



Sustainable
Solutions

polyrey



“We do not inherit
the earth from
our ancestors,
we borrow it
from our children”

Antoine de Saint Exupéry





POLYREY, A COMPANY COMMITTED TO AN ENVIRONMENTALLY FRIENDLY APPROACH

At the heart of its sustainable development approach, Polyrey is implementing an active policy aimed at reducing the impact of its activities on the environment throughout all stages of the manufacturing process and life cycle of its products: energy saving, waste reduction, preservation of natural resources, air protection and product durability.

ECO-RESPONSIBLE SOLUTIONS AND HEALTH CONSCIOUS PRODUCTS

Polyrey measures and is working to reduce the environmental impact of its products, using a Life Cycle Assessment (LCA) model from production to the end-of-life of its products.

Polyrey gives priority to sustainably managed raw materials and has set up PEFC and FSC-certified chains of custody to ensure traceability of its managed timber, from woodland management until transformation of the finished product.

Both of Polyrey's industrial sites are certified ISO 14001 in Environmental Management since 2010.

Always at the forefront of innovation, Polyrey offers safe laminate products: low formaldehyde content (E1), low VOC emission rates (A), food-safe surfaces and Sanitized® antibacterial treatment.

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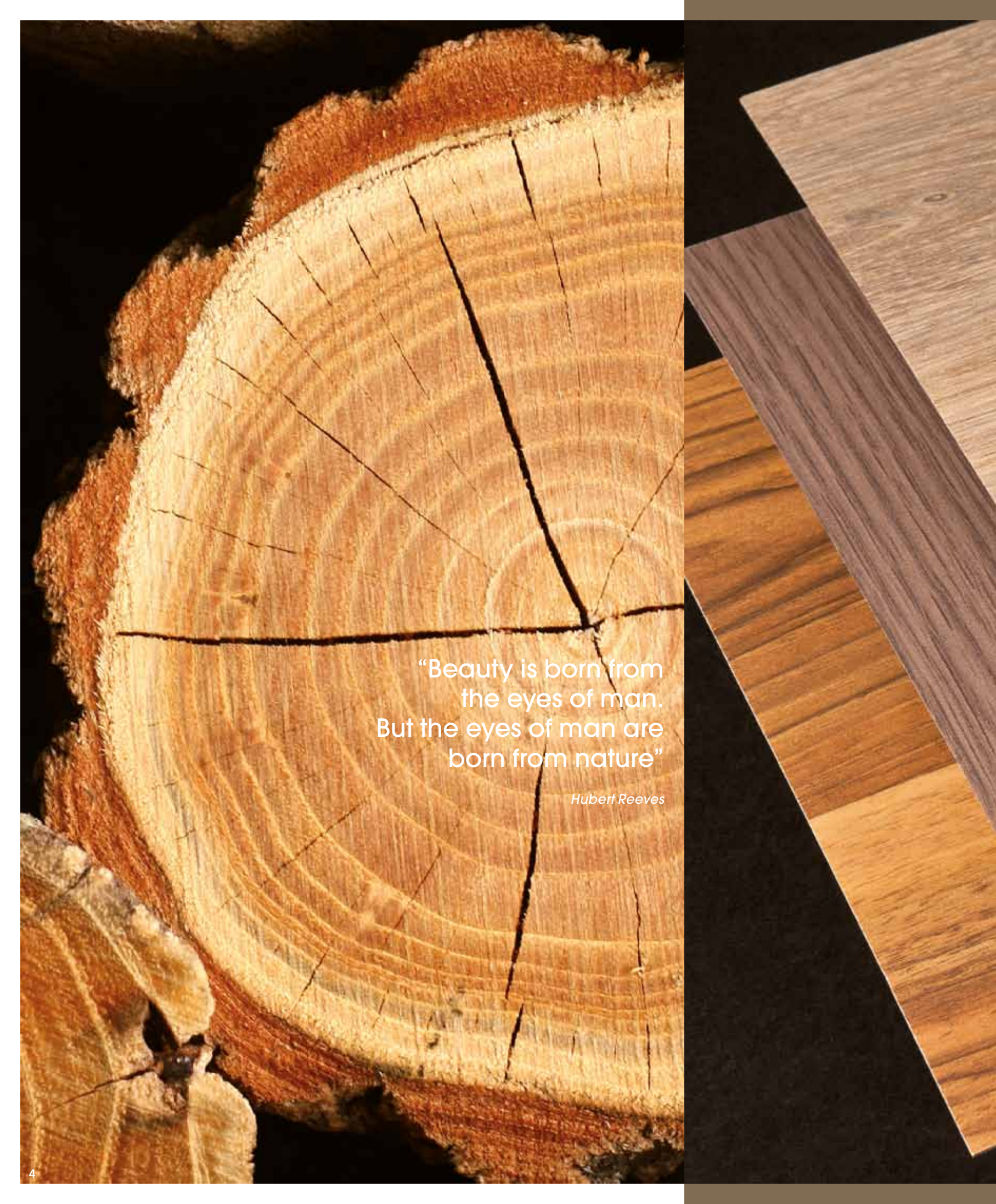
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“Beauty is born from
the eyes of man.
But the eyes of man are
born from nature”

Hubert Reeves

POLYREY HIGH PRESSURE LAMINATE IS MADE UP OF 65% PAPER: A RENEWABLE RESOURCE

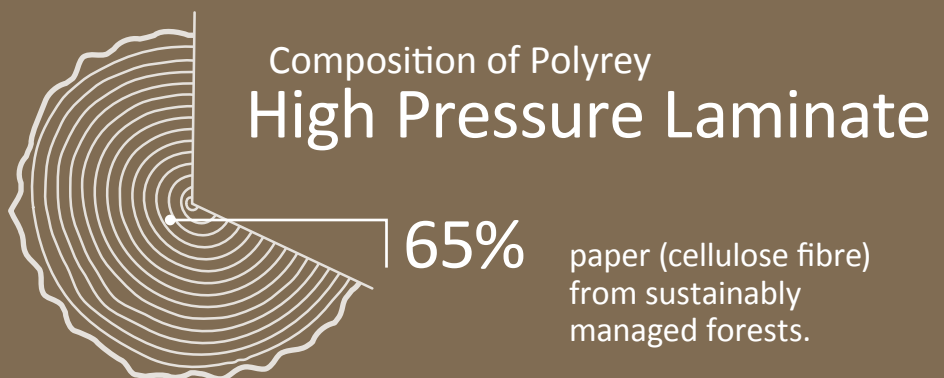
Polyrey manufactures HPL composed of layers of kraft and decorative paper impregnated with thermosetting resins. The combined action of heat (150 °C) and high pressure (75 kg/cm²) results in a product with excellent properties that complies with European standard EN 438.

Polyrey's HPL is an eco-certified product, since it is made up of 65% paper (cellulose fibre), a renewable resource obtained from timber harvested in sustainably managed forests. It complies fully with European green construction standards, which focuses on durability, responsibility and the use of renewable resources.

Composition of Polyrey® HPL



As a wood-based product, the High Pressure Laminate uses natural resources for almost 65% of its composition. The remaining 35% are thermosetting resins which comply with the requirements of REACH⁽¹⁾ regulations in respect of chemical substances.



⁽¹⁾ REACH
Registration, Evolution, Authorisation
and Restriction of Chemical substances.

HPL LAMINATE, COMPACT & MELAMINE-FACED PANELS WITH PEFC CERTIFICATION

Polyrey has been PEFC-certified by the FCBA, an independent sustainable and environmental management organisation, since 2003, with the establishment of a Chain of Custody. The PEFC Chain of Custody certification is awarded to companies that can track and document the certified material throughout the entire manufacturing process, from the forest to the consumer, including all subsequent stages of procurement, processing, manufacturing, distribution and sale of certified goods.

Today, all Polyrey HPL Laminate, Compact and Melamine-faced Panels are PEFC-certified*, a guarantee for our customers and consumers that the products they are purchasing have been made using wood sourced from sustainably managed forests and contribute to green construction. Certified material is material from a certified company that complies with specific environmental, social or economic requirements.

* All our HPL and Compact laminates are at least 40 % PEFC-certified.
All our Polyrey, Panoprey, Polyform products are at least 90 % PEFC-certified.

- PEFC certification (Programme for the Endorsement of Forest Certification) establishes criteria for sustainable forest management that are more stringent than national regulatory requirements, in accordance with international standards, and ensures their enforcement. The PEFC label thus guarantees that our products have been sourced from sustainably managed forests.
- The main objective of the PEFC is to improve and conserve forest resources, biodiversity and to maintain the vitality of forest ecosystems.
- Certified timber is wood that has received a certificate from an independent organisation meeting standards of responsible forest management.

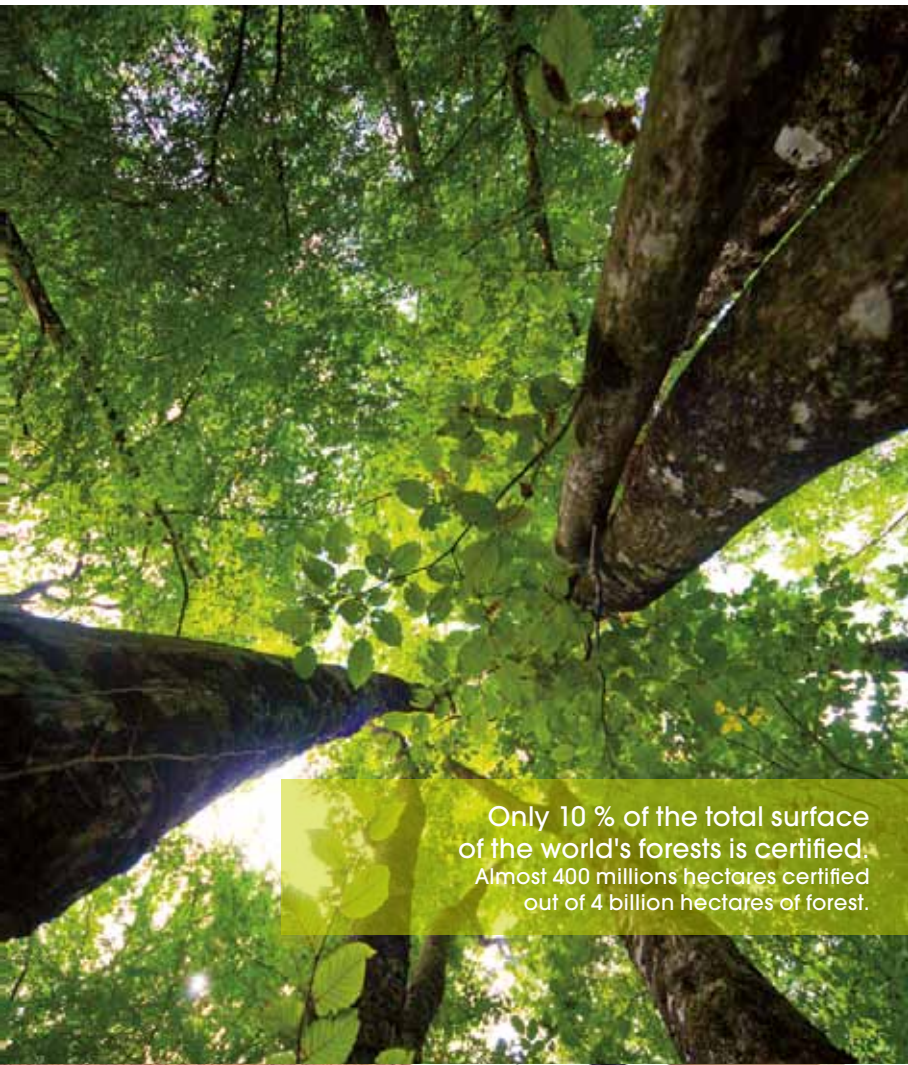


Preserving forest sustainability



GREEN DESIGN





Only 10 % of the total surface of the world's forests is certified. Almost 400 millions hectares certified out of 4 billion hectares of forest.

HPL LAMINATES WITH FSC CERTIFICATION

Polyrey has put in place a FSC Chain of Custody for its supply of kraft and decorative papers since 2010. The FSC Chain of Custody certification is awarded to companies that can track and document the certified material throughout the entire manufacturing process, from the forest to the consumer, including all subsequent stages of procurement, processing, manufacturing, distribution and sale of certified goods.

Today, the majority of **Polyrey HPL laminates are FSC-certified***, a guarantee for our customers and consumers that the products they are purchasing have been made using wood sourced from sustainably managed forests and contribute to green construction. Certified material is material from a certified company that complies with specific environmental, social or economic requirements.

* The list of our FSC-certified HPL laminates is available on request. Please contact us. Availability according to credits.



- *The FSC (Forest Stewardship Council) supports and develops ecologically suitable forest management principles that ensure that the harvesting of timber and non-timber products maintains forest biodiversity and the productivity and functionality of ecosystems.*



The mark of responsible forestry

- *The main objective of the FSC is to promote the responsible management of the world's forests through environmentally appropriate, socially beneficial and economically viable management in order to meet the needs of present and future generations.*

- *Certified timber complies with the requirements of the ten principles and criteria defined as a forest development unit according to FSC.*

COMPANY CERTIFIED ISO 14001



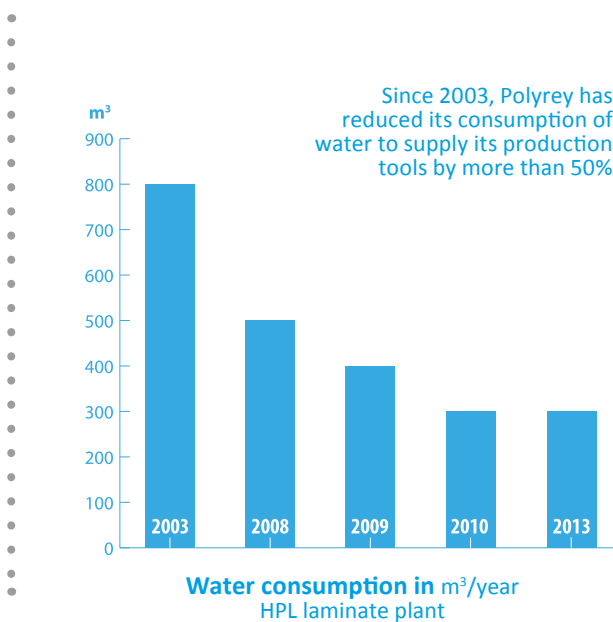
AS AN ACTIVE PLAYER IN ENVIRONMENTAL MANAGEMENT FOR MORE THAN 10 YEARS, POLYREY HAS CONCENTRATED ITS INVESTMENTS IN SUSTAINABLE PRACTICES.

PRESERVATION OF WATER RESOURCES:

Polyrey is constantly striving to improve the efficiency of its processes by reducing its water consumption. For instance, the consumption of water from the Dordogne river adjacent to the Couze factory has been reduced by a factor of 10 over the last 15 years. Polyrey monitors the quality of its wastewater on a daily basis. For all check points (volume, temperature, pH, etc.), Polyrey exceeds the requirements of the DREAL⁽¹⁾. Over the last 10 years, nitrogen waste has been reduced by a factor of 19 and the phenol index by a factor of 24. Finally, the company promotes the recycling of wastewater in its manufacturing processes in order to better preserve water resources.

The objective is to quantify the environmental impact levels generated during each phase and to generate a statistical assessment. This assessment is included in the EHDF: Environmental and Health Declaration Form of the product, according to NF P01-010, available on www.polyrey.com.

(1) DREAL is an official entity dedicated to the Environment.



Protecting natural resources



GREEN DESIGN





Industry accounts for 40%
of the world's Co2 emissions

International Energy Agency



AIR PROTECTION:

In 1997, Polyrey installed a treatment plant for Volatile Organic Compounds (VOC) in order to obtain better air protection.



Polyrey regularly conducts quantitative studies of health risks by measuring the presence of atmospheric pollutants in the areas around its industrial sites. No traces of phenol or formaldehyde have been detected. Polyrey is committed to minimising the health impact of its waste through the implementation of processing equipment (such as a thermal oxidiser for VOCs). These processes destroy 90% of the VOCs generated by our production.

ENERGY SAVING:

Polyrey implements ambitious and highly technical actions in its processes, aimed at saving energy. No fewer than 110 actions have been launched or scheduled: modification of press settings, hot air recovery for heating, lighting optimisation, etc. These efforts have enabled the company to save over 4400 MWh in one year, equal to the average consumption of 700 households per year, and 1300 metric tons of carbon equivalent.

Co2 EMISSIONS:

Polyrey regularly invests to measure and reduce greenhouse gas emissions linked with the operations of its production activity.

Through regular investments and the efforts of its teams, Polyrey has succeeded in reducing 1100 metric tons of Co2 equivalent for the year 2013, which is equal to 23% of its carbon footprint.



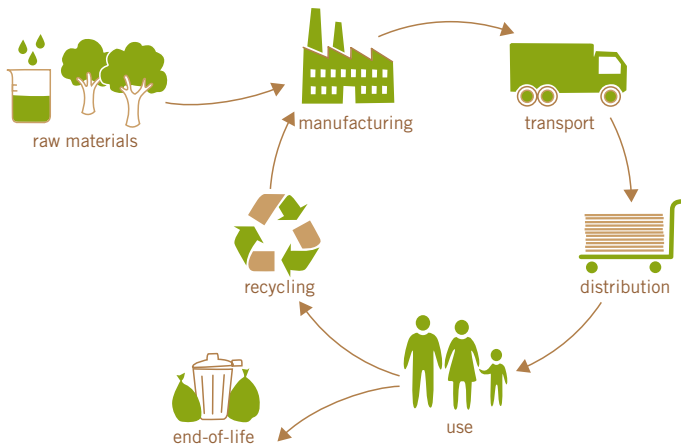
LIFE CYCLE ANALYSIS

CONSCIOUS OF ITS ECOLOGICAL FOOTPRINT, POLYREY HAS DECIDED TO CONDUCT AN ANALYSIS OF THE LIFE CYCLE OF ITS MAIN PRODUCTS IN ORDER TO ASSESS THE IMPACT OF PRODUCTION TO THE END OF LIFE OF THE PRODUCT.

Life Cycle Analysis (LCA) is considered the best way to measure and evaluate the environmental impact of a product over the six stages of its life: raw materials, manufacturing, transportation, implementation, use and end-of-life processing. It identifies and describes, throughout the life cycle, the physical flows of material and energy associated with activities related to the product's life cycle, assesses their impact on the environment then interprets the results obtained.

The objective is to quantify the environmental impact levels generated during each phase and to generate a statistical assessment. This assessment is included in the EHDF: Environmental and Health Declaration Form of the product, according to NF P01-010.

Life Cycle Analysis (LCA):
from the cradle to the grave.



EHDF Environmental and Health Declaration Forms

- All Polyrey products have reliable and transparent environmental data stated in their EHDF (Environmental and Health Declaration Forms), available to download from www.polyrey.com.
- The EHDF make it possible, by means of a detailed study, to establish an environmental assessment of the materials for green-construction projects according to HQE or LEED.

Reducing our environmental impact



**GREEN
DESIGN**





WASTE RECYCLING

FACED WITH THE DEPLETION OF NATURAL RESOURCES, POLYREY IS RETHINKING ITS DESIGN AND PRODUCTION MODEL IN ORDER TO INCORPORATE A FURTHER SYSTEM TO REUSE AND RECYCLE.

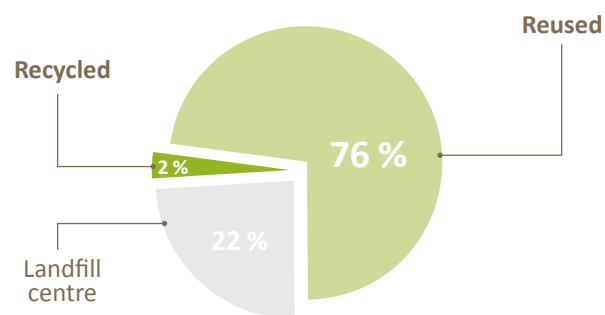
We are determined that companies should adapt their models to this circular economy, in which raw materials as well as finished products are reused and recycled.

Polyrey is naturally involved in a sustainable approach that includes the management of raw materials, waste and energy. All of our equipment has a detailed sustainability plan aimed at continuing to reduce our impact on the environment.



Polyrey has improved its recovery of energy from waste. Thus, waste incineration has enabled the company to save more than 50,000 MWh of steam in one year.

For over 10 years, we have worked on sourcing treatment channels for our production waste. Today, 78 % of our waste is either converted into energy to power our production machinery or recycled (metal, paper, plaster). But because we know that the best way to deal with waste is simply not to produce it in the first place, we strive to reduce the amount of waste we produce.



Waste sorting has been practised at source for around 10 years. 78 % of our waste is converted into energy or recycled by companies specialised in reusing pallets, recycling paper, cardboard and plastic, reselling scrap metal, etc.

INDOOR AIR QUALITY

POLYREY OFFERS SAFE PRODUCTS (LOW FORMALDEHYDE RATE (E1), LOW VOC EMISSION RATES (A)) IN ORDER TO GUARANTEE BETTER INDOOR AIR QUALITY FOR CLIENTS AND USERS.

As a manufacturer of construction materials, Polyrey is aware of the need to protect its users, and provides healthy panels that comply with the regulations that govern VOC emissions.

All materials emit volatile substances known as volatile organic compounds (VOC). According to the quantity or quality of the VOCs emitted, some products may be detrimental to the indoor air quality of buildings.

The air that we breathe in our workplaces, homes, schools, leisure spaces or shops can affect our health and well-being, ranging from mild discomfort (smell, irritation) to the development of allergies.

LOW FORMALDEHYDE RATE

All thermoset Polyrey panels are chemically inert and have a formaldehyde rate that is considerably lower than the limits for wood-based materials (E1: lowest level recognised by the standard).

All Polyrey bonded boards are below the E0.5 threshold, which is not recognised by the standard: less than 1.75mg/m².h in accordance with the NF EN 717-2 standard.

OBJECTIVE ZERO

Polyrey is doing everything it can to reduce the presence of formaldehyde in its panels and resins in all its manufactured products, seeking to achieve the optimal objective of "zero formaldehyde".

Formaldehyde Free

Guaranteeing indoor air quality



**GREEN
SOLUTIONS**





On average, people spend
80 % of their time in
enclosed or semi-enclosed spaces.

Ministry of the Environment



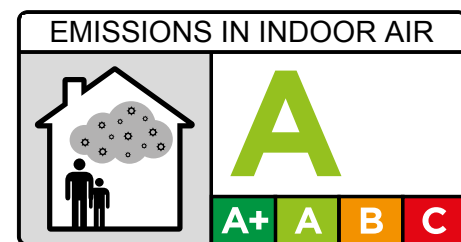
LOW VOC EMISSIONS

Indoor air quality is measured by the rate of VOC emissions

Due to the importance of interior surfaces and their health impact, laminated and melamine-faced boards require special care, in particular buildings occupied by vulnerable population groups such as children, the elderly or people with health problems.

Emissions are characterised according to a 4-class scale, ranging from A+ (very low emissions) to C (high emissions).

Polyrey HPL, Compact and Melamine-faced panels are class A; Rey Partitions is class A+.



- *In accordance with French legislation set forth in the National Plan for Health and the Environment (PNSE2), labels must state formaldehyde emissions and total VOC emissions, but should also include: acetaldehyde, toluene, tetrachloroethylene, xylene, trimethylbenzene, dichlorobenzene, ethylbenzene, butoxyethanol and styrene.*

- *The emission level of the product is indicated by a class ranging from A+ (very low emissions) to C (high emissions). This provides professionals and consumers transparent information that can help them during their product selection. It allows clients to consider indoor air quality as a criterion in requests for quotations for the construction or renovation of buildings.*

ANTIBACTERIAL TREATMENT

IN HOSPITALS, SCHOOLS AND THE FOOD-SERVICE INDUSTRY, POLYREY SEEKS TO OFFER SPECIFIC ANSWERS TO THE PROBLEMS OF HYGIENE AND HEALTH OF USERS IN CONTACT WITH THE HPL.

All Polyrey HPL and Compact products undergo an antibacterial treatment with silver ions incorporated in the material. Polyrey is constantly innovating to provide you with healthy decorative solutions, by means of a treatment in which silver ions (Ag+) are encapsulated in glass beads, resulting in an inorganic solution which does not migrate, is very stable and does not deteriorate over time. The antiseptic action of silver is an essential element in the health and food-service industries and in public spaces.

Antimicrobial, food safe and FDA approved (Food and Drug Administration), the Sanitized® silver-ion treatment is recognised and widely used in hospitals and the food industry.

More than 99.9 % of bacteria are destroyed through this process. Effectiveness tested on 7 bacteria according to the JIS Z 2801 standard: *Escherichia coli* ATCC 8739, *Enterococcus hirae* ATCC 8043, *Listeria monocytogenes* ATCC 15313, *Staphylococcus aureus* (MRSA) ATCC 33592, *Staphylococcus aureus* ATCC 6538, *Mycobacterium smegmatis* ATCC 19420 and *Salmonella enteritidis* ATCC 13076.

Sanitized® is an independent Swiss company, leader in the production of antimicrobial solutions, with 50 years of experience in silver-ion based treatments. It also provides advice and recommendations to health stakeholders, including the Centre for Nosocomial Infection Control.



Active Biocidal Substance
SILVER-ION

Protecting the health of users



GREEN SOLUTIONS





80 % of bacteria are transmitted through contact between the hands and contaminated surfaces.

FOOD CONTACT

All the HPL, Melamine-faced boards and Compact products have been tested and approved for food contact according to the Institut Ianesco.



Chemical compound migration rates are much lower than the tolerated thresholds and do not affect the food in any way. The specific migration tests take into account formaldehyde and melamine.

CHEMICAL INERTNESS

Polyrey strives to select chemical raw materials that comply with European REACH⁽¹⁾ regulations, do not have any harmful effect on humans, and do not migrate.

We guarantee that the chemical materials used in our products are recorded, evaluated and authorised, in particular in regards to pre-registration and registration with the European Chemicals Agency (ECHA).

Our products do not contain any chemical elements that are included in the list of SVHC (Substances of Very High Concern) with a concentration of more than 1 % by weight.



OBJECTIVE ZERO

Polyrey is naturally committed to using raw materials in its products that are:

- free from heavy metals (lead, cadmium, etc.)
- free from carcinogenic compounds
- free from solvent-based inks
- free from substances that are subject to REACH⁽¹⁾ restrictions

(1) European regulation system for the Registration, Evaluation, Authorisation and Restriction of Chemical substances.

CORPORATE SOCIAL RESPONSIBILITY

GOING ONE STEP FURTHER, THE RESPONSIBILITY OF POLYREY INCLUDES SOCIAL, ENVIRONMENTAL AND ECONOMIC CONCERNS.

Integrated management system

The Polyrey management system includes principles of social responsibility, with transparent and ethical behaviour that contributes to sustainable development.

Polyrey has been audited and certified according to the ISO9001 and ISO14001 standards, following principles of transparency which include:

- > annual presentation of results
- > open days on both sites
- > regular communication: social report, report of the workplace health and safety committee

Respect for Human Rights

Polyrey has signed an agreement for equal rights concerning gender, and is dedicated to promoting the employability of disabled persons.

The company's awareness of health and safety involves monitoring the practices of subcontractors and suppliers. In addition, Polyrey has drawn up a charter which addresses social, environmental and corporate issues.

Industrial relations and working conditions

A "zero accident" safety goal is an integral part of the personnel management system. Polyrey organises its process according to the elementary rules of prevention, seeking to increase the level of commitment among its employees on both industrial sites.

Polyrey acknowledges the importance of social dialogue and has set up partnerships with staff representation bodies to improve working conditions and the sustainability of the company.

- **CSR** *From the environment to society: Corporate Social Responsibility (CSR) is a new concept in which companies combine social, environmental and economic concerns in their interactions with stakeholders on a voluntary basis.*
-
-
-
-
-
-

Respecting our social commitments



GREEN SOLUTIONS





Consumer protection

Because a happy customer is a loyal customer, Polyrey offers full support for every project, from the specification stage to implementation. All customer comments are taken into consideration and used to improve our processes.

Polyrey aims to manufacture a product that is reliable, creative and responsible for all its customers. Processes and innovations have been defined in order to address this ambition of the company:

- > scratch and abrasion tests
- > eco-certified raw materials
- > panels with antibacterial treatment
- > partnerships with designers

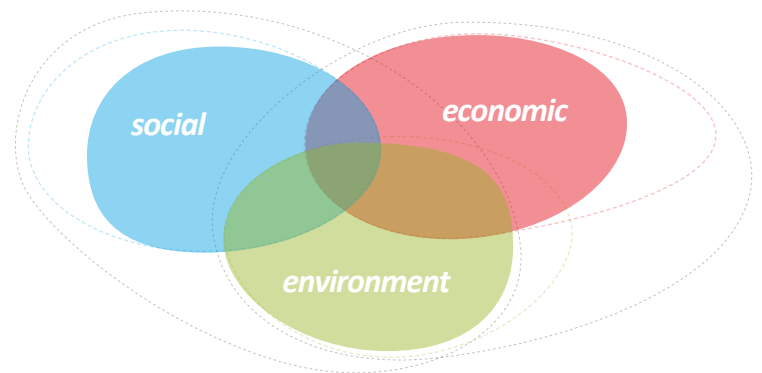
Loyal practices

Polyrey encourages best practices among its employees, based on values of ethics, loyalty, impartiality and transparency.

Suppliers are selected in accordance with criteria of impartiality defined according to the quality of the products and services, acquisition cost, payment terms and conditions, after-sales service, etc.

Sustainable development is defined by the commitment to meet the needs of present generations without jeopardising those of future generations. For Polyrey, it is to focus on the 3 main areas:

- Economy: create wealth and improve the working conditions of employees.
- Social: investing in health and safety training for employees
- Environmental: conserve natural resources and energy





High Environmental Quality

HQE® is a set of voluntary practices aimed at managing environmental quality, with a double objective: to improve the health and comfort of the occupants of a building and to limit its impact on the environment. HQE certification confirms compliance with a specific framework of requirements and the implementation of an Environmental Management System (EMS).

This approach targets all the phases of a project: design, construction, operation and decommissioning of a building, and involves the integration of environmental requirements into the project. The client defines efficiency levels and is committed to empowering all the project stakeholders to achieve them. This step includes, in particular, the selection of products.

The HQE approach defines 14 environmental targets grouped into four areas: green construction, green management, comfort and health. The 14 targets are broken down into 38 sub-targets and 147 concerns, all of which are evaluated according to three levels (Basic, Efficient and Highly Efficient).

Polyrey HPL laminates used as decorative surfaces in interior fittings such as furniture, doors, partition walls and worktop applications, as a component material, can help meet HQE certification targets:

- . Target 2: Integrated choice of products, systems and processes
- . Target 12: Hygiene and cleanliness of spaces
- . Target 13: Air quality



Building Research Establishment Environmental Assessment Method

As an assessment and certification method that aims to improve the environmental efficiency of buildings, BREEAM sets standards for best practices in the sustainable design, construction and operation of buildings.

BREEAM certification assesses the efficiency of buildings according to nine environmental categories: management system, energy, health, well-being, pollution, transport, land use, biodiversity, materials and water, with one additional bonus category: innovation. Points are awarded for each of these aspects in light of the above criteria and the efficiency achieved. The total score is used to assign a level of efficiency: Pass, Good, Very good, Excellent, Outstanding.

Polyrey HPL laminates used as decorative surfaces in interior fittings such as furniture, doors, partition walls and worktop applications, as a component material, can help obtain BREEAM credits:

Health. Well-being

- . HEA 09: Volatile Organic Compounds (VOC)

Materials

- . MAT 01: Material specifications
- . MAT 05: Material source

Complying with green construction criteria



GREEN BUILDING





Leadership in Energy and Environmental Design

A system for rating buildings with high environmental quality developed by the US Green Building Council (USGBC). It is a green-construction rating system based on the sustainability of the building, which assesses the effectiveness of the product in five major areas related to human and environmental health: sustainable site development, water efficiency, energy efficiency, material selection, indoor environmental quality.

The LEED rating system takes into account all the construction-related aspects of a project. Materials are very important, especially for the "Materials & Resources" and "Indoor Environmental Quality" categories. The rating system is points-based and is used to evaluate the environmental profile of a building, with no weighting by criteria. Ultimately, the building can achieve four levels: certified, silver, gold and platinum.

HPL Polyrey laminates used as decorative surfaces in interior fitting and furniture, doors, walls and worktop applications, as a component material, can help obtain LEED credits for construction certification:

MR: Materials and Resources

- . MR Credit 3: Material reuse
- . MR Credit 4: Recycled content
- . MR Credit 5: Regional content (France)
- . MR Credit 7: Certified wood

IEQ: Indoor Environmental Quality

- . IEQ Credit 4.4: Low emitting material



Deutsche Gesellschaft für Nachhaltiges Bauen

A system for rating buildings with high environmental quality developed by the German Sustainable Building Council (DGNB). It is a green-construction certification system based on three pillars of sustainable development: environmental quality, functional and sociocultural and technical quality.

The environmental analysis is conducted throughout the life cycle of the building, and applies to buildings under renovation and to new construction. The analysis studies more than 50 criteria divided into six areas: environmental, economic, sociocultural and functional qualities, technical qualities of the design process, and siting. The overall score grants access to a label with three levels: Bronze, Silver and Gold.

HPL Polyrey laminates used as decorative surfaces in fittings and furniture, doors, walls and worktop applications, as a component material, can help obtain DGNB points for construction certification:

Environmental Quality

- . Criteria 1 to 7: Life Cycle Analysis (LCA)
- . Criterion 8: Sustainable resources (FSC, PEFC)

Sociocultural and Functional Quality

- . Criterion 20: Indoor Air Hygiene Technical Quality
- . Criterion 33: Fire safety
- . Criterion 40: Ease to clean and maintain

Sustainable Solutions

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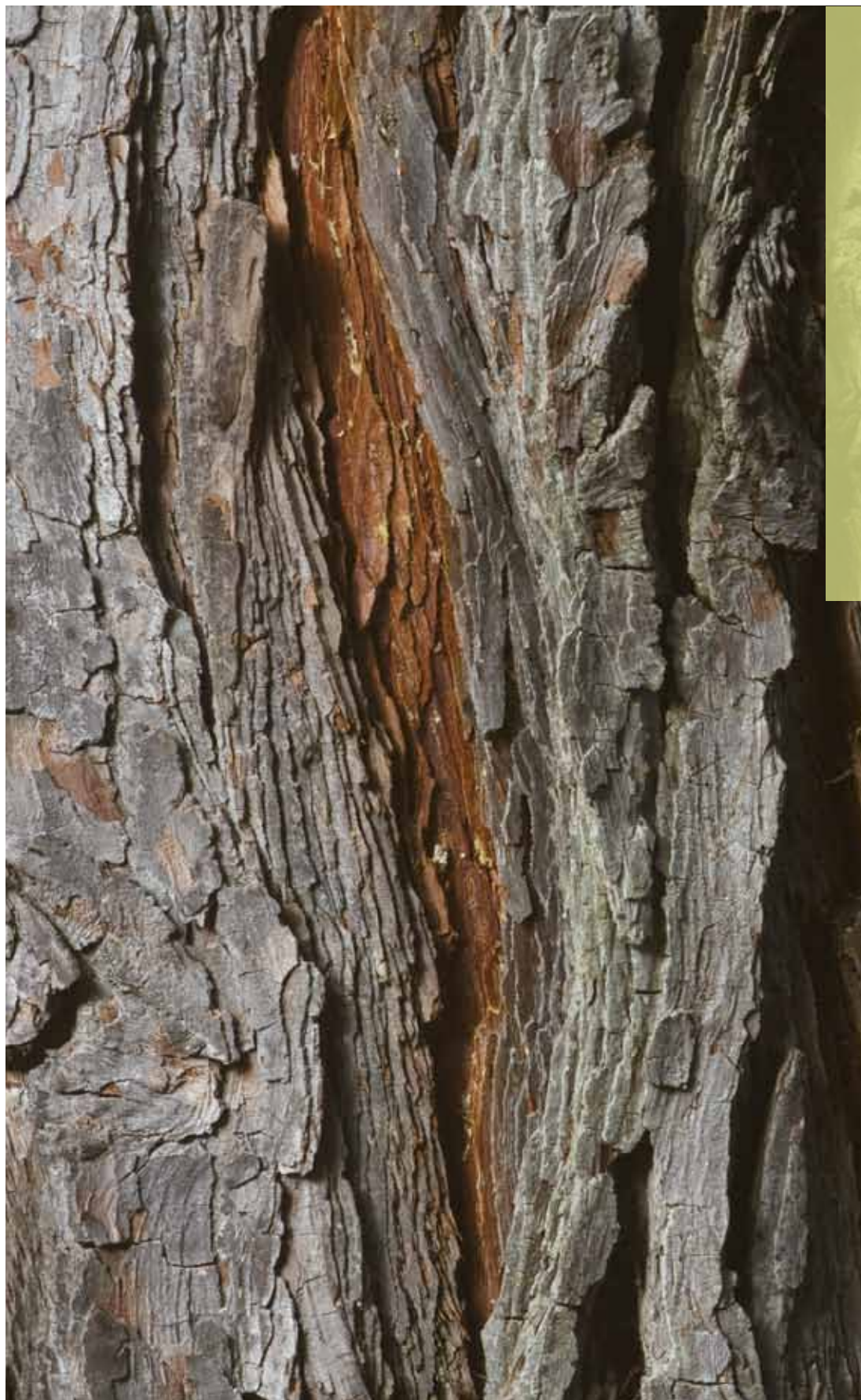
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Look for our FSC
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This company
certified its chain
control.
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