

3.P.2. Environmental Performance

3.P.2.1. Reporting on environmental performance

Reporting scope

The environmental data published in this report is for all Valeo Group production and distribution sites worldwide, excepting those of the minority-owned affiliates. The financial data reported by the Group (sales, research and development expenditure, etc.) is checked for consistency against the data reported by the sites.

The environmental indicators for 2008 cover a total of 119 sites, including eight advanced supplier sites, eight Valeo Service sites and one storage site:

- advanced supplier sites are manufacturing sites located at an automaker customer site;
- sites devoted exclusively to research and development or to office work and sites acquired, sold or closed during the year are not included;
- companies 50% controlled by Valeo are included proportionately, at 50%. Companies in which Valeo has more than 50% control are included in full, at 100%.

Presentation of indicators

Most indicators are expressed in terms of total quantity as well as quantity consumed or emitted per million euros. Quantity per million euros is calculated by dividing total quantity by total sales for the relevant sites.

The unusual time pattern of activity in 2008 – marked by a steep fall-off in activity and sales in the fourth quarter – necessarily affected in the environmental indicators in diverse ways:

- decreases in “gross” indicators (total quantities) more or less in proportion to the decrease in activity;
- deterioration of environmental performance ratios: in terms of equivalent absolute performance (constant total consumption of water, energy, etc.), the sharp contraction in sales does not reduce environmental impacts in the same proportions, because industrial production remains in operation. Ratios of absolute performance to sales are therefore affected negatively, if somewhat artificially.

The representativeness of each indicator is measured by a response rate. This rate is expressed as total sales of sites responding for that indicator divided by total sales of all sites in the reporting scope.

As in previous years, the responses from the sites were consolidated and checked for consistency by an external body in order to ensure quality and representativeness.

The Valeo Group’s environmental performance in 2008 is presented subject by subject in the following pages. In each subject area, the strategy adopted by Valeo on product design and site management is outlined. Charts with comments are presented to give an at-a-glance view of Group performance and trends over the past five years. Details are also given for the resources applied at Group level and local level. Lastly, text boxes outline the forthcoming measures that Valeo has chosen in order to keep making progress on its environmental endeavors.

3.P.2.2. Energy consumption and global warming

Carbon dioxide (CO₂) is one of the six greenhouse gases (GGs) that are building up in the atmosphere and causing global warming. The transport sector accounts for about a quarter of GG emissions worldwide, with road transport contributing 18%. This figure is for vehicle usage alone and does not include emissions arising from energy consumed in producing components and assembling vehicles at the factory. With the population growth and economic growth expected over the coming decades, strong demand for individual mobility will have to be balanced against increasing scarcity of fossil fuels and the ever more pressing need to combat global warming.

Valeo contributes in two ways: (i) by developing products and technologies to reduce vehicle fuel consumption, and thereby CO₂ emissions; and (ii) by implementing cleaner, energy-saving manufacturing processes at its production sites.

Developing products to reduce vehicle fuel consumption

One expression of Valeo’s long-standing commitment to environmental protection and the fight against global warming is

its deliberate choice to develop environmentally friendly products and systems. Taken together, recent Valeo innovations can reduce vehicle fuel consumption, and thus CO₂ emissions, by up to 40%.

Up to 40% reduction in fuel consumption

	Technology	Reduction
Power on demand	High-performance air-conditioning system	3%
	UltimateCooling™	3-5%
Thermal management	THEMIS™ valve	2-4%
	Dual-clutch transmission with electromagnetic actuators	4-6%
Transmission automation	Exhaust gas recirculation (EGR) cooler	5-7%
Air intake	StARS micro-hybrid system (stop-start with regenerative braking)	6-15%
Hybridization	e-Valve system	15-20%
Engine control		

The Valeo **e-Valve technology** is based on a variable electromagnetic valve control system that replaces the conventional mechanical system. It yields fuel savings of up to 20%, improved engine performance and enhanced driving comfort.

The principle of the **StARS starter-alternator** is the system’s ability to stop and restart the engine instantly and silently. StARS saves fuel (from 6% to as much as 15%) and significantly reduces pollutant emissions when the vehicle is stopped at a red light or in a traffic jam.

The main function of **EGR cooling systems** is to reduce the formation of nitrogen oxides in diesel engines. Recently, EGR cooling systems have been developed for gasoline engines to achieve fuel savings of 5% to 7% through higher compression ratios.

An alternative to hydraulic automatic transmissions, the **dual dry clutch** has separate clutches for odd and even gears. This solution combines the comfort of an automatic transmission with the lower fuel consumption of a manual transmission (4% to 6% reduction in CO₂ emissions).

The **THEMIS™ valve**, part of the engine cooling system, manages the flow of coolant through the engine, the radiator and the passenger compartment heating system. Fuel savings of 2% to 4%, reduced pollutant emissions and improved performance of climate control systems are a few of the many advantages of the THEMIS™ valve.

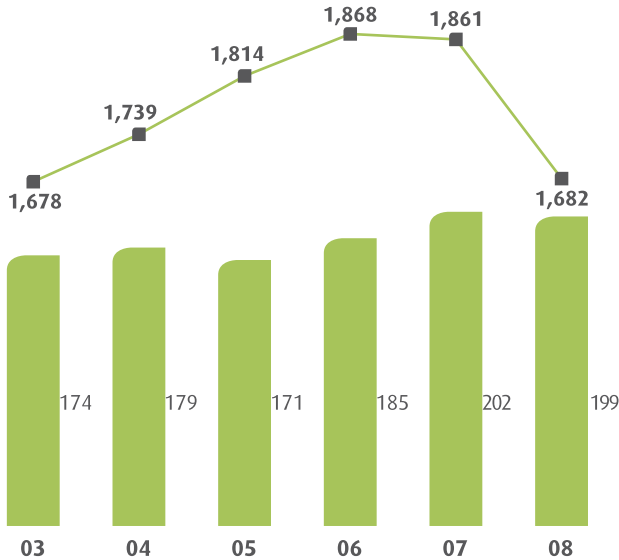
UltimateCooling™ is a new cooling system that optimizes thermal energy management by having all fluids transit through a single cooling circuit. Besides fuel savings of 3% to 5%, the UltimateCooling™ system also enables improved vehicle body design by reducing front overhang (by 20% to 40% compared with conventional cooling systems).

Valeo’s **high-efficiency air-conditioning system** features innovative lightweight components with a computerized control algorithm for optimum efficiency at all times. This reduces energy consumption by around 3% and leads to significant fuel savings.

In the years ahead, the Valeo Group will continue to pursue product innovation of the kind favored by the European environment. Automotive components that can reduce vehicles’ CO₂ emissions are set to become increasingly widely adopted.

Energy optimization at Valeo sites

Energy consumption

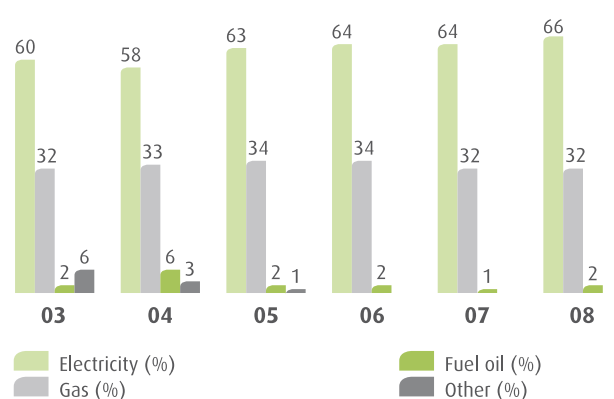


■ Total energy consumption/Sales (MWh/€ millions)
 ■ Total energy consumption (GWh)

Response rate

2003	2004	2005	2006	2007	2008
98.3%	97.1%	98.7%	96.2%	99.7%	98.9%

Breakdown of energy consumption by source



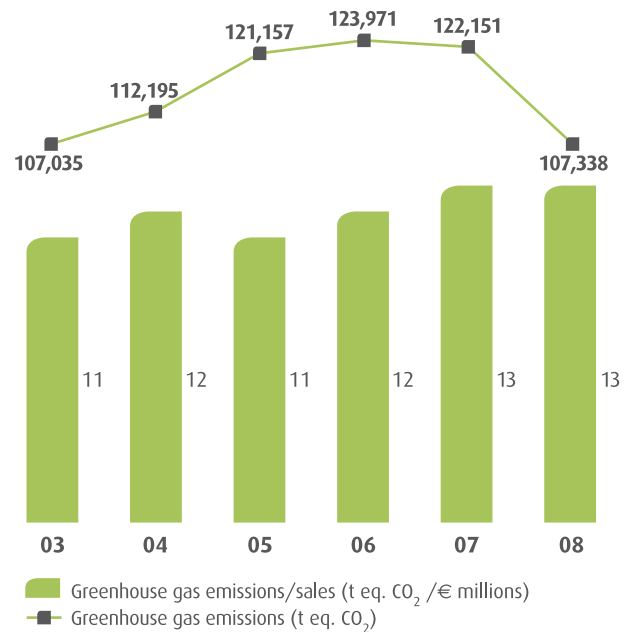
Response rate

	2003	2004	2005	2006	2007	2008
Electricity	98.7%	98.0%	99.7%	97.8%	99.7%	98.9%
Gas	98.1%	97.4%	99.6%	96.8%	99.7%	98.9%
Fuel oil	97.9%	98.2%	99.8%	98.1%	99.6%	98.9%

In contrast to the rising trends of recent years, 2008 shows a marked reduction in energy consumption, both absolutely (GWh) and relative to sales (MWh/€m). These results are a reflection of the Group's strong commitment to curb its energy consumption, as manifested in the three-year targets set for each of its sites. The energy mix is relatively steady, with use of electricity holding around 65% and gas around 32%. This reflects the Group's policy of using primarily these two energy sources, leaving fuel oil to play only a marginal role.

Actions to reduce greenhouse gas emissions are taken at Group level and by each site. Valeo has been measuring fossil fuel combustion emissions since 2001. Energy optimization is specifically included in the Valeo Group generic plant concept. Building climate control, ventilation, lighting and process energy requirements are planned from the initial plant design stage to achieve control over operating energy expenditure. Progress has also been made in the design of combined heat and power (CHP) cogeneration systems. But since processes and resources vary considerably from site to site, each site must develop its own solutions.

CO₂ Emissions (direct emissions only)



Response rate

2003	2004	2005	2006	2007	2008
91.1%	94.7%	100%	96.9%	99.7%	98.9%

Direct emissions are emissions generated by combustion of gas and fuel oil at Valeo sites (as opposed to indirect emissions, generated elsewhere by the production of the electricity consumed at Group sites).

After holding relatively steady for three years, direct emissions of CO₂ equivalent decreased by 12% during 2008. This result is the fruit of the Group's energy conservation efforts in 2008. The decrease relative to sales is smaller, since the fall-off in activity late in the year pulled this ratio down.

In 2008 the Meslin l'Évêque site in Belgium (Valeo Lighting Systems) entered into an agreement with the Wallonia regional government on reducing its emissions of greenhouse gases and improving its energy efficiency. The site commits to increase its energy performance and in return will receive financial and administrative benefits from the Region. The agreement targets a 14% reduction in the index of greenhouse gas emissions by 2012. The site achieved savings of more than 100,000 euros in 2008.

Numerous sites took action in 2008 to conserve energy by regulating illumination. At Angers in France (Valeo Lighting Systems), interior lighting is regulated according to the level of natural daylight, saving 8,000 euros a year. This site is also recovering heat energy emitted by a production line incinerator, for savings of 47,000 euros a year. The Sainte Florine site in France (Valeo Engine and Electrical Systems) switches work areas to low-energy lighting depending on activity. At the Toluca site in Mexico (Valeo Climate Control), 30% of shop floor lighting has been replaced by low-wattage lighting, reducing unit consumption from 1,000 watts to just 300 watts. The Daegu site in South Korea (Valeo Transmissions) has installed translucent panels on the roof, an innovative solution that enhances visual comfort and reduces the need for artificial lighting.

At all Valeo sites, employees are made aware of everyday, common sense things they can do to save energy.

Looking ahead, Valeo will continue to optimize energy efficiency in its processes and at its sites and promote use of renewable energy sources at Group level.

In 2009 Valeo intends to run tests at pilot sites of a tool to calculate energy efficiency and an action plan to improve it. The Group would then hope to be able to deploy such a tool at all of its sites.

Reducing transport-related energy consumption and emissions

A first study of CO₂ emissions generated by transport was conducted in 2007. On the basis of data collected for 35 sites, it was established that transport-related emissions were equivalent to emissions from the Group's industrial sites. The main mode of transport used by the Group, responsible for three-quarters of emissions, is trucking. Sea freight is responsible for nearly a quarter of CO₂ emissions, and air freight, used only occasionally, is responsible for about 2%.

In 2008 Valeo expanded the scope of its data gathering to the entire Group in order to have more reliable data. Aggregate results were collected from carriers by means of a questionnaire sent to them.

In 2009 Valeo will pursue efforts to obtain precise quantitative information from carriers on emissions attributable to transport of Valeo products alone. When this work is done, the Group will be in a position to develop a full action plan for reducing transport-related emissions.

The Campinas site in Brazil (Valeo Wiper Systems) has focused on treating and recycling its effluents on-site and on drawing water from local artesian wells. These efforts help to limit the volume of effluents to be transported to treatment facilities and the volume of water that must be brought in by truck, yielding an expected 90% reduction in transport-related emissions.

The Breuilpont site in France (Valeo Service) has expanded its use of accompanied intermodal (road/rail) transport to the south of France.

3.P.2.3. Use of natural resources

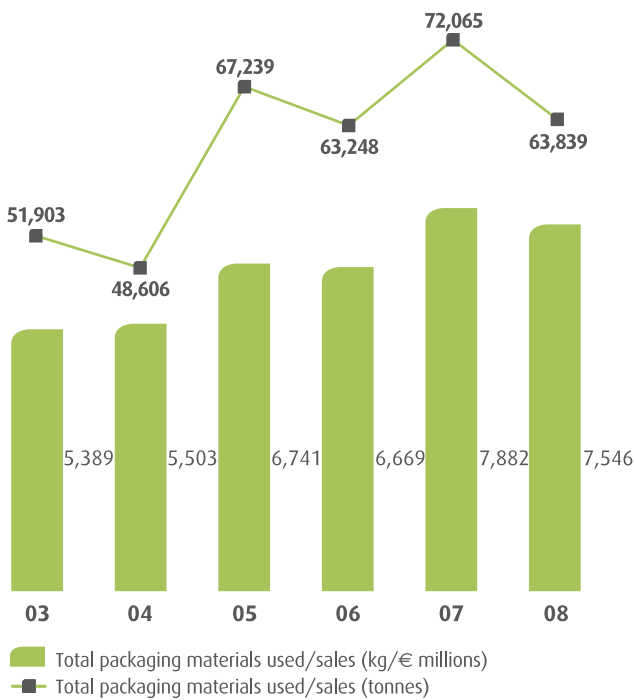
Consumption of natural resources such as water, minerals and oil increases with human activity in general. But the limited and non-renewable nature of some of these resources raises the threat that global economic development will deplete supply and threaten the capacity of future generations to enjoy an environment as diverse as today's. The soaring prices of raw materials (metals, petroleum, and thus plastics) on world markets in recent years also show that utilization of natural resources now raises essential economic as well as environmental challenges.

Because of the products it makes and the packaging and industrial processes it uses, Valeo uses natural resources such as metals, plastics and water. In order to limit its impact on the environment, Valeo is taking action along two lines: limiting consumption of raw materials and making greater use of recyclable and recycled materials.

Limiting the quantity of packaging materials

Packaging is essential to the handling of Valeo products. Packaging is required for transport. It facilitates storage, protects products, and in the case of aftermarket products, helps to sell them. To serve all these various functions, Valeo uses many different kinds of packaging materials, mainly paper and paperboard, wood, plastic and metal.

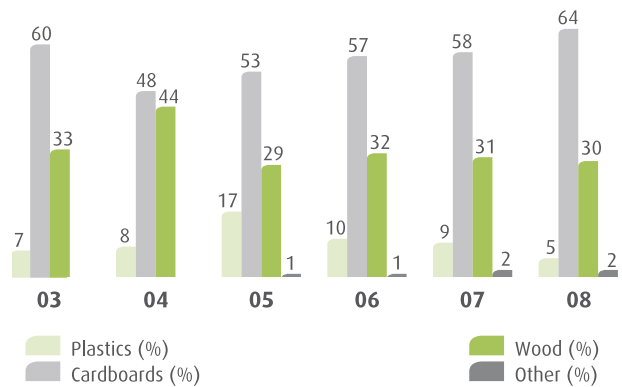
Consumption of packaging materials



Response rate

2003	2004	2005	2006	2007	2008
95.7%	80.1%	92.5%	90.4%	99.1%	98.9%

Breakdown of packaging materials used



Response rate

	2003	2004	2005	2006	2007	2008
Plastics	87.9%	82.8%	93.1%	92.1%	99.1%	98.9%
Paperboard	87.9%	87.0%	92.6%	92.9%	99.1%	98.9%
Wood	87.9%	85.4%	94.3%	94.4%	99.1%	98.9%

The 2008-2010 targets set for Valeo sites for their consumption of packaging materials reverse the rising trend of the past few years. Already, the sites' efforts are reflected in a reduction of more than 11% in packaging consumption. The shift from plastic to paperboard continues, increasing the likelihood that packaging materials will be recycled after use.

Valeo promotes the use of reusable packaging (through the use of non-disposable packs, now widespread at Valeo sites), recyclable materials (plastics) and recycled materials (plastics, paper and paperboard). Several Valeo sites have taken initiatives to minimize the environmental impact of their packaging.

In 2008 Valeo sites took a number of actions to reduce their use of packaging and increase reuse of materials. The Martos site in Spain (Valeo Lighting Systems) organized reuse of packaging in ways forecast to yield a saving of 620 thousand euros in the first year. The Sainte Florine site in France (Valeo Engine and Electrical Systems) chose to get more value from its wooden pallets and to increase fill rates on its packages.

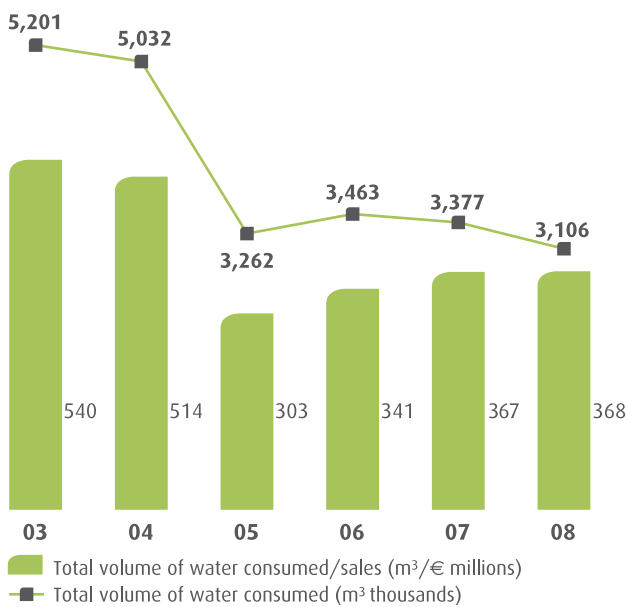
Many sites turn to businesses providing work for the disabled and disadvantaged to restore their wooden pallets for reuse. The sites send pallets in unusable condition to these businesses, which undertake to repair them. The repaired pallets are either sold or taken back into service. Extending pallet service life helps to conserve timber resources.

Valeo will continue its efforts in 2009 with a view to reducing its use of packaging materials and increasing reuse and reclamation at its sites.

The 3-year environmental objectives set for the sites include a target for controlling water consumption. Approximately one-half of the sites achieved their 2008 targets, yielding an overall reduction in the total volume of water consumed. Many sites undertook actions in 2008 to optimize their use of water, such as by finding and stopping leaks, saving water in non-production uses, tuning processes to use less water, and so on. These efforts were partially offset, however, by the first inclusion in the reporting scope of a large-scale water user, the Timisoara site in Romania, which uses an open-circuit cooling system.

Reducing water consumption at the sites

Water consumption



Although further water savings will be more difficult to achieve, newer, more water-efficient processes are gradually being implemented. The Campinas site in Brazil (Valeo Wiper Systems) has to cope with scarce local water supplies as well as limits on effluent discharges. It has installed a system to treat effluents on site and recycle wastewater by spraying it on roofs to cool building interiors. This integrated approach stands to reduce total water consumption by 30% and effluent discharges into the environment by 90%.

Numerous efforts to find and stop leaks, coupled with actions to reduce consumption, achieved significant results in 2008. A few examples are given below:

- the Sao Paulo site in Brazil (Valeo Service) installed automatic taps in the washrooms, cutting water consumption by 40%;
- the Amiens site in France (Valeo Transmissions) has installed waterless urinals and expects to save 70 cubic meters of water.

In line with the objectives sought via the generic plant concept, each Group site is encouraged to implement techniques to reduce water consumption further in the years ahead: controlling leaks, changing individual behavior, replacing open-circuit cooling systems. Reclamation of rainwater and wastewater is another avenue to be explored on a case by case basis.

Response rate

2003	2004	2005	2006	2007	2008
98.7%	98.0%	99.7%	96.9%	99.7%	98.7%

3.P.2.4. Waste production and reuse

An effective waste management policy has four components: at-source waste reduction (the best way to manage waste is by not producing any), sorting (indispensable for recycling), recycling, and disposal under environmentally sound conditions. Valeo addresses all four issues, both in managing its sites and in designing products, which will inevitably become waste at the end of their useful lives. The Group adheres to the objectives set by the EU directive on end-of-life vehicles (Directive 2000/53/EC), which calls for reuse-recovery rates to reach 95% and reuse-recycling rates to reach 85% by January 1, 2015.

Low-waste product design

Valeo's Eco-design Standard, pending final validation, seeks to minimize the environmental impact of products throughout their life cycle. It sets out requirements on three aspects of end-of-life impact: heavy metal content, recyclability and reusability. Thus, in the initial product design stage, the Valeo Group aims to minimize the number of parts, use fewer different metals, facilitate disassembly and favor products that are reusable.

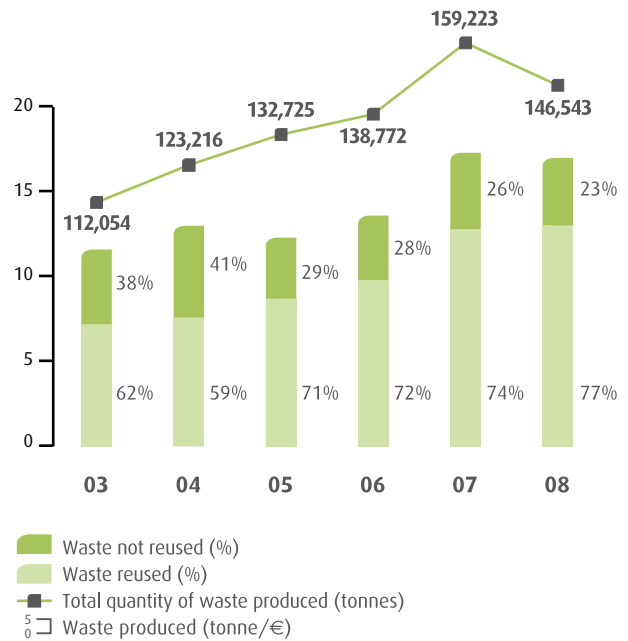
Reducing waste production at the sites

The Group's main waste products are, in descending order of volume, metal, wood and plastics. Almost all metal waste is sold for recycling. Some 75% of wood scrap is recycled, and the remainder is used for heating. Two-thirds of the plastic is sold for recycling.

Total waste production decreased in 2008.
 The recycling rate has been steadily increasing since 2002. That rise gained new momentum in 2008 when sites were given reclamation targets.
 Production of hazardous waste is holding steady around 21,000 tonnes.

Waste generation and reuse rate/
Production of hazardous waste

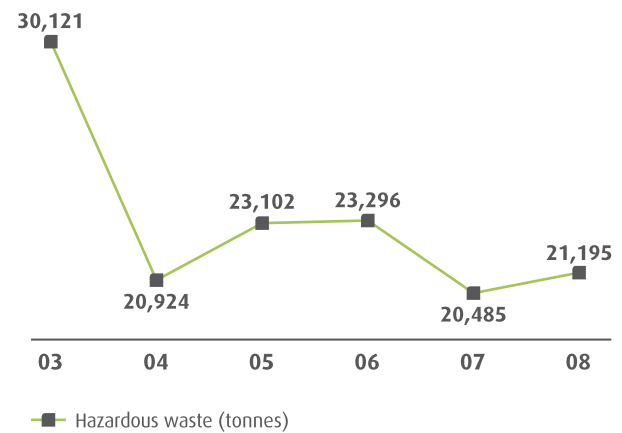
Waste production/Reclamation rate



Response rate

2003	2004	2005	2006	2007	2008
96.5%	98.5%	99.9%	97.4%	99.7%	98.9%
97.9%	95.4%	99.4%	96.8%	94.7%	98.9%

Hazardous waste Production



Response rate

2003	2004	2005	2006	2007	2008
98.7%	98.7%	100%	97.4%	100%	98.9%

In 2008 all Group sites were ISO 14001 certified or, in the case of newly acquired sites, in the process of becoming certified. This entails continuous improvement of performance through concrete measures to increase recycling, established locally based on activity at each site. Furthermore, the generic plant concept developed by the Group aims for minimum waste and higher recycling rates.

The Madrid site in Spain (Valeo Wiper Systems) has cut its lumber consumption by specifying thinner boards for pallet tops (80mm rather than 100mm). This change has cut pallet weight by 25%.

The Wenling site in China (Valeo Wiper Systems) uses packaging made of steel and recyclable plastics.

The Group's objective for the years ahead is to continue these efforts to improve on all fronts: reduce waste production by improving processes, increase recycling and increase reuse of materials.

3.P.2.5. Hazardous substances

Exposure to hazardous substances is an issue in terms of products as well as production processes. Elimination of such substances is a challenge on two counts, both for the environment and for human health:

- when products are being serviced or dismantled at the end of their life, environmentally toxic substances may be released into the air, soil or water, causing local pollution;
- hazardous substances generally have toxic properties (carcinogenic, mutagenic, etc.) that can harm the health of any person exposed to them: a factory worker, a vehicle repairman, etc.

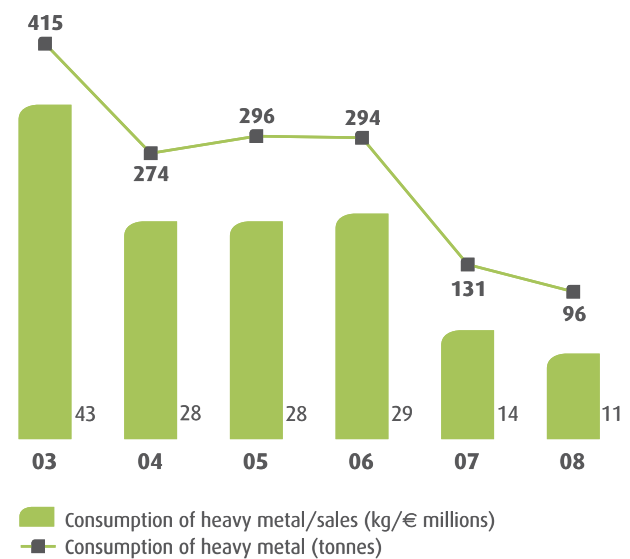
Compliance with the EU Directive on end-of-life vehicles: products free of heavy metals

The end-of-life vehicle directive includes provisions relating to vehicle design and thereby applies to the business of a parts maker such as Valeo. The Directive aims to prohibit, except where technically infeasible, the use of heavy metals such as mercury, lead, cadmium and hexavalent chromium and to favor recycling when these metals are used. A December 24, 2004 order sets down conditions on which such substances may still be used.

Updated in August 2008, Annex II of the ELV Directive tightens the requirements by prohibited the use of leaded solder in electronics starting in 2010. To meet these new challenges, Valeo is currently developing new solutions for two technical processes used at its sites.

In one case, solutions developed in the laboratory are now in the industrialization phase. In the other case, industrial application has already been proven, and the solution is currently being deployed at the relevant Group sites.

Consumption of heavy metals



Response rate

2003	2004	2005	2006	2007	2008
96.1%	97.2%	99.6%	97.5%	100%	98.9%

Since the inception of the database of banned and regulated substances in 2001, Valeo's use of heavy metals has fallen dramatically. Between 2007 and 2008, it declined by 21% measured in proportion to sales. Technical solutions to further restrict the use of heavy metals continue to be identified and implemented. For example, the San Luis Potosi site (Valeo Wiper Systems) has limited its use of leaded solder, and the Madrid site (Valeo Wiper Systems) no longer uses chromium 6.

To achieve results like these, the Product Families followed a number of paths over the years:

- eliminating lead in soldered electronic components;
- changing surface treatment process to switch from chromium 6 to chromium 3;
- eliminating cadmium as a coloring agent.

In the years ahead, the Group will continue to go beyond the initial scope of the Directive's strictures, with the eventual goal of reaching zero heavy-metal content in its products. The goal will drive ongoing technological efforts by the Product Families' R&D departments.

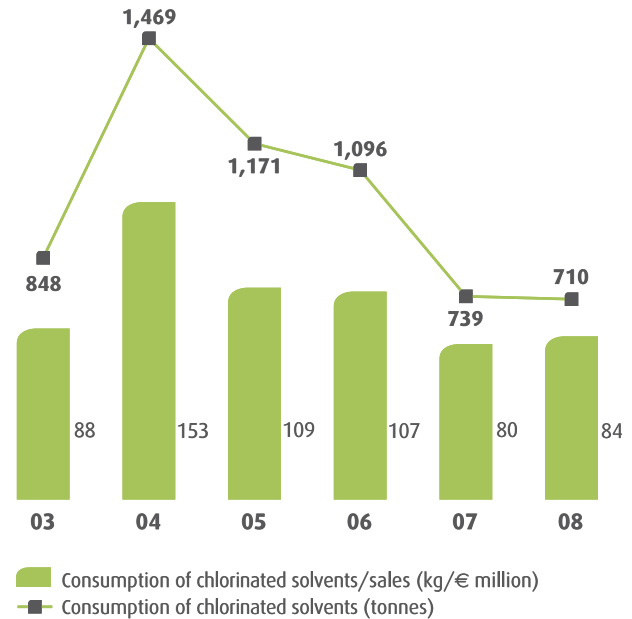
Eradication of hazardous substances used at the sites

In parallel with its actions on the product side to come into compliance with the REACH Regulation, the Group makes a policy of eradicating all substances used at its industrial sites that are deemed hazardous.

To this end, sites follow a procedure that involves identifying prohibited substances, seeking out replacement substances (on economically acceptable terms), testing them, and having them approved by customers. The majority of hazardous products now present at Valeo sites are either products still in use because substitutes for them are awaiting certification or products for which substitutes are currently available only at excessively high cost.

Consumption of chlorinated solvents/ Consumption of Carcinogenic, Mutagenic and Reprotoxic (CMR) substances

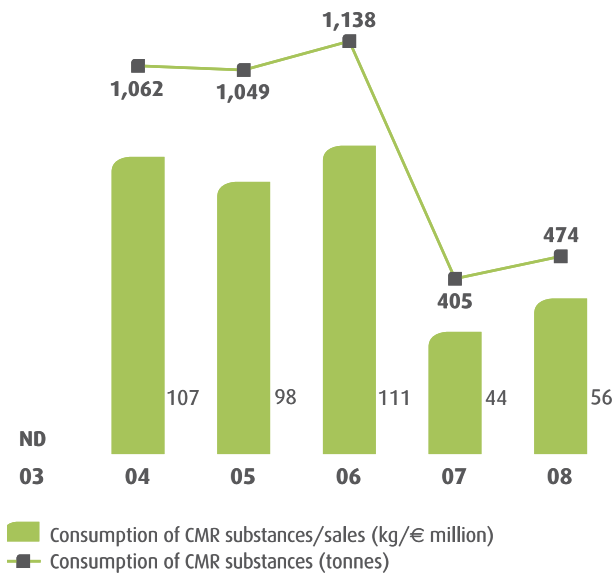
Consumption of chlorinated solvents



Response rate

2003	2004	2005	2006	2007	2008
93.3%	95.8%	99.3%	98.2%	100%	98.9%

Consumption of Carcinogenic, Mutagenic and Reprotoxic (CMR) substances



Response rate

	2003	2004	2005	2006	2007	2008
NA		94.9%	98.8%	98.2%	99.4%	98.9%

After dropping sharply in past years, Valeo’s consumption of chlorinated solvents and CMR products has now stabilized. Fourteen sites are still using chlorinated solvents, but only four of them use them in significant quantity (more than 20 tonnes per year). Sixteen sites report using CMR products, but only the Queretaro site in Mexico (Valeo Transmissions) uses more than 10 tonnes per year. The increase in consumption of these two types of product at Queretaro – required to meet customer requirements – explains the increases at Group level in 2008.

The number of listed chemicals has fallen at all sites, and limitations have been set on the quantities of chemicals used.

Actions have already been taken to curtail the use of hazardous substances. A “hazardous products” campaign has significantly reduced the number of Group sites still using chemicals of this type. At the Skawina site in Poland (Valeo Wiper Systems), the new painting line complies with the provisions of the EU directives on end-of-life products concerning recycling and elimination of prohibited substances. Furthermore, solvent-based paint has been replaced by water-based paint, reducing atmospheric emissions of solvent vapor by 20 tonnes.

At the Amiens site in France (Valeo Transmissions), a zinc phosphating line has been replaced by an oil-based protectant technique using recyclable oil. Implementing this new technique has cut the cost of the process by 87%.

In the years ahead, Valeo will forge ahead with such measures to reach the goal of eradicating all hazardous substances from its production sites. The sites will also continue their compliance efforts relating to the REACH Regulation.

3.P.2.6. Reducing noise and other forms of pollution

Minimizing all forms of pollution, to ensure that its industrial activities are properly integrated into their environment, is another of the Group’s ongoing environmental objectives. This objective applies just as much to the performance of products developed by the Group as it does to the processes used to make them.

On the product side, Valeo has developed the StARS starter-alternator that allows an engine to be stopped and restarted instantly and silently, resulting in a notable reduction in noise pollution in urban areas.

Operations at Valeo sites are not particularly noisy, and the Group is careful to locate new sites far from residential areas. Valeo has issued a Group directive describing practices and processes to limit noise inside the factories.

For several years, the Valeo Group has been developing a policy of favoring installation of collective protection systems (noisy machines are isolated from their surroundings) while continuing to impress upon employees the importance of wearing individual hearing protection equipment.

The visual impact of sites is taken into account at the time of their construction, by following the Valeo Factory Design guide, and a large portion of each site is given over to green space.

Odor pollution, usually associated with emissions of volatile organic compounds (VOCs), can be particularly unpleasant for others in the vicinity of the site. Processes have been altered to reduce emissions at the source. For example, solvent-based paints have been replaced by water-based alternatives, and trichloroethylene has been phased out of the manufacturing process for clutch facings. The Valeo sites where odorous emissions are an issue are equipped with treatment systems to keep emissions below the threshold of perceptibility: bio-filtration, absorption, condensation and incineration, the last-mentioned being the most widely used.

Valeo is also highly aware of the need to protect the health of people living or working near its sites. In 2005 the Group issued a directive on the *Legionella* bacterium based on the regulations that apply in France, which are some of the strictest in this field. This directive is imposed at all Valeo sites worldwide. Under this directive, the sites must:

- wherever possible, replace wet cooling towers with dry towers;
- install preventive treatment systems to suppress proliferation of *Legionella* bacteria;
- perform frequent checks to ensure that the treatments are effective.

3.P.3. Table of environmental indicators

	2002	2003	2004	2005	2006	2007	2008
Total sales across all sites in reporting scope (gross in millions of euros)	11,373	9,632	9,940	10786	10486	9,222	8,555
Number of sites in reporting scope	125	114	137	137	138	119	119
ISO 14001 certified sites (%)	39	59	65	70	77	94	88
OHSAS 18001 certified sites (%)	0	2	4	11	52	74	76
Number of hours of environment training (plant total)	29,229	34,907	38,979	36,938	37,386	33,458	41,313
Total volume of water consumption (thousand m ³)	6,334	5,201	5,032	3,262	3,463	3,377	3,106
Total volume of water consumption/sales (m ³ /€m)	579	540	514	303	341	367	368
Total energy consumption (GWh)	1,758	1,678	1,739	1,814	1,868	1,861	1,682
Total energy consumption/sales (MWh/€m)	158	174	179	171	185	202	199
Electricity (%)	60	60	58	63	64	64	66
Gas (%)	31	32	33	34	34	32	32
Fuel oil (%)	4	2	6	2	2	1	2
Other energy sources (%)	5	6	3	1	0	0	0
Consumption of chlorinated solvents (tonnes)	2,288	848	1,469	1,171	1,096	739	710
Consumption of chlorinated solvents/sales (kg/€m)	212	88	153	109	107	80	84
Consumption of heavy metals (tonnes)	1,396	415	274	296	294	131	96
Consumption of heavy metals/sales (kg/€ million)	133	43	28	28	29	14	11
Consumption of CMR substances (tonnes)	1,947	NA	1,062	1,049	1,138	406	474
Consumption of CMR substances/sales (kg/€ million)	192	NA	107	98	111	44	56
Consumption of packaging materials (tonnes)	59,301	51,903	48,606	67,239	63,248	72,065	63,839
Consumption of packaging materials/sales (kg/€m)	7,293	5,389	5,503	6,741	6,669	7,882	7,546
Proportion of plastic packaging (%)	11	7	8	17	10	10	5
Proportion of paperboard packaging (%)	49	60	48	53	57	58	64
Proportion of wood packaging (%)	40	33	44	29	32	31	30
Proportion of other packaging materials (%)	0	0	0	1	1	2	2
Consumption of recycled plastics (tonnes)	10,026	10,420	6,219	5,020	6,150	7,184	6,751
Volume of industrial effluents (thousands of m ³)	1,174	940	1,009	695	748	918	809
Volume of industrial effluent emissions/sales (m ³ /€m)	104	98	102	65	76	103	96
Heavy metal content in effluents (kg)	859	1,196	365	208	278	242	142
Heavy metal content in effluents/sales (kg/€ million)	0	0	0	0	0	0	0
VOC atmospheric emissions (tonnes)	2,473	2,931	1,242	1,708	1,489	1,296	1,107
VOC atmospheric emissions/sales (kg/€m)	329	304	143	162	153	141	132
TCE atmospheric emissions (tonnes)	1,740	917	536	465	327	51	89
TCE atmospheric emissions/sales (kg/€m)	178	92	54	44	32	6	10.5
Lead atmospheric emissions (kg)	167	270	130	72	52	173	137
Lead atmospheric emissions/sales (g/€m)	19	27	13	7	5	20	16.5
Greenhouse gas emissions (tonnes CO ₂ equiv.)	122,011	107,035	112,195	121,157	123,971	122,151	107,338
Greenhouse gas emissions/sales (tonnes CO ₂ equiv./€m)	11	11	12	11	12	13	13
Total waste generated (tonnes)	139,707	112,054	123,216	132,725	138,772	159,223	146,543
Total waste generated/sales (tonnes/€m)	13	12	13	12	14	17	17
Hazardous waste (tonnes)	29,975	30,121	20,924	23,102	23,296	20,485	21,195
Non-hazardous waste (tonnes)	109,495	80,854	102,755	109,628	115,498	138,738	125,347
Waste reuse rate (%)	62	62	59	71	72	74	77
Number of fines and compensation awards	NA	NA	5	5	3	1	10
Amount of fines and compensation awards (€ thousands)	NA	NA	25	16	4	1	4.1
Provisions and guarantees for environmental risks (€ thousands)	NA	NA	7,580	8,054	3,091	4,289	1,386
Functional expenditure to prevent environmental consequences of operations (€ thousands)	NA	NA	14,140	13,861	16,417	19,789	19,930
Capital expenditure to prevent environmental consequences of operations (excluding decontamination work) (€ thousands)	NA	NA	5,624	7,205	4,244	3,552	4,898
Decontamination costs (€ thousands)	NA	NA	869	1,467	1,240	1,427	1,217