and audit (54% in 2012, 60% in 2011, 60% in 2010 and 50% in 2009) are shown separately: 310,000 MWh in 2012, 315,972 MWh in 2011, 289,913 MWh in 2010 and 180.638 MWh in 2009.

### **ENERGY CONSUMPTION BY SECTOR AND SOURCE**

(in MWh)



### **BEST PRACTICES**

- Since 2009. Hennessy has been implementing a "Sustainable Development Action Plan" to modernize its vehicle fleet, which at the end of 2012 comprised 30% of green vehicles. During that period, almost 50 employees were trained in energy-efficient driving. In 2012, Hennessy supplemented its green vehicle fleet with five new Peugeot iOn electric cars, three Peugeot Partner electric vans, and eight Toyota Auris hybrids. Four recharging stations were installed at the La Vignerie production site in Châteaubernard, and 20 employees were trained in energy-efficient driving. - In 2012, MHCS acquired an electric high-clearance tractor for the following

### **BEST PRACTICES**

With regard to employee travel, Louis
Vuitton encourages a variety of working
methods. For example, at head office and
international sites, it offers innovative
remote meeting solutions, such as
videoconferencing. Since 2011,
telepresence solutions have been set up so
that virtual meetings can be held between
several individuals while offering
the resources of an actual meeting room.
The use of shared transport, carpooling
and bicycle rentals are systematically
encouraged.

#### MAKE UP FOR EVER

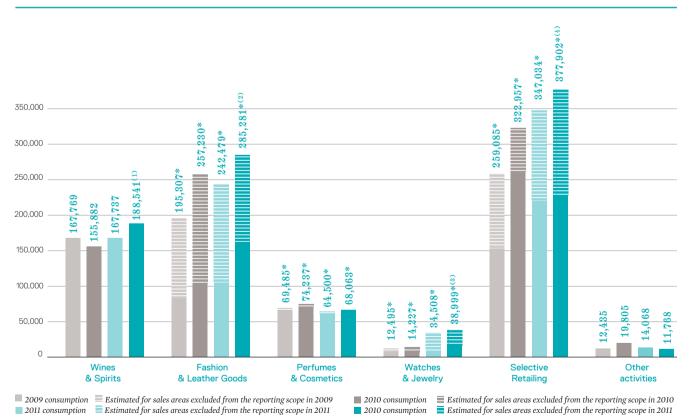
(proportion of modes of transport as a %)	Sea	Air	Road
2011	33	45	22
2012	51	22	26

Louis Vuitton pays particular attention to store energy consumption and the management of the raw materials it uses, such as leather and textiles. In 2012, Louis Vuitton and LVMH finalized a new "Guide to Reading Energy Bills" for stores around the world. Available on the LVMH Mind intranet, the guide is designed to make reporting easier and more reliable.

• The Group's Champagne Houses have launched an ambitious energy-efficiency

program based on a savings target of 25% over the next five years. It includes 19 action points for which the ROI will be spread over three to five years for an investment of €1.5 million. In early January 2012, more than 25 people – energy specialists, winemakers, House environmental liaison officers, and representatives from ADEME – attended a seminar on energy efficiency in Épernay. Following the seminar, MHCS decided

### CHANGE IN ENERGY CONSUMPTION BY BUSINESS GROUP (in MWh)





- (1) Change mainly related to the inclusion of Wenjun and the increase in business of the other Wines & Spirits Houses.
- (2) Change primarily due to the inclusion of Louis Vuitton, Kenzo Mode, Givenchy Couture, Fendi, Berluti and Marc Jacobs stores.
- (3) Change due to the inclusion of Bulgari manufacturing sites.
- (4) Change due to the inclusion of Sephora stores in Italy and Portugal.

to launch three priority projects. The first would track energy consumption and define management indicators, the second would establish "best energy practices" in the fermenting room and on the disgorging lines, and the third would create MHCS's own technical committee to monitor energy efficiency.

- Louis Vuitton began a program to insulate its buildings, including the new offices at the German headquarters of the Northern Europe region. It also created centralized technical management for some buildings, such as the Southern European headquarters, and conducted relevant awareness campaigns. In 2012, in Japan, for example, these guidelines led to energy savings of 8% at stores in the region. Presence detectors were installed at all Louis Vuitton locations (offices and stores) to optimize the management of air conditioning, heating and lighting. Infrared thermal measurements were taken at the Cergy 1 and Cergy 3 sites to better diagnose thermal insulation weaknesses.
- Various Houses are working on projects that feature a combination of energy management and recovery within the highest environmental standards.

As such, in April 2012, Hennessy teamed up with the local employer union to promote the pilot of a PACO patented process to recover energy from gas-fired boiler flue gas. It also set up instant monitoring of its sites' daily power consumption in conjunction with EDF subsidiary NetSeenergy. With regard to Parfums Christian Dior, new energy recovery systems were installed on air compressors at its site in Saint-Jean-de-Braye, France. Le Bon Marché is pursuing a number of projects that involve improved air recirculation from AHUs (air handling units), pooled refrigeration, and chiller replacement. Lastly, in 2012, Louis Vuitton undertook a number of energy optimization projects, including an audit of air handling units at the logistics sites in Cergy, a review of the compressors and air extractors at the Ducey workshop, and a new automated air-conditioning system and second refrigeration unit at the Ardèche workshops in Sarras, France.

- Store and workshop lighting: in 2012, a Store Lighting Working Group was set up by the Group, tasked specifically with regulation, technology and energy consumption measuring in stores. Its goal was to boost efforts to reduce lighting-related energy consumption. Sephora Europe and Americas has now installed LED lighting in many of its stores, as have Parfums Christian Dior, DFS and Louis Vuitton. The latter worked with lighting designer Hervé Descottes' Lighting Designers and Consultants International Observatory on a new concept for incorporating LED lighting in a number of pilot stores, specifically Le Bon Marché, Plaza 66 in Shanghai and some of the Japanese stores. After an in-house seminar held in November 2012, all the issues involving energy, regulations and practices were clearly laid out and led to the development of common guidelines on temperature, lighting programming, reporting, etc. to reduce consumption. Best practices have also been deployed in workshops with the installation of presence detectors and replacement of incandescent lighting. LVMH Fragrances Brands and Make Up For Ever have also replaced incandescent lighting at their workshops with more efficient technologies.

#### **RENEWABLE ENERGY**

One of Louis Vuitton's most significant projects is the ongoing program to produce solar energy at the Fiesso d'Artico site in Italy, the San Dimas workshop in California and the Cergy 1 warehouse in France. The Cergy 1 warehouse alone has 2,000 m2 of solar membranes and 64 solar panels. Commissioned in early October 2010, it produced 100 MWh of electricity in 2012. In Switzerland, TAG Heuer's plants at La Chaux-de-Fonds have the largest solar roofs ever created in the western part of the country. To minimize its carbon footprint, the Swiss House has partnered with Swiss energy provider Viteos and Swiss consulting firm Planair,

#### **BEST PRACTICES**

- At workshops and warehouses, a system of electric transport operates between sites whenever possible. This has resulted in emission reductions at the Drôme workshops in France, for example, of 10 metric tons of CO<sub>2</sub> equivalent over 12 months. Zoning or carpooling boards have also been set up at all workshops. At the Asnières workshop, a working group has been focusing on sustainable mobility. - Since December 2012, the MHCS service vehicle fleet has included electric vehicles: a Renault Kangoo for the vineyard and three Renault Zoés for messengers. Hybrid vehicles, such as the Toyota Prius and the Peugeot 3008, will also be tested. The House has installed a charging point at the new site in Mont Aigu and has acquired electric terminals for charging cycles in readiness for the development of a facility in Épernay scheduled for the first quarter of 2013. These initiatives are part of the intercompany travel plan launched by MHCS during Sustainable Development Week.

### THE "LED REVOLUTION"

An exhibition on LED (light-emitting diode) lighting technology was organized by the Group's Environmental Department at the headquarters in rue Bayard, Paris, from October 2 to 8, 2012.

The event was an opportunity to present the current performance of LED lighting during a series of themed workshops on saving energy, color rendering, reliability of adjustments, merchandising, prototypes and innovations, and sourcing.

House architects and buyers were able to learn more about and discuss these topics in the heart of 100 m² of exhibition space.

MARKET-BASED INSTRUMENTS

France's Energy Savings Certificates (ESC) Scheme, introduced on January 1, 2006, entered its second phase of higher targets on January 1, 2011 for the period from 2011 to 2013.

As the LVMH Group was no longer eligible under the new system, it formed a partnership in August 2011 with a "required" stakeholder, GEO PLC, which is responsible for facilitating the creation of energy savings certificates from lifetime cumulative savings (in kWh) achieved as a result of the work undertaken by Houses in France. As a result, LVMH has since been keeping a record of operations likely to be eligible in respect of 2011 and will ensure that for the period 2011 to 2013 energy savings measures correspond to the operations' technical eligibility criteria.

In 2012, Louis Vuitton created a standard ESC profile identifying hypothetical cases applicable to workshops. This profile will facilitate the selection of energy-saving projects and technology as well as reporting via GEO PLC. At the end of 2012, templates relating to LED lighting were published by decree. LVMH will endeavor to select for all its stores LED lighting that meets the eligibility criteria specified in these templates. During the second half of 2012, a number of Houses embarked on a strategic review to accelerate the return on investment of related projects.

which specializes in the environment, to install solar panels on the roof of its four buildings. With a total surface area of 777 m<sup>2</sup>, the panels produced 108,000 kWh of power in 2012, all of which was redistributed to consumers via the power grid.

A number of new projects were launched in 2012. For example, Louis Vuitton installed 210 solar panels on the roof of its Tumon Sands Global store on the island of Guam. With the production of 54 kWh of power, by the end of this year the store will become the largest private energy producer in Guam.

Sephora Europe installed photovoltaic panels on the roof of its Santa Cristina e Bissone warehouse, near Milan, Italy.

Lastly, the roof of the building at TAG Heuer's Chevenez plant, a surface of some 2,000 m<sup>2</sup>, is expected to be delivered in 2013. It will be equipped with a solar system that will make the company partly self-sufficient.

The installation will last at least 25 years and will have around 100 kWh of power, unless further extensions are added.

## ATMOSPHERIC EMISSIONS

The main atmospheric emissions that are most significant to the Group's operations are greenhouse gases. These result primarily from energy consumption at sites and from transportation. The other main emissions are volatile organic compounds (VOCs).

### GREENHOUSE GAS EMISSIONS

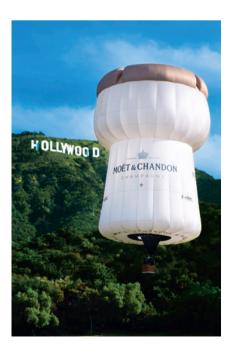
Taking account of the consequences of climate change is enshrined in LVMH policy. Since 2002, the Group has been assessing the Carbon Footprint® of many of its Houses, namely Louis Vuitton, Moët & Chandon, Veuve Clicquot, Hennessy, Parfums Christian Dior, Guerlain, Parfums Kenzo, Parfums Givenchy, Givenchy Couture, Make Up For Ever, DFS, Sephora and Le Bon Marché. To date, all of the

Group's major Houses have completed their reports and are working to implement priority initiatives for the transportation of products.

In 2012, Group Houses (specifically Christian Dior Couture, Guerlain, Hennessy, Le Bon Marché, LVMH Fragrance Brands, MHCS, Parfums Christian Dior, Sephora SA, Société des Ateliers Louis Vuitton, Société des Magasins Louis Vuitton, Société Louis Vuitton Services) affected by the new French regulation requiring companies with more than 500 employees to report their greenhouse gas emissions were in compliance; reports had been updated and results made available.

Givenchy, which did not fall within the above regulation, voluntarily produced its first Carbon Footprint\*, which led to the identification of a number of areas for improvement and emission reduction. The exercise was also an opportunity to prepare a guide to environmental reporting methodology for internal use.

Estimated greenhouse gas emissions in metric tons of CO<sub>2</sub> (carbon dioxide) equivalent are from energy consumption at Group sites. They include direct and indirect emissions (scopes 1 and 2) and do not cover emissions related to



the transportation of raw materials and finished goods (scope 3), which are shown separately.

 ${
m CO_2}$  emission factors are updated each year per energy source, particularly electricity. These updates can lead to significant change. The main efforts to reduce scope 1 and 2 greenhouse gas emissions are reducing energy consumption in stores (lighting and air conditioning) and optimizing energy consumption during manufacturing processes.

A special working group comprising architects tasked with opening and refurbishing stores is working to identify the most efficient and economical lighting sources and bring them into general use. Greenhouse gas emissions represented a volume of 193,371 metric tons of CO<sub>2</sub> equivalent in 2012, versus 155,362 metric tons of CO<sub>2</sub> equivalent in 2011. It should be noted that 56% of sales areas (Selective Retailing, Fashion & Leather Goods, Perfumes & Cosmetics, Watches & Jewelry) are not included in

the consolidation. These areas generated estimated greenhouse gas emissions of 154,144 metric tons of CO<sub>2</sub> equivalent in 2012, versus 158,074 metric tons of CO<sub>2</sub> equivalent estimated for 2011.

The DFS and Sephora boutiques contribute significantly to electricity consumption and even more to greenhouse gas emissions. This is because higher emission factors are applied in the host countries of these stores (Australia, China, New Zealand and the United States in particular). At equal electricity consumption, CO<sub>2</sub> emissions are proportionately higher than in France.

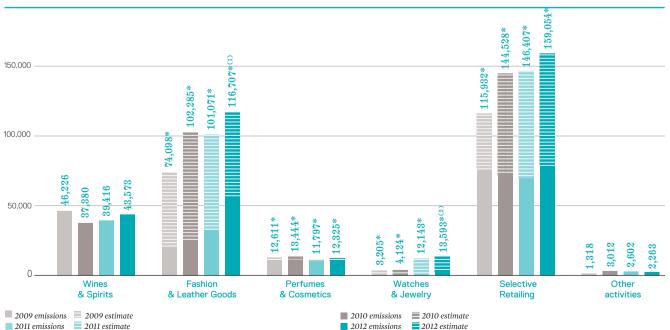
- Transportation is another major source of  $\mathrm{CO}_2$  emissions. Although transportation is not carried out directly by the Group's companies, it is nevertheless subject to specific measures, such as the preference for maritime transport. The Group has begun detailed reporting on transportation:
- upstream transport, consisting of the transport of components from suppliers'

### **BEST PRACTICES**

- The monitoring system at the Belvedere distillery was strengthened after obsolete equipment was replaced and measurement and control parameters for the distillation process were improved. Fuel oil was replaced by natural gas for all distillery equipment and  $\rm CO_2$  emissions were cut by 30% based on the reduction target of 6,000 metric tons of  $\rm CO_2$  equivalent set in 2012.
- Managing refrigeration fluids, some of which can cause significant warming, is also a major challenge. LVMH Fragrance Brands in Beauvais dismantled two air-conditioning units containing chlorodifluoromethane, or R-22, a hydrochlorofluorocarbon (HCFC) used as a cooling fluid in refrigeration and air-conditioning equipment.
   Make Up For Ever took similar measures at one of its two packaging workshops.

#### CHANGE IN GREENHOUSE GAS EMISSIONS BY BUSINESS GROUP

(in metric tons of  $CO_2$  equivalent)

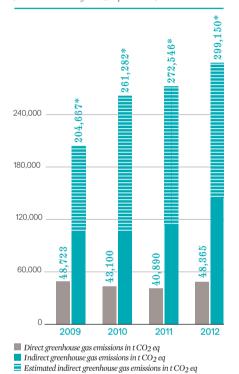


<sup>\*</sup> Estimates of greenhouse gas emissions for sales areas excluded from the reporting scope and audit (54% in 2012, 60% in 2011, 60% in 2010 and 50% in 2009) are shown separately. (1) Change primarily due to the inclusion of Louis Vuitton, Kenzo Mode, Givenchy Couture, Fendi, Berluti and Marc Jacobs stores.

(2) Change due to the inclusion of Bulgari manufacturing sites.

### CHANGE IN GREENHOUSE GAS EMISSIONS

(in metric tons of CO<sub>2</sub> equivalent)



\* Estimates of greenhouse gas emissions for sales areas excluded from the reporting scope and audit (54% in 2012, 60% in 2011, 60% in 2010 and 50% in 2009) are shown separately: I54,144 t CO $_2$  eq in 2012, 158,074 t CO $_2$  eq in 2011, 154,124 t CO $_2$  eq in 2010 and 97.119 t CO $_2$  eq in 2009.

sites to the Group's manufacturing sites. Initially only the principal components (bottles, leather, flasks, etc.) were included;

• downstream transport, consisting of the transport of finished goods from manufacturing sites to distribution platforms. Results are already available for the Group's principal Houses.

The following Houses were included in the reporting scope this year: Moët & Chandon, Veuve Clicquot, Hennessy, Belvedere, Glenmorangie, Cloudy Bay, Cape Mentelle, Chandon Australia, Bodegas Chandon, Louis Vuitton, Céline, Parfums Christian Dior, Parfums Givenchy, Parfums Kenzo, Guerlain, Make Up For Ever, Cortech, Les Ateliers Horlogers and TAG Heuer. This reporting system will continue to be improved in coming years.



### **VOC EMISSIONS**

LVMH also actively monitors VOC (volatile organic compound) emissions, which apply to the Spirits Houses through alcohol evaporation during the barrelaging process and, to a lesser extent, the Perfumes & Cosmetics and Fashion & Leather Goods Houses, which may need to use volatile substances (glues, solvents, and so on) in their manufacturing processes.

At Louis Vuitton, the use of solventbased adhesives in leather goods workshops has been almost entirely eliminated.

This commendable practice has been extended to Small Leather Goods and at the end of 2012 was being reviewed for the footwear segment.

### **DETAILS OF DIRECT AND INDIRECT EMISSIONS BY YEAR**

(in metric tons of CO <sub>2</sub> equivalent)	201	2	201	1	201	0	200	9
3 2 1	Direct t CO <sub>2</sub> eq	$\begin{array}{c} \textit{Indirect} \\ \textit{t CO}_2  eq \end{array}$	$\begin{array}{c} \textit{Direct} \\ \textit{t CO}_{2} \textit{ eq} \end{array}$	$Indirect \\ t CO_2 eq$	$\begin{array}{c} \textit{Direct} \\ \textit{t CO}_{2} \textit{ eq} \end{array}$	$\begin{array}{c} \textit{Indirect} \\ \textit{t CO}_2  eq \end{array}$	$\begin{array}{c} \textit{Direct} \\ \textit{t CO}_{\underline{\imath}} \textit{eq} \end{array}$	$\begin{array}{c} \textit{Indirect} \\ \textit{t CO}_{2} \textit{ eq} \end{array}$
Wines & Spirits	29,053	14,520	25,327	14,089	23,763	13,617	29,161	17,065
Perfumes & Cosmetics	5,073	5,318	4,011	97,060	5,566	96,719	6,953	5,658
Fashion & Leather Goods	6,206	49,772	4,662	7,135	6,338	7,106	4,935	69,163
Watches & Jewelry	1,264	1,046	791	11,352	582	3,542	736	2,469
Selective Retailing	6,068	72,788	5,224	141,183	5,752	138,776	6,838	109,094
Other activities	701	1,562	875	1,727	1,099	1,922	100	1,218

### **UPSTREAM TRANSPORT 2012: GREENHOUSE GAS EMISSIONS**

$(in\ t\ CO_2\ eq)$	Total Wines & Spirits	Total Fashion & Leather Goods	Total Perfumes & Cosmetics	Total Watches & Jewelry
Road	2,513	7,128	22,926	91
Rail	25	-	-	_
Air	44	4,045	8,736	2,071
Ship	23	2	92	2
TOTAL	2,605	11,175	31,754	2,164

### **DOWNSTREAM TRANSPORT 2012: GREENHOUSE GAS EMISSIONS**

$(in\ t\ CO_2\ eq)$	Total Wines & Spirits	Total Fashion & Leather Goods	Total Perfumes & Cosmetics	Total Watches & Jewelry
Road	46,071	1,512	6,961	255
Rail	365	5	-	-
Air	9,208	71,525	59,987	3,220
Ship	4,790	73	314	_
TOTAL	60,434	73,115	67,262	3,475



### SUPPORTING OUR EFFORTS



## SUPPORTING OUR INITIATIVES MANAGEMENT AND EDUCATIONAL SUPPORT

Organizational structure

Training

**Events** 

Public awareness campaigns

The main goal of the organizational structure adopted by the Group is to involve and train staff by giving them the tools best suited to the situations they encounter.

### ORGANIZATIONAL STRUCTURE

The Group's Environmental Department has been a driving force behind this shared vision since 1992. Its tasks consist of supporting the Houses in their respective initiatives, ensuring that the Environmental Charter is observed,

rolling out the "LIFE" program, and running the Environment Committee, which brings together a network of almost 50 environmental representatives from the various Houses several times a year. The Environmental Department also runs a variety of specialist in-house working groups, which deal, for example, with the European REACH regulation, ecodesign and the energy consumption of stores.

Although the Houses are represented in the Group's Environment Committee representatives network, they also have their own organizational structure. For instance, Louis Vuitton has



set up a network of around a hundred direct and indirect representatives (from head office, workshops, regional offices, etc.), including various steering committees. The network has expanded in recent years and taken on a professional status. Another example is Guerlain's Sustainable Development Committee, which had 15 members at the end of 2012 representing all company departments.

All Houses have their own additional resources, depending on local issues and the size of their in-house projects.

- Since they are so closely attuned to local conditions, most Houses have enhanced their environmental strategy. For example, the Management Committee of Make Up For Ever reaffirmed its commitment to the environment in early 2012 by formalizing its environmental policy and officially launching the ISO 14001 certification project with all employees. At Domaine Chandon California and Newton, new results have been achieved by reorganizing the environmental team based on five priority areas: water, energy, solid waste, natural resources and the supplier chain. For each area, team members are tasked with collecting data and suggesting improvements.
- Some Houses publish their own sustainable development or corporate responsibility reports for internal or external use. For example, at the end of 2012 Loewe published its sustainable

development program which was circulated internally and to key suppliers. Some Houses, such as Hennessy, have launched their own environment-related intranet with new content, and have plans to create a CSR space.

### INTERNAL TRAINING

The Group's Houses provide staff with training and education about the environment. In 2012, more than 17,766 training hours were devoted to this purpose (versus 15,602 in 2011). The latest initiatives under way vary widely. This year, the training program focused on biodiversity issues and the future implementation of the Nagoya Protocol. "Biodiversity" training involved various businesses and was supplemented in early 2013 by case studies.

– Some initiatives are openly geared toward performance. This is the case with MHCS, whose report for 2011 and initiatives undertaken in 2012 were the subject of a management review. It implemented a computerized tool to manage improvement initiatives and provided training to 100 people. At Louis Vuitton, environmental information for sales staff is taking shape, largely through educational briefs. The constitution of working groups on energy and waste sorting are also opportunities to boost collaborative training for staff.

### THE ENVIRONMENT: EVERYONE'S BUSINESS

- LVMH is structured so that every employee can play their part in protecting and improving the environment.
   This applies to every business and every function performed in the Group.
   Everyone can help implement sustainable environmental solutions.
- The internal portal LVMH Mind provides details of the issues involved in safeguarding and improving the environment for each function in the company. More generally, it describes the Group's principles and initiatives with regard to environmental and corporate social responsibility: diversity, equality, ethics, environmental protection, responsible procurement, etc. The site is available to all Group employees. It is both an information resource and a collaborative working tool for Environmental representatives. Employees can also receive newsletters from the site and subscribe to newsflashes.

PROTECTING KNOW-HOW

Protecting know-how is one of the nine key aspects of environmental performance listed in the LVMH "LIFE" program. The Group and its Houses perform regular strategic reviews focusing on the importance of protecting know-how related to protecting the environment. Like all patiently acquired, consolidated expertise in site and operational management, knowledge related to biodiversity and raw materials is inseparable from technical know-how related to the businesses and represents an invaluable asset that the Group wants to protect and promote as much as possible, both internally and externally. This challenge is reflected in the building of loyalty among top environmental specialists and the recruitment of talented new employees who are motivated by this issue.

- Safety and risk prevention are also issues that require customized training. MHCS launched a training program related to France's Certiphyto certification, which approves the professional use of phytopharmaceuticals in agricultural and non-agricultural business environments, and introduced special training for staff working in pressing and fermentation. At Parfums Christian Dior, as part of the ISO 14001 certification process, 891 House employees plus staff from independent companies working on site were trained in environmental protection. In Poland, training materials provided specifically for Belvedere employees and subcontractors made it possible to train more than 230 people at 70 training sessions. Emphasis was placed on the challenges of the REACH regulation. At Bodegas Chandon, display panels are periodically set up offering information on food safety, health and employee safety. Posters educate employees about water consumption and the responsible use of printers. Lastly, Louis Vuitton organized two seminars on the topics of "Waste recycling - the CEDRE Platform" and "Sustainable Construction" that brought together representatives from the Production/Logistics network as well as independent stakeholders. Site visits were organized in conjunction with the seminars. As part of the "SIRIUS" project to coordinate and support the ISO 14001 certification process for the leather goods workshops, a training module was deployed and 13 new in-house auditors were trained at head office and the Cergy workshop.

### **EVENTS**

– LVMH partnered with the European Commission for the 12<sup>th</sup> Green Week Conference in Brussels, held from May 22 to 25, 2012, on the topic of water. During the week of May 21, 2012, LVMH sent a daily themed fact sheet to all Group employees on a specific topic related to water consumption, such as the water

footprint, saving water during the manufacturing process, and water used in farming.

- The "European Sustainable Development Week", which took place from April 1 to 7, 2012, is an annual event that raises awareness in France of sustainable development issues and encourages people to act more responsibly. It is also an opportunity for many of the Group's Houses to get involved and showcase their commitment.
- For example, Make Up For Ever's "For Ever Week" took the form of a daily email to employees on topics related to sustainable development, global warming, water, water management, social causes, and the House's CSR initiative. Each site was challenged to reduce its paper consumption. Lastly, at the Paris and Gennevilliers sites, during an exhibition on the future of waste management, two awareness-raising workshops were held on eco-design and environmental issues (specifically water, air and energy). The week ended with an online competition.
- During that same week, Moët & Chandon was involved in two projects at its site in Épernay. The House was involved in a pilot project organized by the Épernay town hall called "NOEMIE Notre Organisation pour l'Essor d'une Mobilité Interentreprises à Épernay" (Our Organization for the Development of Inter-company Mobility in Épernay). Employees were invited to participate in a survey about their travel habits, with a view to implementing effective measures to improve traffic and transport.
- In 2012, materials and biodiversity were the focus of a Louis Vuitton exhibition entitled "Nature, Art and Materials", examining the relationship between materials (wood, leather, fabrics, textiles, gold and stones) and nature. Each day, a different material was spotlighted during a demonstration by artisans or experts from each business line, while an artist gave a "live" performance using offcuts of materials under Louis Vuitton's partnership with La Réserve



Ground floor of the DFS Galleria Singapore certified LEED Gold.

des Arts (a non-profit organization that recycles unwanted materials by passing them on to professional artists and designers). The exhibition was taken to workshops, and even to China, and a book on materials and nature was created from exhibition panels and distributed to all stores.

- Hennessy undertook a number of initiatives as part of the UN 2012 International Year of Sustainable Energy for All.
- The Light on Sustainable Energy exhibition at Hennessy's riverside distillery in Cognac, organized in partnership with ADEME, showcased the measures being taken by the House to reduce its energy consumption and develop green energy.
- Educational workshops led by regional non-profit organizations gave schoolchildren and the general public a behind-the-scenes look at renewable energies.
- An evening was reserved for winemakers to visit the exhibition and attend

a talk on the recovery and methane fermentation of distillation residues.

- Employees were invited to a preview of the exhibition on the riverfront and to attend the workshops with their families. Additional activities during the week included a quiz based on the exhibition, promotional events on the House's intranet site, a travelling exhibition, organic meals in the company restaurants, a test drive of the fully electric Peugeot iOn, and deployment of new trash cans for selective sorting.
- Some Houses also staged special popular events outside France to encourage staff involvement.
- Louis Vuitton's San Dimas workshop, for example, organized an "Earth Hour" on March 26, 2012 and an "Earth Day" on April 22, 2012. At its US headquarters, Louis Vuitton held its third "Best Green Idea" environmental challenge in which the employee with the best idea for reducing environmental impact was awarded a prize and his or her idea implemented for one year.

### **BEST PRACTICES**

At the end of 2012, Loewe created an e-learning module on sustainable development, available in Spanish, English, Japanese and Chinese.

Also at the end of 2012, it published a bilingual Spanish-English brochure on its sustainable development program.

Available online to customers, the brochure was distributed to employees throughout the world as well as to key suppliers.

The brochure was appended with a document containing questions and answers as well as information about Loewe's policy on sourcing wildlife.



### **BEST PRACTICES**

Teams from the seven Houses with a presence in the US city of Miami (Guerlain, Parfums Christian Dior, Loewe, Parfums Givenchy, Kenzo, Fendi and Emilio Pucci) have joined forces to create the "LVMH Initiative for the Environment". This initiative, backed up by 67 employees in 2012. was designed to take into account the very specific environmental challenges faced by staff on a daily basis. Its goal was to reduce environmental impact resulting from the use of printing paper (15% reduction in paper purchases and 35% reduction in printing costs) and drinking cups, and take part in a tree-planting program organized by Miami-Dade County. On June 25, 2012, the teams were awarded a certificate of appreciation by Miami-Dade County at its monthly Community Image Advisory Board (CIAB) meeting.

• Bodegas Chandon held its own sustainable development week from February 4 to 8, 2012. Information on a variety of environmental topics and activities was released daily, such as emission reduction, carpooling, photo reports and a suggestion box for eco-friendly ideas.

• Guerlain's biennial sustainable development week (L'Événement durable Guerlain) on the subject of biodiversity

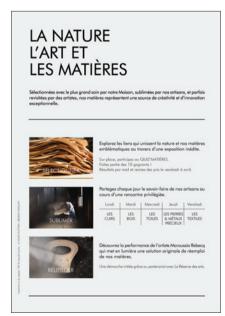
was held on June 14 and 15, 2012 in Chartres, France. It was an opportunity to showcase multiple topics such as orchid farming, the Tianzi nature reserve in China, raw materials used in perfumery, and biodiversity challenges at industrial sites.

– To support European Mobility Week, held from September 16 to 22, 2012, a number of Houses, including Guerlain, organized initiatives to educate their employees about reducing CO<sub>2</sub> emissions from transport and travel. (See "Transport" in the "Energy Savings" section on page 30.)

### PUBLIC AWARENESS CAMPAIGNS

Drawing on their heritage and traditions, the Group's Houses help promote the know-how of their craftsmen and employees both locally and nationally by trying to increase people's understanding of the environmental challenges of the Group's various businesses.

- In Spain, Loewe organized an open day at its production plant in Getafe, south of Madrid, and unveiled a new building that doubled the site's size. The new building houses a cutting center, with 150 new jobs, a leather innovation center for the analysis and presentation of materials available to designers, a leather goods school for training craftsmen, and a museum showcasing the history of Loewe's production. Throughout the day, Loewe employees and their families, a total of 800 people including more than 150 children, were given the opportunity to go on some guided tours and take part in fun activities.
- Louis Vuitton's workshops organized a number of open days featuring the in-house exhibition "Nature, Art and Materials". A film promoting best practices in safety and the environment is shown to every service provider who visits the Sainte-Florence workshop in Vendée.



### KEY MANAGEMENT AND CERTIFICATION PROCESSES

Investment

**Environmental management** 

**Building standards** 

Responsible Jewellery Council

.....

### ENVIRONMENTAL INVESTMENT

In 2012, expenditure directly related to environmental protection totaled €16.1 million: €9.7 million for operating expenses (versus €7.7 million in 2011) and €6.4 million for investment (versus €7.9 million in 2011). This total amount of environmental expenditure excludes all other expenses underpinning the Group's commitment to the environment, such as additional costs related to high environmental quality standards for buildings, in-house technical training and support, environmental sponsorship initiatives, and external partnerships.

The environmental expense items were recognized in accordance with the recommendations made by the French National Accounting Board (CNC). Operating expenses and investments were carried forward for each of the following items:

- protection of the ambient air and climate;
- management of waste water;
- management of waste;
- protection and clean-up of soil, underground water and surface water;
- combating noise and vibrations;
- protection of biodiversity and the landscape;
- protection against radiation;

- research and development;
- other environmental protection operations.

### MANAGING COMPLIANCE AND RISK PREVENTION

The system of internal control and risk management is based on a common methodology and a unique standard for which the LVMH SA holding company coordinates deployment Group-wide. Since 2004, the Group has had a risk mapping tool that systematically identifies its industrial, environmental and operational risks based on a common standard. Risks are ranked in order of priority. Reducing the frequency and severity of risk is achieved through preventive action (for industrial risk), internal control (for process-related risk), and business continuity planning (BCP) or operational action plans. The main control and monitoring measures relate to the areas outlined below.

### INDUSTRIAL AND ENVIRONMENTAL RISK

As part of its production and storage operations, the Group is exposed to accidents such as fires, floods and natural disasters. To identify, analyze and handle industrial and environmental risk, the Group relies on the combined expertise of independent specialists and qualified professionals from the Group's companies, particularly those in charge of safety and security, quality control and the environment. In consultation with its insurers, LVMH has adopted what is known as the "HRP" (highly protected risk) approach, the goal of which is to reduce substantially the risk of fire and consequent business interruption. The Group therefore pays particular attention to the risks related to the storage and transportation of raw materials.

 Group companies are audited on a regular basis, either by third parties, insurers or internal auditors, enabling them to keep their compliance monitoring plan up to date. In 2012, 24% of the 247 manufacturing, logistics or administrative sites were audited, i.e., 56 external and 104 internal audits, with some sites being audited several times during the year. This figure does not cover the many compliance audits pertaining to a specific aspect of environmental regulation, such as waste-sorting monitoring, performed periodically by Group companies at their sites.

- In addition to these audits, insurers have been reviewing compliance with environmental regulations since 2003 and have included an environmental component in their fire engineering visits to Group company sites. Thirty Group sites underwent such assessment in 2012.
- Some Houses, particularly those classified for environmental protection, have begun steps to bring their sites into compliance with regulations. For example, Guerlain, Loewe, Louis Vuitton and MHCS have developed tools that monitor and analyze potential regulatory non-compliance in different areas, such as water treatment and discharge, waste storage, application of the WEEE European Directive, storage of chemical products, and fire protection.

### PRODUCT RISK

- Product-related risk is prevented by strengthening safety and traceability. The HACCP (Hazard Analysis Critical Control Point) method is used in the Wines & Spirits and Perfumes & Cosmetics segments. This makes it easier to anticipate product recall and improve response times. A legal watch has also been set up to guard against liability risk, particularly the kind which may affect the Group's brands.
- With regard to the safety and quality of Perfumes & Cosmetics products, the LVMH Group is particularly vigilant when it comes to compliance with regulatory texts. (See "Material traceability and compliance" on page 21.)

### LVMH 2012 Profile of an employee



Sophie Gourbat, Environment and Food Safety Manager at Hennessy

Sophie Gourbat joined Hennessy in 2003 on an internship after completing her studies in agricultural engineering. She has been Environment and Food Safety Manager since May 2008.

She reports to the Method Manager in the Operations Department and manages a team of five. Having trained as an agricultural engineer, the decision to join Hennessy was an immediate match with her values: "Being intimately associated with part of our heritage, being close to a very special region associated with the Cognac Appellation, safeguarding natural resources, and addressing food safety challenges are major motivating forces in my daily work. I also have a very pragmatic view of the environment which is firmly rooted in what I have learned and at the same time geared toward the future, and a strong interest in what science has to offer."

The most significant project from a personal viewpoint was in 2004 – just after she had joined the company – when she helped obtain ISO 14001 certification for one of Hennessy's two subsidiaries, La Distillerie de la Groie, in Cognac.

Today, Hennessy is particularly proactive with regard to sustainable viticulture (most notably being recognized by SODEPA as a benchmark farm under France's 2018 Ecophyto plan), energy management, all areas of environmental impact but especially water, waste management and eco-design.

Outside the company, Sophie Gourbat gets most satisfaction out of continuing Hennessy's pioneering role across the cognac industry and within the profession. Because of its concern for responsibility, Hennessy routinely interviews all of its suppliers to ensure they share the same standards. Within the company, Sophie Gourbat is most enthusiastic about the cross-disciplinary commitment and exchange with co-workers and teams:

"Having taken a centralized approach for the roll-out of ISO 14001 certification, we are now even more focused on participation and innovation. Today there are direct links to all sites and functions. People come to me to offer solutions. Technology is one thing, but cross-disciplinary management, exchanging information and emulation are also very important, which is what makes my job so worthwhile."

For the future, Sophie Gourbat stresses the ripple effect of Hennessy's requirements vis-à-vis its business partners: "Large companies like ours have an undeniable leadership role, because tomorrow's new economic standards are forming in their wake. As a global leader in our sector, we must set an example of how biodiversity and water conservation can be integrated into future projects."

#### SUPPLIER RISK

With regard to its relationships with suppliers, LVMH requires its partners to subscribe to its Supplier Code of Conduct by virtue of which it reserves the right to conduct compliance audits at any time and without notice. (See "Environmental and social responsibility of suppliers and subcontractors" on page 23.)

### ENVIRONMENTAL MANAGEMENT

One of the key requirements of the Environmental Charter adopted by the Group in 2001 is for each House to establish an environmental management system as part of a management-driven policy. For most Houses, the management strategy includes obtaining environmental certification.

### ISO 14001

At the end of 2012, 42% of industrial, logistics or administrative sites were ISO 14001-certified.

- ISO 14001 certification of Parfums Christian Dior was renewed in 2012 for all of its sites, including Saint-Jean-de-Braye, which merged the international distribution center and factory certifications, Pudong District in the municipality of Shanghai in China, and Singapore.
- Obtaining ISO 14001 certification in 2011 is Guerlain's most significant environmental initiative. All Guerlain France businesses are now certified the Chartres site, the headquarters in Levallois, the Paris stores, and, since June 2012, the Orphin production site. The policy, safety and security, wellbeing and environment of the Orphin site are all in line with Guerlain's social and environmental commitment. The goal now is to obtain ISO 14001 certification for all international subsidiaries, starting with the Guerlain Belux subsidiary in the first half of 2013.
- Under the SIRIUS project to obtain ISO 14001 certification for leather goods workshops, the Sainte-Florence and

Ducey workshops have been certified and the others are continuing the process. Louis Vuitton has also completed the environmental analysis of the workshops in Saint-Pourçain-sur-Sioule. Outside France, ISO 14001 certification of Louis Vuitton's New York headquarters was launched as a pilot project and will eventually be rolled out to other geographical regions. Louis Vuitton is also continuing its Green Supply Chain project, whose goal is ISO 14001 certification for all supply chain stakeholders, from workshops to stores.

- In 2012, Bodegas Chandon initiated the ISO 14001 process. The certification scope for 2013 includes Chandon and Terrazas de los Andes in Argentina.
- Make Up For Ever (France) created an ISO 14001 working group with the goal of becoming certified in the first quarter of 2013. Monthly tracking of consumption has been stepped up for water, electricity, gas, printing, and upstream and downstream transport.

### WINES & SPIRITS CERTIFICATIONS

- The entire Champagne-Cognac-Vodka division is ISO 22000-certified in food safety management. The aim of this certification is to standardize food safety management practices and guarantee maximum safety for the consumer.
- Having adopted a new environmental policy in 2011 for managing their vine-yards and obtained Napa Green Winery certification, in 2012 Domaine Chandon California and Newton in California focused on the Napa Green Certified Land program, which seeks to protect watersheds in Northern California. The program is designed to protect habitats through sustainable farming practices, ecosystem protection, soil restoration projects, and measures to combat erosion. The certification audit of the entire Domaine Chandon estate and the Newton vineyards is scheduled for early 2013.
- Domaine Chandon California and Newton have also applied for California

Sustainable Winegrowing Alliance (CSWA) certification, which is associated with California's Sustainable Winegrowing Program. The goals of the certification program are to improve transparency, encourage participation at state level, and incorporate into the Californian wine industry the highest standards in environmental management, natural resource conservation and socially equitable business practices. This program is based on the triple bottom line reporting method related to people, planet and profits. The vineyard and cellar first perform a selfassessment and analysis of their sustainability, and then an improvement plan is drawn up, taking into consideration best management practices and the reduction of inputs. At the end of 2012, Domaine Chandon California had completed its selfassessment and collected all relevant data.

### **BUILDING STANDARDS**

The majority of the LVMH Group's construction or renovation projects, whether industrial sites, warehouses, stores or administrative offices, now incorporate environmental criteria. For construction, renovation and building operation, the Houses apply various standards and certifications such as HQE, BBC, BREEAM and LEED. In the last decade, more than 28 buildings have been constructed according to these standards, which not only have an environmental component but also a social one. For example, Loewe launched a review of all of its stores worldwide regarding their accessibility to people with disabilities. An action plan for the next three years will be implemented based on the results noted at the end of 2012.

– A variety of construction and refurbishment programs were undertaken in 2012. For example, Sephora Europe obtained BREEAM and HQE certifications for its store located in the Chapelle-Saint-Luc shopping center near Troyes, and the store in the So Ouest de Levallois shopping center. For almost 12 years,

Louis Vuitton has done what it could to construct its buildings sustainably and as a result has developed considerable expertise in environmental performance relating to eco-design (with wood framework), eco-management, comfort and health. In 2012, the process to obtain LEED EBOM (LEED for Existing Buildings: Operations and Maintenance) certification for the Cergy 3 warehouse continued with the help of students from the École centrale de Paris engineering school. In August 2012, the Singapore teams moved into a new warehouse that met multiple requirements in terms of the building's aspect, water and energy conservation targets, and waste reduction and recovery. The building has a green wall and roof, and various garden areas. It is one of the largest "green" logistics centers in Asia and has LEED Gold and Green Mark Platinum certification.

– The project to build the Louis Vuitton Foundation for Creation Museum was launched in 2011. The Museum was designed by architect Frank Gehry and is under construction in the heart of the Bois-de-Boulogne. It applies exemplary standards and technologies that fall within a "Museum" high environmental quality pilot program. It is a consummate

project by virtue of its many architectural features, such as geothermal energy and materials bearing the French NF Environnement eco-certification label and European Ecolabel. In terms of waste management, there are five sorting facilities for jobsite waste with very high targets for recovery and recycling. Water and electricity consumed by jobsite trailers and the site itself have been closely monitored since the project began. A newsletter (Journal HQE) is circulated to workers and staff to raise awareness about environmental quality, and information is posted covering various aspects of the HQE® approach. In an effort to control the environmental characteristics of the materials used at the site, more than 600 licenses have been obtained for the products concerned. Monitoring is reinforced by monthly visits focusing on environmental protection measures. Finally, the Carbon Footprint® of key items is updated as work progresses. When developing and managing their sites, the Houses pay close attention to safeguarding green areas and making sure the workshops are integrated into the local environment. Similarly, the height of the Louis Vuitton Foundation for Creation Museum has been designed to blend in with the tree line of the Jardin

and Bois de Boulogne.

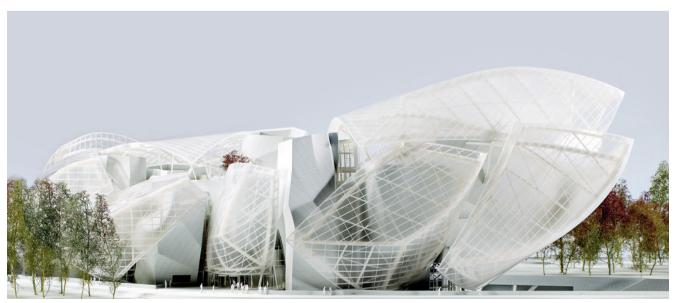
– The architectural project to refurbish La Samaritaine department store in Paris, which began in 2011, is part of an innovative and extremely rigorous environmental strategy. The project has been awarded several labels and certifications and meets the targets of the Paris Climate Plan.

The design includes the construction of a 70,000-m<sup>2</sup> complex comprising a hotel, a department store, social housing, offices, parking lots and a 60-cot children's daycare center.

It reflects a strict approach to urban ecology and includes:

- French environmental certification for the tertiary and commercial buildings (Bâtiments tertiaires Démarches HQE® Bureau and HQE® Commerces certification) and the Low Consumption Building (BBC) label for the offices and stores;
- the French "Heritage, Habitat & Environment" standard, and the BREEAM and LEED standards for the offices, stores and hotel:
- the French high energy performance label BBC-Effinergie/Rénovation Logements for the housing.

Various informational meetings were held before and during the clearing and asbestos-removal work, as well as during



Model of the future Louis Vuitton Foundation for Creation. Architect: Frank Gehry – Photo credit: STUDIOS Architecture.





Mont Aigu: the fermenting room was completed in mid-2012 after 18 months of work. It was the first stage of this project, which has a total of 137 vats in an area extending to 6,000 m<sup>2</sup>.

the project's development phase. A "model house" containing all the appropriate presentation media and explaining the site's history and specific architectural features was opened to the public in March 2011. Local residents and the town hall of the 1st arrondissement were kept fully informed and involved in the consulting process. The project was awarded Démarche HQE-Bâtiments tertiaires and NF380/12/889 certifications on April 26, 2012 for the scheduling phase of the refurbishment. In September 2012, the project also obtained Gold certification under the LEED Core & Shell Development program for the stores, daycare center and offices. This pre-certification did not, however, include the hotel or social housing. Moët & Chandon adopted ambitious goals for the extension of its Mont Aigu site:

- pilot operation under the "HQE® industrial buildings" program (11 targets) certified by Certivéa;
- adoption of the Very High Energy Performance label for the fermenting room (26% reduction in energy

consumption compared with the benchmark building);

– adoption of the Low Building Consumption standard for offices and administration premises (55% reduction in energy consumption compared with the benchmark building).

### RESPONSIBLE JEWELLERY COUNCIL

The LVMH Watches & Jewelry business group has been a member of the Responsible Jewellery Council (RJC) since 2005. Since 2011, all Watches & Jewelry Houses have been RJC members. The RJC is an international non-profit organization that brings together more than 160 member companies from around the world that are committed to promoting responsible ethical, human rights, social and environmental practices throughout the jewellery supply chain, from mine to retail. This commitment of stakeholders in the gold and diamond industry and ongoing

### INTERNATIONAL CONFERENCES AND EVENTS

In 2012, the LVMH Environmental Department participated in a number of international conferences and events, including:

- Global Compact Day, organized during the Rio+20 Earth Summit in Rio de Janeiro from June 13 to 22; and
- the Convention on Biological Diversity (COP11) in Hyderabad, India, from October 8 to 19, in a side event co-organized by LVMH, the Foundation for Biodiversity Research and Association Orée, and consisting of a presentation of the goals, methodology and expected outcomes of the impact assessment conducted by FBR researchers to analyze LVMH practices in respect of the Nagoya Protocol on Access and Benefit Sharing (ABS) for the relevant supply chains.

dialogue between partners ensures that each step of the mining, refining, processing, and retail chain respects sustainable development challenges and criteria.

The RJC has developed a certification system for members involved in the gold and diamond sectors requiring them to undergo audits by accredited independent auditors. RJC-certified Houses in the Watches and Jewelry business group are Bulgari, TAG Heuer (plus distribution subsidiaries in the United Kingdom, Japan and the United States), Hublot, Zenith, Chaumet and Fred. Bulgari, TAG Heuer, Chaumet and Fred were certified in 2011, Zenith in January 2012, Hublot at the end of June 2012, Christian Dior Couture in July 2012 and Louis Vuitton's jewelry business in September 2012.

## PROJECT PARTNERSHIPS AND PROFESSIONAL COLLABORATION

Governments and institutions

Regional and local authorities

Non-profit organizations and research bodies

Environmental sponsorship and NGOs

Aware of the advances that can be made through holding discussions and collaborating with others, particularly in environmental matters, LVMH makes a point of forming key partnerships with national and international non-profit organizations, local authorities and educational institutions. The Group and its Houses are involved in a number of technical projects that contribute to global expertise and to environmental discussions with other business leaders.



– LVMH partnered with the European Commission for the 12<sup>th</sup> Green Week Conference in Brussels, held from May 22 to 25, 2012, on the topic of water. Speaking on the eve of the opening of Green Week 2012, European Environment Commissioner Janez Potočnik said:

"Private sector initiatives are crucial if we are to make real progress in improving our environment. I am pleased to see LVMH encouraging environmental best practices among its employees and hope that other companies will take note and follow suit."

– After committing in 2011 to France's National Strategy for Biodiversity (SNB) 2011-2020, presented by the French government on the eve of International Biodiversity Day on May 22, 2011, the LVMH Group was awarded "National Strategy for Biodiversity Recognition" in October 2012 by the French Ministry of Ecology, Sustainable Development and Energy for its project entitled "Improving, from upstream to downstream, the footprint on biodiversity of LVMH activities, with the goal of having an actual positive impact on biodiversity".

– Since 2011, LVMH has participated in the French government's trial of environmental labeling. (See "Environmental labeling" on page 17.)

In Argentina, Bodegas Chandon has joined the "Clean Production" program supported by the Mendoza Environment Secretary and the Inter-American Development Bank (IADB). The program seeks to foster synergies between the government and wine-production businesses in order to train and educate suppliers, provide information to the general public, and increase the percentage of material that is recovered and recycled.

 LVMH also contributes to Global Compact local sustainable development initiatives through the Île-de-France Sustainable Development Club. Established in 2007, this club seeks to



### PARTNERSHIPS FOR BEES

For several years, the Group's Houses –
particularly Chaumet, Guerlain
and Louis Vuitton – have been supporting
bee protection initiatives in partnership
with the Terre d'Abeilles non-profit
association, the Ouessant Black Bee
Conservatory, the Île-de-France Black Bee
Conservatory (CANIF) and the CNRS.
(See under "Safeguarding access
to responsibly sourced raw materials
and protecting biodiversity at the outset"
on page 18.).

introduce best practices to SMEs and has set up a system of second-party auditing involving representatives of companies that are comparable in terms of concerns and resources.

### REGIONAL AND LOCAL AUTHORITIES

– In France, for example, staff from Louis Vuitton serve on the Sustainable Development Advisory Committee of the Greater Cergy-Pontoise District Council in connection with eco-business parks. In 2012 a pilot agreement was signed to collect and recycle waste from the business parks in this urban center. Teams from the Cergy warehouses promoted their logistics site's best practices at meetings of the Versailles Chamber of Commerce

and Industry (energy efficiency), the Vald'Oise Préfecture and DRIEE [Regional and Inter-department Environment and Energy Department] (energy efficiency), and the University of Cergy-Pontoise (sustainable logistics).

– In partnership with the city of Żyrardów, Poland, and local farmers, the Belvedere distillery, located in Żyrardów, set up an Environmental Protection Foundation. In 2012, the Foundation continued its support of the "Żyrardów – Garden City" project linking green areas (forests, gardens and parks) to the town center. The 5.8-hectare Ditrich Park underwent a major renovation, including a river canal, an area of new trees, and an architectural upgrade. As part of its "Clean Up the World" program, Belvedere collected a total of 14 metric tons of waste in 2012 from the banks of the Pisa River.

### MARC BY MARC JACOBS, PARTNER OF MANOS DEL URUGUAY

Established in 1968, Manos del Uruguay is a non-profit association owned by craftswomen from rural villages in Uruguay who produce hand-knitted and hand-dyed garments. The women have joined forces to promote the use of the country's wool resources and create high-quality garments and accessories. As a member of the World Fair Trade Organization, Manos fosters local social and economic development.



Artistic performance at Make Up For Ever with production wastes and products.



### AN ORIGINAL ENVIRONMENTAL SPONSORSHIP PROJECT

In February 2012, the French National Forests Office (ONF) and Moët Hennessy, LVMH's Wines & Spirits business group, signed a three-year environmental sponsorship agreement to promote biodiversity protection and the sustainable development of the Montagne de Reims state forests in France's Marne region. The program is being conducted near two of Moët Hennessy's iconic heritage sites: the Manoir de Verzy and the Abbaye d'Hautvillers. The sponsorship agreement will enable the ONF to undertake original restoration and development programs.

## NON-PROFIT ASSOCIATIONS AND RESEARCH BODIES

- To strengthen its methodological approach to the environment and biodiversity, the LVMH Group is a member of the non-profit association Orée, which works with businesses and local authorities on environmental issues, and vice-chair of the Strategic Orientation Committee of the Foundation for Research on Biodiversity (FRB). The Group is involved on an ongoing basis with Business for Social Responsibility (BSR), primarily as part of a working group to implement best practices in the sourcing of exotic leathers.
- Bodegas Chandon is a member of the Sustainable Development Commission of "Argentina Wineries", a trade association whose main goal is to define and set the parameters for sustainability indicators most relevant to the wine industry in terms of water and energy consumption.
- LVMH continues to make frequent presentations to major business schools (ESSEC and HEC) and universities

(Léonard-de-Vinci and Saint-Quentinen-Yvelines) about the environmental challenges faced by its business groups and operations. In 2012, Louis Vuitton's Environmental Manager spoke on the topic of "Luxury and the environment: the case of Louis Vuitton" at a meeting of graduate marketing students at French fashion and arts school, Mod'Art International.

### ENVIRONMENTAL SPONSORSHIP AND NGOS

The Group's Houses form flagship partnerships with environmental NGOs. Louis Vuitton, for example, has an ongoing involvement with The Climate Project, the non-profit organization founded by Al Gore to educate the general public about the effects of climate change, and Green Cross International, the Foundation created by former Russian president Mikhail Gorbachev. For its part, TAG Heuer is continuing the partnership it formed in 2009 with Leonardo DiCaprio to raise funds to benefit the Natural Resources Defense

Council and Green Cross International.

- Through Orchidarium, its orchid research platform, Guerlain has partnered with the Tianzi Nature Reserve in China, under a 10-year sponsorship agreement that has three areas of focus: reforestation, planting of orchids in the natural environment, and the development of a social program for local populations. Guerlain has also introduced responsible vetiver cultivation in the high plains above the town of Coimbatore in southern India. Another of Guerlain's sponsorship initiatives involves its symbol, the bee. It is sponsoring a bee protection program run by the Breton Black Bee Conservatory on Ouessant, an island protected from intensive farming and with outstanding biological diversity, is one of the very few areas in Europe to be free from varroa, a parasitic mite associated with honey bees. This sponsorship is based on protecting the Breton black bee on Ouessant and supporting the scientific research being conducted on the island.
- Louis Vuitton supports a number of different projects such as beach cleaning in Hawaii and the "One Million Trees" project, launched in 2007, whose goal is to plant one million trees across New York City's five boroughs over the next decade. In October 2012, the 25 employees of Louis Vuitton's New York headquarters planted almost 200 trees in Highbridge Park in the Washington Heights section of Manhattan.
- Following the earthquake and tsunami in Japan on March 11, 2011, and independently of donations made to the Japanese Red Cross to help disaster victims, Louis Vuitton made an additional two-year commitment in 2012 to support the "Forests Are Lovers of the Sea" project, devised by an oyster farmer from the Miyagi Prefecture, Shigeatsu Hatakeyama, to help rebuild the oyster fields destroyed by the tsunami. As part of the "Louis Vuitton Forest" project, Louis Vuitton has financed the purchase of a forest located in Japan's Nagano region. In 2012, the project's fourth year, felled wood was given to the architect Shigeru Ban to be used

for shelters and furniture for Japan's disaster victims. In 2012, Louis Vuitton's Japanese head office and stores in the region launched an initiative in partnership with a local non-profit association to collect and recycle bottle tops, which funded the distribution of polio vaccines to children.

– Louis Vuitton is continuing its partnership with the non-profit association La Réserve des Arts, a platform that collects and recycles corporate waste by passing it on to professional artists and designers. Materials are regularly collected from head office, the Asnières workshop and the Louis Vuitton Cultural Space, and given to costume designers, architects, young artists, choreographers and sculptors. The first post-event collection was made on a pilot basis during the dismantling of the Louis Vuitton/Marc Jacobs exhibition at the Museum of Decorative Arts.

### **OBJECTIVES**

The tables below indicate the objectives assigned to a given Group House.

### **ACHIEVEMENTS COMPARED WITH 2012 OBJECTIVES**

### AIM FOR A HIGH LEVEL OF ENVIRONMENTAL PERFORMANCE

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Strictly comply with environmental regulations	Holding company	Systematically verify environmental compliance during internal financial site audits	Ongoing
	Holding company	Maintain the French and international environmental regulatory watch	Ongoing
Reduce environmental impact at industrial and administrative	Holding company and Houses	Define best practices for store lighting and air conditioning	Ongoing
sites and shipping hubs: water, energy, waste, transport, etc.	Holding company and Houses	Introduce into pilot stores systems that measure energy consumption by item	2013
	Wines & Spirits	Obtain carbon neutrality for one House	Ongoing
	Wines & Spirits	Continue construction of a new High Environmental Quality building at one Champagne House	Achieved
	Selective Retailing	Reduce the energy consumption of one House by 20%	Ongoing
	Wines & Spirits	Discontinue the use of fuel oil in favor of natural gas and reduce $\mathrm{CO}_2$ emissions by 20%	2013
	Wines & Spirits	Increase herbicide-free farming areas	2012 and beyond
FOSTER A COLLECTIVE I	PURPOSE		
Ctonatono	P	Oliveria and the decrease in the	D II

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Involve all employees	Holding company and Houses	Enhance the new Web-based environmental reporting tool with new indicators for products, biodiversity and ${\rm CO_2}$ emissions (Scope 3)	Achieved (biodiversity indicators will be developed further)
	Holding company and Houses	Raise awareness of all Group employees during Sustainable Development Week and European Green Week	Achieved
	Wines & Spirits	Include an environmental module in the training given to all grape-harvest seasonal workers (pressing)	Ongoing
Distribute the results to all levels of management	Holding company and Houses	Deploy the Group's environmental KPIs at the eight pilot Houses	Achieved

### CONTROL ENVIRONMENTAL RISKS

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Have an effective management system that is audited at least once	Perfumes & Cosmetics	Obtain environmental certification at one production site	Achieved
every three years	Fashion & Leather Goods	Obtain ISO 14001 certification for the supply chain of one House	Ongoing
	Fashion & Leather Goods	Obtain ISO 14001 certification for all workshops of one House	Ongoing
Detect, prevent and reduce all environmental risks	Holding company and Houses	Develop a tool for international regulatory watch for products	Ongoing (2013)
au environmenta ristos	Holding company and Houses	Develop a tool to assist with the environmental audit of suppliers	Achieved
DESIGN PRODUCTS BY IN	NTEGRATING ENVIRONME	ENTAL INNOVATION AND CREATIVITY	
Strategy	Business group	Objective assigned to the company in 2012	Deadline
Include environmental considerations in the design of Group products, internally and when dealing with suppliers and subcontractors	Holding company and Houses	Distribute to Marketing, Purchasing and Development Managers an eighth version of the "Materials to Consider: Eco-material Handbook" and maintain the watch on environmentally friendly materials, processes and products	Achieved
	Perfumes & Cosmetics Wines & Spirits	Deploy a Web tool to calculate the Environmental Performance Index (EPI) of packaging	Achieved
	Fashion & Leather Goods	Establishment of a working group on product reparability	Deferred (2013)
	Holding company and Houses	Continue to take part in trials in France to provide environmental information on product labels and participate in the development of new labeling standards	Achieved
MAKE COMMITMENTS O	UTSIDE THE COMPANY		
Strategy	Business group	Objective assigned to the company in 2012	Deadline
Be involved with stakeholders	Holding company	Continue the work with Orée, the BSR, the Responsible Jewellery Council, the Federation for Research on Biodiversity and 11 other partner organizations and associations	Ongoing
	Wines & Spirits Perfumes & Cosmetics	Open sites to the public during Heritage Days	Ongoing
	Fashion & Leather Goods Watches & Jewelry Perfumes & Cosmetics	Continue partnerships with environmental NGOs such as Green Cross, The Climate Project and Terre d'Abeilles	Achieved
	Fashion & Leather Goods	Build on the partnership with the non-profit recycling platform La Réserve des Arts, which recovers corporate waste for the cultural sector	Achieved
	Holding company	Continue sharing best practices with small-and medium-sized companies in the Paris region in conjunction with the Île-de-France Sustainable Development Club	Achieved

### **OBJECTIVES FOR 2013 AND BEYOND (NOT EXHAUSTIVE)**

### AIM FOR A HIGH LEVEL OF ENVIRONMENTAL PERFORMANCE

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Strictly comply with environmental regulations	Holding company	Systematically verify environmental compliance during internal financial audits of sites	Ongoing
	Holding company	Maintain the French and international environmental regulatory watch	Ongoing
Reduce environmental impact at industrial and administrative sites and shipping hubs: water, energy, waste, transport, etc.	Holding company and Houses	Define best practices for store lighting and air conditioning	Ongoing
	Holding company and Houses	Introduce into pilot stores systems that measure energy consumption by item	2013
	Wines & Spirits	Obtain carbon neutrality for one House	Ongoing
	Selective Retailing	Reduce the energy consumption of one House by 20%	Ongoing
	Wines & Spirits	Discontinue the use of fuel oil in favor of natural gas and reduce CO <sub>2</sub> emissions by 20%	2013

### FOSTER A COLLECTIVE PURPOSE

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Involve all employees	Holding company and Houses	Include at least 50% of Group stores in the environmental reporting (as a percentage of sales area)	2013
	Holding company and Houses	Raise awareness of all Group employees during Sustainable Development Week and European Green Week	2013
	Wines & Spirits	Include an environmental module in the training given to all grape-harvest seasonal workers (pressing)	Ongoing
Distribute the results to all levels of management	Holding company and Houses	Extend the "LIFE" program to at least five new Houses	2013

### **CONTROL ENVIRONMENTAL RISKS**

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Have an effective management system that is audited at least once every three years	Wines & Spirits	Obtain California Sustainable Winegrowing certification in two Houses	2013
	Fashion & Leather Goods	Obtain ISO 14001 certification for the supply chain of one House	Ongoing
	Fashion & Leather Goods	Obtain ISO 14001 certification for all workshops of one House	Ongoing
Detect, prevent and reduce all environmental risks	Holding company and Houses	Develop a tool for international regulatory watch for products	Ongoing (2013)

### DESIGN PRODUCTS BY INTEGRATING ENVIRONMENTAL INNOVATION AND CREATIVITY

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Include environmental considerations in the design of Group products, internally and when dealing with suppliers and subcontractors	Holding company and Houses	Distribute to Marketing, Purchasing and Development Managers an eighth version of the "Materials to Consider: Eco-material Handbook" and maintain the watch on environmentally friendly materials, processes and products	2013
ana suocontractors	Perfumes & Cosmetics Wines & Spirits	Develop the Edibox environmental packaging assessment tool for other life cycle stages and other indicators	2014
	Wines & Spirits	Launch an eco-designed case for a flagship range	2013

### MAKE COMMITMENTS OUTSIDE THE COMPANY

Strategy	Business group	Objective assigned to the company in 2012	Deadline
Be involved with stakeholders	Holding company	Continue the work with Orée, the BSR, the Responsible Jewellery Council, the Federation for Research on Biodiversity and 11 other partner organizations and associations	Ongoing
	Fashion & Leather Goods Watches & Jewelry Perfumes & Cosmetics	Continue partnerships with environmental NGOs such as Green Cross, The Climate Project and Terre d'Abeilles	2013
	Fashion & Leather Goods	Build on the partnership with the non-profit recycling platform La Réserve des Arts, which recovers corporate waste for the cultural sector	2013
	Holding company	Continue sharing best practices with small-and medium-sized companies in the Paris region in conjunction with the Île-de-France Sustainable Development Club	2013

## METHODOLOGY FOR THE LVMH GROUP'S ENVIRONMENTAL REPORTING

The LVMH group has been consolidating environmental indicators since 1999. These indicators have been published in the Group's Registration Document and in the Environmental Report since 2001. Since 2002, they have been verified by teams specialized in sustainable development and attached to one of the Auditors. An analysis of relative importance was conducted by the Environmental Department to select the information and key indicators to be published. At the request of LVMH, the key indicators have been audited since 2008 – by the same independent Auditor – to deliver a higher level of assurance ("reasonable assurance"). The Auditor's conclusions are presented at the end of this document.

### **PROTOCOL**

All the consolidation and calculation rules are defined in the LVMH environmental reporting protocol, which is updated annually and available for public consultation from the Environmental Department. Requests to read this protocol should be addressed to: environnement@lymh.fr.

### REPORTING SCOPE

The reporting scope of the environmental indicators in 2012 is detailed opposite.

### REPORTING TOOL AND METHODOLOGY

The system used for environmental reporting is an in-house Web-based tool consisting of two types of questionnaire:

- a questionnaire for compiling corporate data: training, packaging, etc.;
- one (or more) questionnaire(s) for compiling data specific to industrial sites: water and energy consumption, waste production (quantity and type of waste), waste treatment, etc.

In all, some fifty types of information are collected from each House.

The data are then checked and automatically consolidated in a central file, which has numerous control and alert mechanisms (for abnormal data, unit problems, etc.).

### INTERNAL AND EXTERNAL ASSESSMENTS

Consistency controls are conducted by the sites (data is compared against the previous year) and again when the data is consolidated by the LVMH Environmental Department (for abnormalities, previous year comparison, etc.). Some environmental indicators are also independently verified by one of the Group's Auditors whose conclusions are presented in their reasonable assurance report on selected environmental indicators.

### PRODUCTION SITES, WAREHOUSES AND ADMINISTRATIVE SITES INCLUDED IN THE REPORTING SCOPE

(number)	2012	2011	Change
Sites covered	214	181	18(2)
Sites not covered	33(1)	29	(1)
TOTAL NUMBER OF SITES	247	208	17

(1) Primarily includes a recently opened Louis Vuitton workshop, the Heng Long (Singapore) and La Comète (Belgium) tanneries, and the Benefit, Fresh, Pucci, Acqua Di Parma, Radio Classique, Marc Jacobs, De Beers, StefanoBi, Donna Karan and Thomas Pink administrative sites.

#### SALES AREAS INCLUDED IN THE REPORTING SCOPE, BY INDICATOR

(as a percentage of total sales area or House sales area) <sup>(1)</sup>	Energy consumption, greenhouse gas emissions		Water consumption	
	2012(2)	2011	<b>2012</b> <sup>(3)</sup>	2011
GROUP TOTAL	46	40	24	26
DFS	70	65	53	33
Louis Vuitton	43	27	10	11
Sephora Americas	57	63	53	59
Sephora Europe	45	41	10	11

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

(2) Also includes all France-based stores of Berluti, Guerlain, Kenzo, Le Bon Marché, and Make Up For Ever, and selected stores of Bulgari, Fendi, Loewe and Marc Jacobs.

(3) Also includes certain Berluti, Bulgari, Fendi and Guerlain stores. For waste production, the reporting scope includes DFS, Le Bon Marché and certain Louis Vuitton stores only. Data from 2011 were carried over for seven DFS stores. Environmental indicators for stores excluded from the reporting scope were determined by extrapolation; these estimates are excluded from the figures in the table and are presented in the comments.

<sup>(2)</sup> Change mainly due to the inclusion of Bulgari, Berluti, Château Cheval Blanc and Wenjun.

### SELECTION AND RELEVANCE **OF INDICATORS**

The purpose of the published environmental indicators is to report to stakeholders on the Group's annual environmental results. Pursuant to Decree 2002-221 of February 20, 2002, known as the "NRE decree" (New Economic Regulations decree), and Decree 2012-557 of April 24, 2012 regarding disclosure obligations for companies in social and environmental fields, this document only reports the nature and importance of indicators that have a relevant and significant impact on business.

### WATER CONSUMPTION

Water consumption is expressed in cubic meters. This indicator measures the amount of water consumed, based on the following two needs:

- agricultural need: measurement of quantities of water used for irrigation and vine sprinkling (for frost protection, etc.). The water volume used is either measured directly or, more commonly, estimated;
- process need: measurement of all nonagricultural needs (industrial and sanitary processes, cleaning, spraying of green areas, etc.). This water consumption is almost always measured.

### WATER POLLUTION

Water pollution is expressed in metric tons of COD (Chemical Oxygen Demand). This indicator reflects the total annual flow discharged by the sites into the natural environment, after treatment at, or downstream of, the site.

The only sectors concerned with this parameter are Wines & Spirits and Perfumes & Cosmetics, for which discharges of organic matter and other pollution from effluents are significant and directly related to operations.

### WASTE **PRODUCTION**

All waste produced is assessed in metric tons. The waste taken into account is hazardous and non-hazardous waste produced by sites during the reporting period. The method for treating each type of waste is also identified in order to measure the recycling rate.

The various methods used to recycle waste are:

- reuse: using the waste for the same purpose as the one for which the product was initially intended (e.g. in the Wines & Spirits business group, bottles are sold on to a third party);
- material recovery which includes:
- recycling: waste is directly reintroduced into the production cycle from which it came to replace partially or completely a virgin raw material, such as paperboard and certain plastics;
- · organic recovery: composting, controlled spreading of organic waste to fertilize soil, etc.
- energy recovery: incineration with recovery of energy from combustion in the form of electricity or heat.

### **ENERGY CONSUMPTION**

Energy consumed is expressed in MWh and represents all types of energy used by the sites (electricity, natural gas, fuel oil, heavy oil, steam and butane/propane) and company vehicles.

### **GREENHOUSE GAS EMISSIONS**

This indicator is expressed in metric tons of CO<sub>2</sub> equivalent and corresponds to greenhouse gas emissions related to the energy consumed by sites. It covers direct and indirect greenhouse gas emissions.

The information set out in this document also reflects the guidelines in Version 3.0 of the Global Reporting Initiative (GRI). The information and environmental indicators of the GRI presented in this report are as follows:

### Strategy

1.1 pp. 3 and 4 1.2 p. 7

Profile of the organization Information can be found in the LVMH 2012 Annual Report downloadable from the Group's website.

### Reporting parameters 3.1 to 3.12 pp. 56 to 58

3.13 p. 59

### Governance and commitments

4.12 pp. 8, 9 and 45 to 48 4.13 pp. 48 to 51

### Management and indicators

EN1 p. 17 EN3 p. 31 EN4 p. 31 EN7 pp. 30 to 34 EN8 pp. 25 and 26 EN12 pp. 18 and 19

and EN14

**EN16** pp. 35 and 36 **EN18** pp. 30 to 36 EN21 p. 27 **EN22** pp. 27 and 28 **EN26** pp. 15 to 17

**EN28** p. 28 **EN30** p. 43

### UPSTREAM AND DOWNSTREAM TRANSPORT

This indicator is expressed in metric tons/kilometer and metric tons of CO<sub>2</sub> equivalent.

A distinction is made between upstream transport and downstream transport:

- upstream transport is the number of kilometers traveled by the raw materials and components from the last site of the last supplier to the first receiving site. The assessment is made at the very least on the main components and main products:
- Wines & Spirits: bottles, boxes, bottle tops/caps, corks, etc.,
- Perfumes & Cosmetics: bottles, boxes, etc..
- Fashion & Leather Goods: leathers, metal parts, packaging, ready-to-wear, etc.,
  - Watches & Jewelry: boxes, cases, etc.,
- Selective Retailing: store bags, envelopes, boxes, etc.
- downstream transport is the number of kilometers traveled by all finished goods from the manufacturing site to the first wholesale platform or to stores (for selective retailing business groups and brands that have stores).

### PACKAGING PLACED ON THE MARKET

This indicator is expressed in metric tons of material. It includes primary and secondary packaging placed on the market by all Group Houses. The packaging used for shipments during transportation is excluded from this indicator.

### TRAINING AND AWARENESS SESSIONS

This indicator is expressed in hours. It includes all training and awareness

sessions completely or partially dedicated to the environment, specifically:

- training of employees to reduce their impact on the environment and covering topics such as energy consumption; handling of hazardous materials; environmental regulations; training for health, safety and environmental officers; training on environmental auditing, water management, waste management and sustainable viticulture;
- general education/training on the environment (key issues covered include greenhouse gases, biodiversity, and education of harvest workers) and environmental management systems (ISO 14001, etc.);
- training given by the holding company (orientation seminar for new managers, attendance at Environmental Committee meetings, involvement of the LVMH Environmental Department in executive committees or other meetings, etc.);
- hours devoted by in-house environmental trainers during Sustainable
   Development Week and World Water Day, training/awareness sessions by health, safety and environmental officers, etc.

## PERCENTAGE OF SITES THAT HAVE UNDERGONE AN ENVIRONMENTAL AUDIT

This indicator represents the number of sites that have been subject to an environmental audit (internal or external) during the year, out of the total number of sites.

The audits included in this indicator must cover:

- environmental performance (waste; atmospheric, water and soil discharges; energy and water consumption; noise, etc.);
- an assessment of environmental risk (flood, fire, etc.);
  - the company's regulatory compliance;
  - an assessment of the environmental

management system (monitoring audit, internal audit, certification audit, etc.) and/or the performance of the environmental management system.

These audits are validated by a written audit report which sets out recommendations.

The sites included in the scope of this indicator are production sites, warehouses and administrative sites owned and/or operated by companies controlled by the Group. These audits do not cover stores.

# EXPENDITURE INCURRED TO AVOID THE IMPACT OF ECONOMIC ACTIVITY ON THE ENVIRONMENT

This indicator is expressed in thousands of euros. It includes the following expenditures and investments made to avoid the impact of economic activity on the environment:

- expenditure to protect ambient air and climate;
- expenditure for waste water management;
- expenditure for waste management;
- expenditure to prevent noise and vibrations (excluding protection of the workplace);
- expenditure to protect biodiversity and the landscape;
- expenditure on research and development:
- expenditure for other environmental protection operations.

# REASONABLE ASSURANCE REPORT OF THE INDEPENDENT AUDITOR ON SELECTED ENVIRONMENTAL INDICATORS

For the attention of the Chief Executive Officer:

As requested, and in our capacity as independent Auditors of LVMH Moët Hennessy Louis Vuitton, we conducted checks to allow us to express reasonable assurance that certain environmental indicators<sup>(1)</sup> for fiscal 2012 (the "Indicators") were established, in all material aspects, in accordance with the LVMH environmental reporting protocol (the "Standards"). The indicators are presented in this LVMH Environmental Report.

It is the responsibility of the LVMH Environmental Department to establish the Indicators and Standards and to ensure their availability.

The Standards are summarized in the section "Methodology for the LVMH Group's Environmental Reporting" in the LVMH Environmental Report and are available from the Environmental Department at environnement@lvmh.fr.

Our independence is defined by statutory texts, the profession's code of ethics, and the provisions contained in Article L. 822-11 of the French Commercial Code. We have also established a quality control system that includes documented policies and procedures to ensure compliance with rules of ethics, professional standards, and applicable laws and regulations. It is our responsibility, on the basis of our audit, to express an opinion on these Indicators. We performed our audit in accordance with ISAE 3000 (International Standard on Assurance Engagements) and professional standards applicable in France.

The opinion expressed below concerns only these Indicators and not all of the environmental indicators contained in the Environmental Report. This opinion does not cover the data from retail sales operations that have not been directly integrated into the scope of environmental indicator reporting; these are estimated by extrapolation.

### NATURE AND SCOPE OF THE AUDIT

To allow us to express an opinion, our audit was conducted as follows:

- we assessed the Standards' accuracy, clarity, objectivity, completeness and relevance with regard to the Group's activities and the sector's reporting practices;
- at Group level, we:
- conducted interviews with those responsible for reporting the Indicators,
- conducted an analysis of material relevance and the risk of anomalies,
- assessed the application of the Standards, implemented analytical procedures and consistency tests, and verified, on a test basis, the consolidation of the Indicators;
- we selected a sampling of Houses that were representative of the businesses and geographic locations, based on their contribution to the Indicators and risks of anomaly previously identified:
- the entities selected represent on average 64% of the total value of the Indicators published by LVMH Moët Hennessy Louis Vuitton<sup>(2)</sup>,
- at this level, we verified the understanding and application of the Standards and conducted detailed checks on a test basis, which consisted of verifying the calculation formulas and reconciling the data with the supporting documents;
- we reviewed the presentation of the Indicators in the LVMH Environmental Report.

Based on the checks performed over the last 10 fiscal years on the Group's significant entities and the measures taken by LVMH Moët Hennessy Louis Vuitton to improve the understanding and application of the

Standards by the sites, we believe that our checks provide a reasonable basis for the opinion expressed below.

### INFORMATION ON THE STANDARDS

We have the following comments to make on the Standards:

- implementation of internal controls on Indicator feed-in processes, which has been done for several years, is generally satisfactory, but there is a significant lack of uniformity among the Houses: implementation of such controls should be systematized and strengthened for Houses where divergence was noted;
- regarding the "Percentage of waste recovery" indicator, efforts to provide supporting evidence of waste treatment processes should be continued and strengthened;
- given the variability of the COD in water discharges, the frequency of measuring the COD concentration from the highest contributing Houses must be increased to ensure a satisfactory level of accuracy.

### **OPINION**

In our opinion, the Indicators have been established truthfully and in accordance with the Standards.

Paris-la Défense, April 8, 2013 Independent Auditors

### **Ernst & Young et Autres**

Environment and Sustainable Development Department

Éric Mugnier

<sup>(1)</sup> Percentage of sites having been the subject of environmental audits (%); total water consumption for process needs (m³); total COD after treatment (metric tons/year); total waste produced (metric tons); percentage of waste recovered (%); total energy consumption (MWh); total CO2 emissions (metric tons of CO2 equivialent); total packaging placed on the market (metric tons).

2) The contributions by indicator are as follows: percentage of sites having been the subject of environmental audits: 63%; total water consumption for process needs: 55%; total CO2 after treatment: 98%; total waste produced: 60%; total waste produced: 58%; percentage of waste recovered: 71%; total energy consumption: 45%; total CO2 emissions: 38%; total packaging placed on the market: 83%.

### **PHOTOGRAPHS**

Cover: Vignes de la Maison Newton en Californie. Inside: Karl Lagerfeld – Moët & Chandon, Stéphane Cardinale – Dom Pérignon, Gilles Bretin – Louis Vuitton Malletier, Inez Van Lamsweerde – Hennessy, Christophe Beauregard – Louis Vuitton, Bruno Aveillan – Domaine Chandon California, Maia Flore – Make Up For Ever, Bertrand Desprez – Picture libraries of LVMH and Group's Maisons.

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