

















preserve...

... the future of the planet by reducing our environmental footprint and by offering our customers innovative products and services to reduce their own impact

| 2008 status report | | | |
|--|------------------|--------|--|
| Objectives disclosed in the 2007 report | Deadline | Status | Key achievements in 2008 |
| environmental management | | | |
| Continue deployment of EMS in compliance with the ISO 14001* standard in the four major countries, as well as in Jordan, Egypt, Senegal, Côte d'Ivoire, Madagascar, Cameroon, Slovakia, Belgium, Romania and Mauritius | 2008-2011 | ● | The 14 countries involved in the EMS* process in 2007 continued to deploy it in 2008. These countries account for 83% of the Group's revenues. Our Orange Business Services unit has also launched the process. |
| Manage the main environmental risks and impacts: 40% of entities in 2008 | 2008 | ● | 57% of the entities involved in the EMS* process (i.e. 8 out of 14 countries) have performed an assessment of their environmental risks and impacts and defined a plan of related actions at the end of 2008 |
| Making personnel aware of the environmental impacts of their activities: 50% of entities in 2008 | 2008 | ● | 71% of the entities involved in the EMS* process (10 countries out of 14) performed "green gesture" awareness campaigns. |
| Evaluate the implementation and performance of the EMS* during managerial reviews: 40% of the entities in 2008 | 2008 | ● | 43% of the entities involved in the EMS* process (6 countries out of 14) included an evaluation of the EMS during managerial reviews |
| climate change | | | |
| Overall objective: reduce our total greenhouse gas emissions by 20% between 2006 and 2020 | | | |
| Improve energy consumption and energy efficiency measures at the building, network and transportation level | 2006-2020 | ◐ | Deployment of optimized ventilation at 147 new sites in France (i.e. a total of 363 sites) and at 1,126 sites in Spain. Deployment of the "Green Datacenters" program aimed at reducing network energy consumption : 5,500 servers virtualized in France, 600 in Poland |
| - Obtain all the billing in 2008. | 2008 | ◐ | Work in progress with the finance department to obtain the bills |
| Continue to replace the fleet of vehicles to achieve an average emission level of 130 g CO₂/km in 2020 | 2006-2020 | | |
| - Replace 2,000 vehicles in 2008 | 2008 | ● | 3,250 vehicles replaced in 2008 (including 44% of utility vehicles and 56% of light vehicles) for an average of 144 g CO ₂ / km ☑ |
| Deploy solutions utilizing renewable energies and increase their share in overall energy consumption | 2006-2020 | ◐ | 226 solar sites installed at the end of 2008 in the AMEA region (including more than 80 sites in Senegal ☑). |
| - Acquire 60,000 metric tons of CO ₂ equivalent in 2008 in renewable energy or green certificates | 2008 | ◐ | New green energy contract signed in the United Kingdom ☑. |
| waste management | | | |
| Overall objective: implement action plans by country on waste management for the four major countries by 2009 and progressively in the others by 2011 based on the following three areas: | | | |
| Complete inventories | 2008-2011 | ● | Inventories done in France, Spain (tertiary waste), Slovakia, and Romania. Inventory of tertiary waste in progress at Orange Business Services ☑. Inventories in progress in the other European countries, inventories started in some countries in the AMEA region. |
| Continue structuring waste management by signing contracts with local partners and formalizing complete process | 2008-2011 | ● | Contracts in place in France ☑, in the other countries of Western Europe, in Slovakia and in Poland ☑. In Romania (ink cartridges ☑), Jordan and Egypt, new contracts implemented for some categories of waste |

| 2008 status report | | | |
|--|-----------|---|---|
| Objectives disclosed in the 2007 report | Deadline | Status | Key achievements in 2008 |
| Trace waste sent to treatment channels outlining the entire process | 2008-2011 |  | Map made in France and Slovakia, begun in the United Kingdom <input checked="" type="checkbox"/> and Romania |
| paper consumption | | | |
| Overall objective: preserve forests and reduce amounts of waste due to the use of office paper | | | |
| Progressively reach 40% electronic billing in all countries by 2009 | 2009 |  | 3,520,417 fixed and mobile general customers have signed up for electronic billing in France <input checked="" type="checkbox"/> (see p. 49 for other countries). |
| Develop the use of FSC-certified paper (or equivalent labels) | 2008-2009 |  | Criterion included in calls for tenders for Group purchases. In France, over 90% of the paper used for commercial purposes is recycled or FSC or PEFC certified. |
| Reduce internal paper consumption by making personnel aware of saving paper and configuring printers for double-sided printing | 2008-2009 |  | Conducting a “green behaviour” campaign in France, Spain, Poland, Slovakia, and Jordan, i.e. close to 116,000 persons (62% of Group staff). Reduction of 15% in internal paper consumption compared to 2007. |
| environmental performance of products | | | |
| Develop eco-friendly design procedures in partnership with suppliers | 2008 |  | Continuation of partnership with Sagem on Livebox. |
| Evaluate the environmental performance of builder products | 2008 |  | Performance of a detailed LCA on Live Box 1.2. Launch at the end of 2008 of the LCA on the Remote Attendance-Video Conference service in cooperation with Consulting Services (Orange Business Services), handsets included. |
| Display the environmental performance of some thirty products at our branches in France with the WWF | 2008 |  | Ecological display in place since October 2008 for general customers on the Group website and at Orange France distribution points |
| Launch the new mini Live-box on our different markets | 2008 |  | Marketing of the mini Livebox in France and the United Kingdom. To be deployed in the other countries during 2009. |
| Prepare an eco-friendly design guide for technical center product managers | 2008 |  | Guide published <input checked="" type="checkbox"/> and distributed to product managers. Making of training modules. |
| solutions furthering sustainability | | | |
| Expand the Green IT process to the international market | 2008 |  | Participation at several “green IT” events in Romania, Berlin, Portugal, Barcelona; Participation at conferences organized by The Economist Intelligent unit in New York, London and Singapore. More than 1.2 million of Business Everywhere users throughout the world <input checked="" type="checkbox"/> . |
| Make a tool available to our customers enabling them to calculate their carbon footprint and evaluate the savings associated with Green IT solutions | 2008 |  | CO ₂ calculator posted on line on the website www.orange-business.com |

-  Objective achieved item reviewed by Deloitte
-  Project in progress
-  Objective not achieved, project cancelled or postponed

implementing our environmental policy

our ambitions:

- reduce the environmental impact of our activities, products and services by implementing environmental management systems at our different entities
- maintain a culture of respect for the environment within the company

Preserving the environment is crucial for our business. Many stakeholders, such as the financial community, NGOs, and our customers, have strong expectations in terms of the environment. Our initiatives in this area help reinforce the Group's values and commitments, and also help identify new commercial opportunities to help us to stand out from our competitors.

a two-fold policy

Although our telecommunications activities have limited environmental impacts compared to those of other industrial sectors, the Group has adopted a proactive approach to managing risks and impacts, helping to preserve the environment and to maintain the trust of our stakeholders.

Begun in 1996 with the signing of the ETNO* Environmental Charter, our environmental policy is a two-fold one:

- Setting an example by reducing our environmental impact through a process aimed at constantly improving our performance;
- Developing and putting into service for society (businesses, local governments, and private individuals) innovative products and services that contribute to environmental protection, particularly the reduction of greenhouse gas emissions. These products and services include telephone conference tools, telecommuting, long-distance training, technologies allowing for remote medical or technical diagnoses, etc.

Implementing our environmental policy is based on a roadmap updated yearly, which formalizes the Group's environmental action priorities. It is broken down for each country according to local specifics. This environmental roadmap ensures compliance with international standards and with voluntary telecommunications sector initiatives. It also includes observance of the commitments made by the Group under the [UN Global Compact*](#) and Caring for Climate* and within international groups, such as the [Global e-sustainability Initiative \(GeSI\)](#), the [European Telecommunications Network Operators association \(ETNO\)](#), and the [Mobile Phone Partnership Initiative \(MPPI\)](#).

To carry out this policy we rely on a network of environmental correspondents working in the different countries where the Group is established, who in turn rely on a network of players within the different functional and operating departments.

At the central level, the Group Environmental Department sees to the coordination and management of the action plan and makes technical and methodological expertise available to the countries on major topics, such as waste, the environmental management system, energy or raising employee awareness of "green behaviour".

our 2008 achievements

In April 2008, a broad campaign for raising awareness of "green behaviour" was conducted in France to encourage employees to adopt simple steps to contribute to environmental protection. At each site with over 150 employees, a cardboard tree was exhibited summarizing "10 green tips that change everything." This initiative was accompanied by a challenge that led to 1,309 innovative ideas in favor of the environment. The communications media made (pictograms, stickers, and posters) and provided them to the other countries so they could replicate this campaign. "Green gesture" campaigns were also conducted in 2008 by our subsidiaries in Spain, Slovakia, Romania, Switzerland, Jordan, Egypt, and Côte d'Ivoire and by Orange Business Services.

Orange outside, green inside

some simple changes of habit can save energy and resources at work.
think green with the 10 environmentally friendly actions you can take



our environmental management system

In order to achieve the risk and impact reduction objectives set within the framework of our environmental policy, we are implementing an Environmental Management System (EMS*) in each country where we operate. To do this, we use the international ISO 14001* standard as a reference.

a structured process

To facilitate the deployment and evaluation of the EMS* performance, the Group has defined a frame of reference and provides methodological support to the project managers in charge of its implementation in the subsidiaries. “

Available to all on the Group intranet in French and in English, this frame of reference consists of a phased deployment methodology especially devised for conducting this kind of project, Group procedures and tools in key areas, such as Risk and Impact Analysis or Regulatory Compliance Management, guidelines and check-lists are used for a detailed audit of the EMS* or its key components.

Three monitoring indicators, consistent with the methodology for conducting projects and the essential requirements of the ISO 14001* reference enable country project managers to effectively conduct their process and to report on it regularly.

These indicators concern:

- project management,
- management of key risks and impacts and regulatory compliance,
- key procedures.

The weighted average of these three indicators provides the value of the Group “EMS* deployment rate” indicator (see below).

This frame of reference and the EMS* key indicators allow units to compare their performance on an objective basis. This fosters the sharing of experiences.

deployment on the increase

Since 2005, the deployment of the EMS* had experienced significant progress: by the end of 2008, fourteen countries, accounting for 83% of the Group’s revenues, had introduced an environmental

management process in accordance with the ISO 14001* standard.

In 2008, we prepared a status report on the results obtained, through which we acquired more detailed information on our impact and could prepare recommendations to prioritize the allocation of resources and speed up the deployment of the EMS*.



Liviu SIMION
Environmental Manager,
Orange Romania

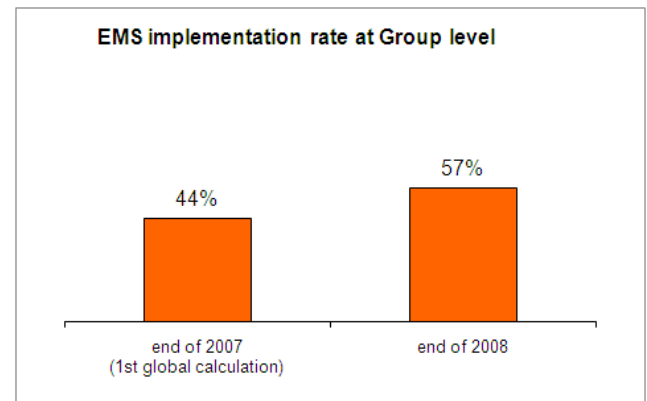
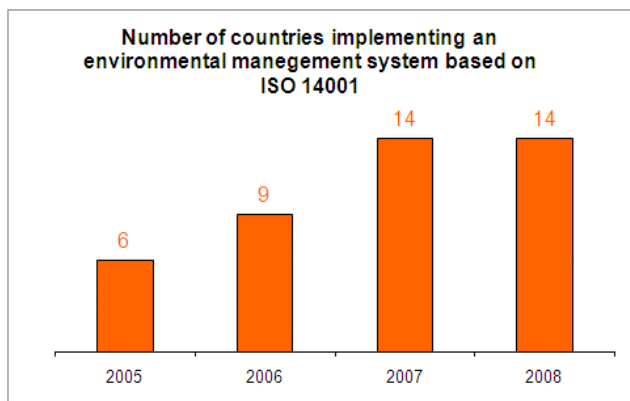
Orange Romania has been involved since late 2006 in the implementation of an environmental management system (EMS) based on the ISO 14001 standard. The project is progressing nicely, and we foresee completing it by the end of the year.

The implementation of the EMS has already provided several benefits, including:

- *improved identification of our key challenges, allowing us to allocate the necessary resources to them;*
- *improved trust by our stakeholders in the company’s ability to control its environmental impacts;*
- *awareness by our employees of energy savings and respect for the environment.*

This process has enabled us to increase the rate of recycling of products at the end of their life and, in general, to improve our environmental performance. In particular, we have reduced the visual impact of our new base stations. For example, in 2008, we built 14 new integrated sites, compared to only 8 in previous years.

We are convinced that this project, once fully completed, will also enable us to strengthen our image among our employees, as well as among our customers.”



fighting climate change

our ambitions:

- reduce our CO₂ emissions by 20% between 2006 and 2020.
- install 1,000 100% solar mobile stations in Africa by the end of 2009
- continue to replace our fleet of vehicles to achieve an average emissions rate of 130 g CO₂/km by 2020
- work with our suppliers to improve the energy efficiency of the products distributed
- offer our customers innovative solutions to reduce greenhouse gas emissions

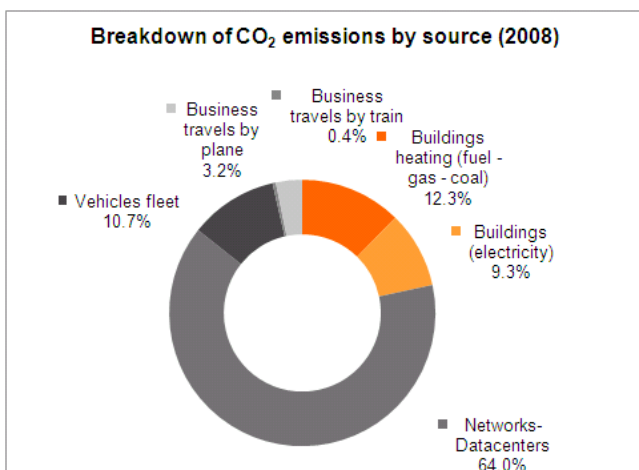
In view of the global challenges raised by climate change, and out of a desire to act as an exemplary company, the France Telecom Group has defined an ambitious energy policy to reduce the CO₂ emissions of its activities, products and services.

reducing our carbon footprint

The Group has committed itself to reducing its greenhouse gas emissions by 20% between 2006 and 2020, by means of the following:

- limiting energy consumption by networks and buildings;
- reducing CO₂ emissions related to the fleet of vehicles and job-related travel;
- increasing the percentage of renewable energy in energy supplies.

Action plans have been undertaken at each of our subsidiaries to aid the achievement of the Group objectives. In 2008, our energy consumption nevertheless continued to increase due to the growth of our business. For the coming years, the growth of data traffic due to new usages (mobile broadband, digital television, etc.) should also entail an increase in network energy consumption. Considering the time involved in replacing network equipment and deploying new technologies, we estimate that the benefit of the network-related actions undertaken will not be visible until 7 or 8 years from now.



networks and datacenters

Network energy consumption, including calculation centers or "datacenters," accounts for more than 60% of total Group consumption.

To reduce it, the Networks, Operations and Information Systems Department has prepared an Energy action plan covering all the components - the proprietary network, datacenters and also terminals. It will be deployed as of 2009 in all the Group's countries and entities.

The datacenters (calculation centers hosting computer servers) account for close to 20% of the Group's total energy consumption.

The "Green Datacenters" project aims to reduce datacenter energy consumption through four types of actions:

- improving the technical environment (choice of more efficient air conditioning and electrical supplies);
- replacing older servers with servers offering up to four times greater processing capacity. This means the number of servers can be reduced.;
- streamlining information systems, limiting the number of applications in service as much as possible and measuring the number of watts consumed per user for each of them;
- virtualizing servers, thanks to the Ecocenter program, which aims to replace physical servers with more energy-saving virtual servers.

The switch to high voltage direct current (HVDC), a solution that we recommend be standardized, could further reduce energy consumption by approximately 10%. The advantage of HVDC is the ability to transmit large amounts of power over long distances at a lower cost with fewer losses than alternating current. Furthermore, optimizing temperature settings in technical rooms saves up to 15% on electricity consumption due to air conditioning simply by allowing higher operating temperatures, while respecting the equipment maker's recommendations. This does not affect operations, or service quality. In France, Temperature settings were optimized in 126 technical rooms in 2008.

🔗 **To learn more:** see "[our networks and information systems go green](#)" online.

buildings

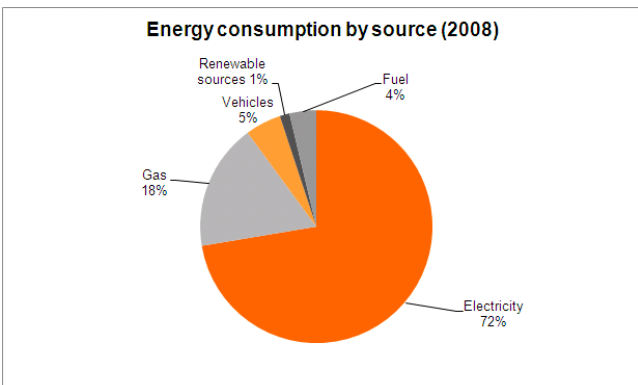
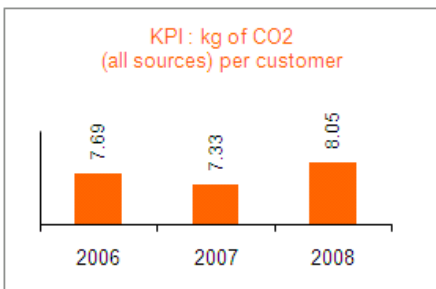
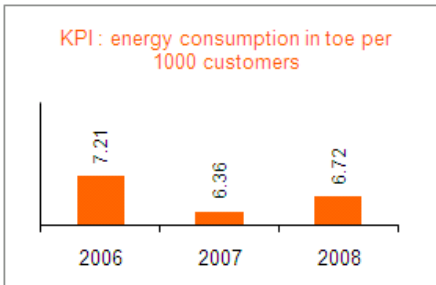
In 2008, buildings accounted for 22% of the Group's total energy consumption.

To optimize energy consumption in buildings, we are acting along two fronts:

- optimizing consumption by equipment (energy audits, preventive maintenance, energy-saving lighting, lowering temperature instructions for air conditioning systems, etc.),
- reducing building energy needs by improving insulation, the use of optimized ventilation or heat accumulators.

Among these measures, optimized ventilation is a system perfected by Orange Labs, which uses the natural temperature variations and the thermal inertia of buildings. This system can reduce energy consumption by 80% compared to traditional air conditioning, while at the same time eliminating the use of environmentally harmful refrigeration fluids. In 2007, Orange Labs was awarded the Proprietary and Economic Technologies trophy by ADEME and the magazine Industries et Technologies.

Another innovation patented by the Group, variable-speed ventilation, is a computer-controlled system that can operate without a cooling system. The benefits: no use of polluting refrigerant gas and an expected 80% decrease in electricity consumption. In 2008, the optimized ventilation system was deployed at an additional 147 sites in France (i.e. a total of 363 sites at the end of 2008) and at 1,126 sites in Spain.



our 2008 achievements:

more than 6,000 servers virtualized in France

At the end of 2008, the Ecocenters program has already helped to virtualize more than 6,000 servers in France, i.e. an energy savings of 6.5 GWh. It is in the process of being deployed at our principal European entities. In Poland, TP thus virtualized more than 600 servers in 2008. This project, which has helped to prevent the emission of 700 tons of CO₂ in 2008 in those two countries, will be extended progressively to all the countries starting in 2009.

launch of the OPERA-Net project

France Telecom is a leader of the European research program OPERA-Net (Optimising Energy Consumption of Mobile Radio Access Network) launched in July 2008 for a period of 3 years. Bringing together different sources of expertise (operators, amplifier builders, and universities), this project aims to optimize mobile network energy consumption by working simultaneously on power amplifiers, the location of base stations, or on standby mode issues in the absence of traffic. The initial deliverables for this project are expected in mid-2009.

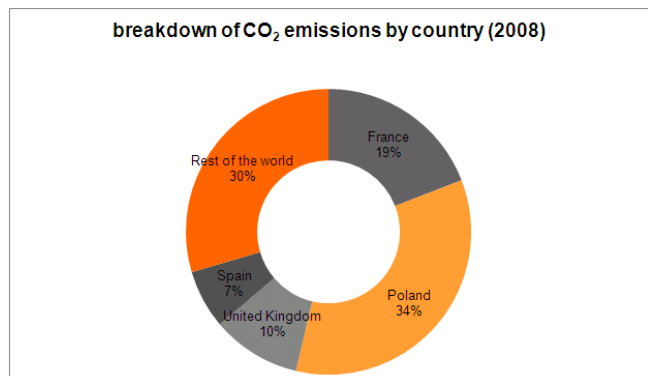
The Group is also a founder of the EE IOCG (Energy Efficiency Inter-Operator Collaboration Group) initiative, which aims to improve energy efficiency on broadband networks and to create more energy-efficient equipment.

Orange Spain honored at Energy Trophy+ competition

In Spain, our campaign to promote energy conservation won the "Best Awareness Campaign" award at the Energy Trophy+ competition. Sponsored by the European Union, the competition recognizes corporate initiatives to promote energy conservation through responsible behavior of employees at the workplace.

energy efficiency of stores

In France, a study was conducted in 2008 to identify ways to conserve energy in Orange shops as part of the partnership with the WWF. The solutions identified in the areas of lighting and air conditioning will be tested in 2009 in a number of pilot stores.



transportation

In order to reduce the CO₂ emissions of our work vehicles, we continued to step up the rate of replacement of our fleet based on three criteria:

- safety and security while in use;
- control of emissions and effluents, beyond CO₂/km emission thresholds, taking into account the vehicle recyclability rate at the end of the life cycle, particle emissions and inputs;
- reduction of overall usage costs.

The Group's catalogue of "clean vehicles" by now includes electric vehicles, hybrids and also vehicles equipped with the "Stop and Start" system and small cylinders, such as the diesel Smart car, emitting less than 100g of CO₂/km and offering combined consumption of close to 3 liters per 100 km.

Several entities have taken steps to limit individual vehicle use. Thus, since February 2008, employees at the Orange Village site in Arcueil have been able to use OTOMobile (Occupation des Transports Optimisée), a tool dedicated to occasional or regular car pooling. Corporate Travel Plans (CTP) have already been instituted in some fifteen cities in France.

Our experience in terms of telecommuting solutions (video conferences, telephone conferences, cooperative work tools) also makes it possible to cut down on business travel by our employees.

renewable energies

Several initiatives for the use of renewable energies are underway at our subsidiaries. The major program involves the Africa and Middle East and has already led to the establishment of 226 solar mobile stations in Madagascar, Niger, Guinea and Senegal. Each solar station can save nearly 13,000 liters of fuel oil per year and can prevent the emission of over 35 metric tons of CO₂ per year. The use of solar energy has also allowed isolated populations without electricity service to access the mobile network. With this innovative mobile engineering program, Orange is increasing mobile coverage in rural areas, while pursuing its objective of decreasing its CO₂ emissions by 20% by 2020. For the AMEA region, this translated into the goal of bringing the solar energy portion of its network electricity supply to 25% by 2015.

Fuel cell battery usage tests are also underway in France and in the United Kingdom.

the carbon impact of our customers

In addition to the actions carried out internally, the Group makes an effort to improve the energy efficiency of its products and makes innovative solutions available to its customers to enable them to stand up to the challenge of climate change (see p. 54).

our 2008 achievements:

more than 3,000 vehicles replaced in 2008

In France, 3,250 vehicles were replaced in 2008, which brings the fleet's average emissions level to 144g of CO₂/km. Of the 3,250 vehicles replaced, 56% were light vehicles with an average CO₂ coefficient of 122 g of CO₂/km.

Mobistar offsets its carbon emissions

Already recognized in 2007 for the innovative and ecological management of its work fleet, Mobistar Belgium has introduced a pollution offsetting system, "CO₂ Logic". With this system, it can offset any CO₂ emissions that it does manage to avoid with the purchase of carbon credits. These credits are used to finance CO₂ emission reduction programs in developing countries.

promoting eco-friendly conduct

In France, training on eco-friendly conduct has been implemented among employees. This training, tested as a pilot program at several entities, was perceived very positively by participants. They immediately signed the form that allows them to adopt safer and more environmentally friendly behaviour, allowing up to 25% in fuel savings.

Orange Switzerland encourages "green" commuting

To encourage employees to adopt more ecological means of commuting, Orange Switzerland has defined a three-pronged mobility plan:

- Monthly mobility premium granted to all employees (regardless of the method of transportation chosen;)
- Implementation of a paid contribution for parking spaces;
- Information on the different existing transportation solutions and encouragement to adopt ecological commuting methods.

80% renewable energy in the United Kingdom

As part of the action plan aimed at reducing its energy consumption in all its activities, Orange UK signed a new "green" energy contract with its chief supplier. Close to 80% of its electricity purchases come from renewable sources (biogas from waste, small hydroelectric plants and off-shore wind farms, primarily). The remaining 20% involves old contracts that will fall under the "green" contract on their expiration date.

France: Two new sites supplied by renewable energy

In France, in addition to the different solar sites already deployed, the use of renewable energy is planned in the specific case of isolated sites. In 2008, a new wind-powered antenna relay and a 100% solar-powered repeater were constructed along the East TGV line.

optimizing waste management

our ambitions:

- implement collection and treatment systems adapted to each type of waste in all our entities, taking in account regulations and local conditions
- ensure waste traceability up to final treatment
- promote treatment of electronic equipment at the end of the life cycle

The Group has defined waste management guidelines aimed, on the one hand, at managing our own waste as efficiently as possible and, on the other hand, encouraging the reuse or recycling of our customers' used telephone equipment.

managing our internal waste

Our activities generate two major categories of internal waste:

- network-related waste: cables, poles, fluorescent tubes, waste from electrical and electronic equipment (WEEE*), other hazardous and non-hazardous waste
- "tertiary" waste from our offices and call centers: computer equipment and other WEEE*, ink cartridges, paper and cardboard, other general waste.

For each type of waste – hazardous and non-hazardous -, we identify the most suitable treatment entities by favoring solutions offering the best balance between environmental effectiveness and cost control. We also ensure that the providers to which we entrust our waste observe environmental regulations.

three major management principles

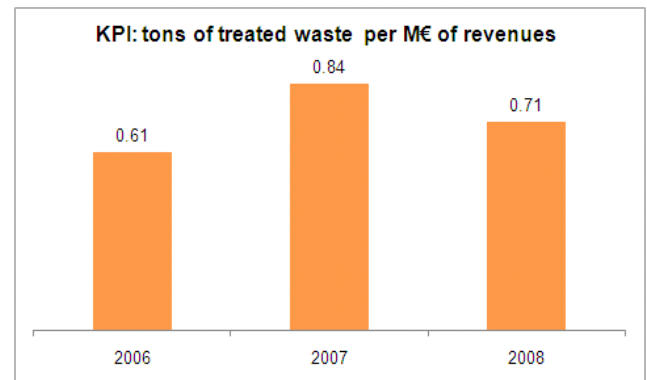
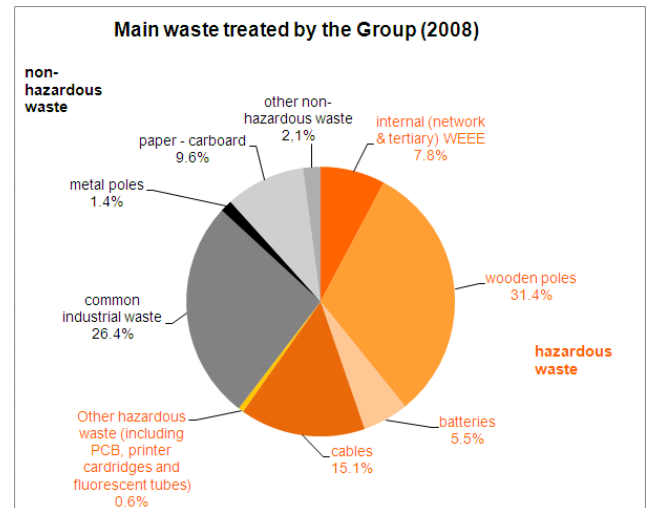
The Group's guidelines ensure the harmonization of waste management practices in the different countries where the group is present.

Three major waste management principles are applied in all the countries:

- **measuring** the amounts of waste generated by our activities, performing inventories at our entities according to the classification defined at the Group level;
- **organizing the processing** of this waste by the appropriate entities taking into account the local context;
- **ensuring the traceability** of this waste in the future, by extending the principle of channel-mapping carried out in France.

A self-assessment questionnaire was sent in 2008 to all subsidiaries to analyze the rate of deployment of the waste guidelines in each country. This rate of deployment is measured taking into account the actions taken in markets in accordance with the three-pronged roadmap. The result obtained for each country is weighted in keeping with the country's contribution to the Group's revenues for the year in

progress. At the end of 2008, the overall rate of deployment at the Group level was 61.8%.



observance of the European regulations on WEEE*

The France Telecom group is subject to the European regulations on Waste Electrical and Electronic Equipment (WEEE) both as a “producer,” and as a distributor.

As a producer, each European subsidiary subject to the directive has joined an approved ecological organization, or implemented an individual system.

| Entities | Work-related WEEE | Household WEEE |
|---|---|--|
| Belgium | Member of Recupel | |
| Spain | Membership in the Tragamóvil system | |
| France | Individual system | Membership in the Eco Systèmes ecological organization |
| Poland | Contract entered into with Biosystem Elektrorecycling | |
| Slovakia | Individual systems implemented | |
| Switzerland (outside the scope of the European directive) | Member of the SWICO association | |
| Romania | Individual systems implemented | |
| United Kingdom | Individual system | Member of Regeneris |
| Orange Business Service | Individual system | Not subject |

As a distributor, the entities concerned have implemented adequate customer WEEE take-back mechanisms (see next page).

our 2008 achievements

Jordan: an exemplary partnership for the recycling of used batteries

As part of its environmental protection policy, Jordan Telecom – Orange signed an agreement with an industrial firm approved for recycling the electrolytes from spent batteries used at operating sites. At all of its facilities, Jordan Telecom in fact uses electrolyte batteries as an alternate energy source in case of electricity outages. This provider approved for battery recycling by the Jordanian Ministry of the Environment will process these fluids ensuring maximum environmental protection.

Egypt: a new life for employee computers

In 2008, the Mobinil computer staff launched an initial campaign for collecting used computers from employees. The computers collected are refurbished and offered to a charity organization working for sick children: “Friends of Children with Cancer”.

The benefits of this action are two-fold: Mobinil thus helps to prolong the usage of electronic equipment, while fighting against the digital divide.

recycling ink cartridges in Romania

Orange Romania implemented a mechanism in 2008 for collecting used ink cartridges at all of its buildings and sales outlets. The cartridges are collected by a provider that sees to it that they are recycled in an environmentally responsible manner.. In 2008, 2.6 tons of cartridges were collected.

traceability: the UK example

In 2008, Orange United Kingdom undertook a project aimed at bolstering the traceability of the different waste channels for the waste generated by its activities (network waste, tertiary waste, and store waste). For this, the channels used by providers are analyzed and documented, in order to ensure observance of the applicable regulations.

the sorting of office waste

In France, 70% of the sites with over 100 people have implemented selective sorting of office paper. The “Green Gestures” campaign serves to remind everyone of the importance of selective sorting of office waste (paper, printer cartridges, batteries, etc.).

treating customer equipment

The growth in information and communication technology usage is accompanied by an increase in the volume of electronic waste. The United Nations Environment Program thus estimates that between 20 and 50 million metric tons of electronic waste is produced worldwide each year, with an increase of three to five per cent per year.

encouraging reuse or recycling

In an increasing number of countries, the telephone equipment of our customers and of our employees, as well as the accessories (specifically chargers) are collected, then sent through the appropriate processing channels. Handsets in operating condition are refurbished and reused. Equipment out of order is dismantled and the different components are recycled in the channels appropriate to each material.

In 2008, 1,642 metric tons of electronic waste were thus collected from customers.

Depending on the country, the amounts collected varied, in keeping specifically with:

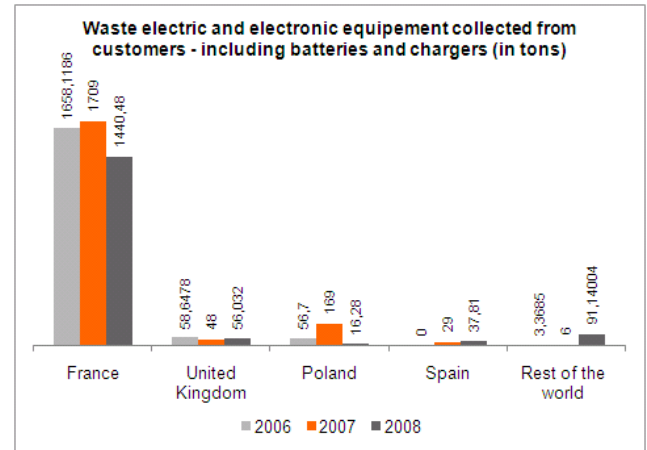
- the age of take back systems in place for electric and electronic equipment (sometimes as in the United Kingdom, prior to the effective date of the European regulations on WEEE*, or more recently, as in Romania, since 2007);
- the level of customer awareness of the possibility of returning mobile phones.

Collection and processing systems operate differently depending on the country. Thus, in the United Kingdom, customers may enjoy rebates on new equipment, or make a donation to a charitable association. In France, so far all revenues issued from the resale of reusable mobile phones have been distributed to UNICEF and to the WWF. In Spain, since the early 2000's, the collection of used mobile phones and consumer awareness are managed by a foundation grouping together industry players. The Group thus adapts its actions according to the market specificities in which it operates to contribute most effectively to the control of this environmental impact.

reducing waste at the source

We are also taking steps to reduce the amount of waste "at the source" by working, for example, on eco-friendly product design or on replacing rechargeable batteries with virtual recharging systems. Thus, thanks to the eco-friendly design work performed on the new Livebox 1.2, the weight and packaging volume have been reduced by close to 30% (see p. 52).

The Group is also working with other operators within the GSMA to devise a common universal charger solution for mobile phones. This charger, which customers could keep when changing a mobile handset, would not only help to reduce the amount of electronic waste, it would also limit the size of packages, since new phones would be delivered without a charger (see p.53).



our 2008 achievements

a second life for Livebox 1.1

In 2008, Livebox 1.1 reached the end of its usage in France and the United Kingdom, since these markets had migrated to new products. Rather than destroy them, we made the choice to encourage their reuse on markets where this model was still active. With the partner chosen at the time when the European center for multimedia product reprocessing was set up, we were able to find technical solutions for handset reconfiguration to allow the transfer of the Livebox 1.1 returned in France or the United Kingdom to our subsidiaries in Switzerland, Belgium and soon in Spain and Poland. With this system, we can reduce our purchases, save on resources and cut down on the amount of equipment at the end of life all at the same time.

collection of work-related WEEE*

In connection with the Directive on Waste Electrical and Electronic Equipment (WEEE*), Orange Business Services collaborated in 2008 with its electric and electronic equipment suppliers to identify the best WEEE management channels and implement a collection system among its customers. In 2008, worldwide, 67% of the routers uninstalled were thus collected and recycled. This cooperation is expected to be strengthened in 2009, in order to further improve performance internationally.

rationalizing our paper consumption

our ambitions:

- reduce internal paper consumption by making personnel aware and through simple steps such as setting printers for double-sided printing
- develop electronic billing to progressively reach 40% in all countries
- give preference to sustainable production procedures by developing purchases of recycled or FSC-certified paper

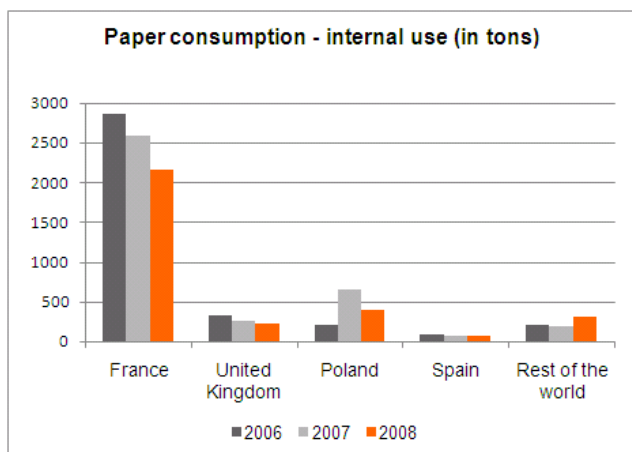
The world's consumption of pulp has doubled over the course of the last 50 years and could increase 40% between now and 2015. Of the commercially operated forests in the world (some of which are based on deforestation)- 42% serves for the manufacture of paper. Now forests, in absorbing CO₂, play an important role in limiting the greenhouse effect.

As with any tertiary activity, the France Telecom Group consumes significant amounts of paper for its internal use, its external communications media, customer billing, etc.

In order to preserve forests and limit the impact associated with the production, use and disposal of paper (consumption of energy, water and chemical products, polluting discharges, waste production), the Group has defined a program aimed at reducing its consumption and encouraging sustainable production procedures for usage that cannot be avoided.

simple steps to consume less

At our different subsidiaries, employees are encouraged to take simple steps helping to limit paper consumption, such as encouraging reading on the screen, filing on the computer or on a CD, or using the double-sided printing setting on printers. Thus, the Green Gestures campaign organized in 2008 in France, Spain, Poland and Slovakia included a specific "I print better and less" flier, providing 10 practical tips for reducing paper consumption. Between 2007 and 2008, the Group's internal paper consumption decreased by 15%.



I print less and better

- I use all means that encourage reading on the screen in order not to systematically print my documents
- I scan my documents and I give preference to sending them by e-mail
- at meetings, I give preference to projecting on a screen and, if this is not possible, I provide one copy of the presentation for every two people in order to limit printouts
- I avoid printing out my documents to file them : I store them on my computer or on a CD
- I choose the pages to print and I systematically make an "outline before printing"
- On Excel, I choose the part to be printed and adjust the page layout
- I set up 2 slides per sheet on PowerPoint or 2 pages per sheet on Word
- I do not print documents on a shaded or black background
- I make a black and white printout, rather than a color one
- I set my printer on double-sided printing

our 2008 achievements

a 9% reduction in office paper in France

In France, the Green Gestures campaign organized in 2008 helped to reduce the consumption of office paper by 9% between 2007 and 2008

Spain: reducing the size of notices

As part of its environmental policy, Orange Spain has taken several measures aimed at reducing its paper consumption and limiting the amount of packaging waste. Thus, notices distributed in packages are reduced to a minimum and printed only in Spanish. Complete notices in several languages are provided on a CD. These measures have made it possible to reduce paper consumption for notices by 8% between 2007 and 2008.



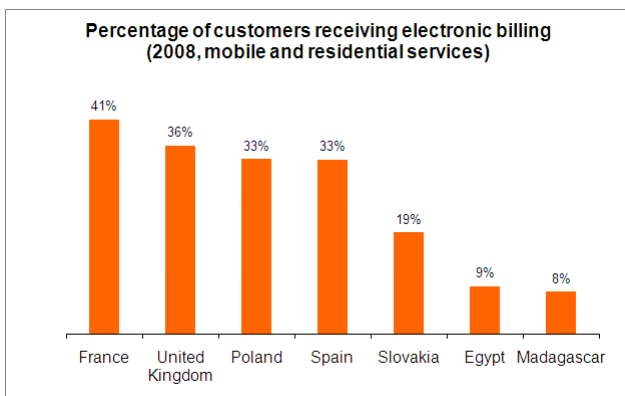
promoting paperless exchanges

Electronic billing helps to reduce the Group's ecological footprint. It reduces the consumption of paper and thus of wood and water, while avoiding the emissions associated with mail delivery.

To promote this ecological solution among our residential and business customers, information campaigns have been conducted regularly at our principal entities.

In France, we continued to encourage the use of the paperless invoice introduced in 2005 with the support of the WWF. At the end of 2008, according to our estimates, 41% of eligible (fixed and mobile) residential customers signed up for electronic billing, i.e. 3.5 million users. This helped to save 455 metric tons of paper in 2008. Since the fall of 2008, stores have also been offering residential customers the chance to sign an electronic contract.

Orange Business Services has also continued to provide Electronic Billing to its business customers. During the last 12 months, this service prevented the mailing of 27,500,000 pages, saving over 67 metric tons of paper.



favouring sustainable production schemes

In addition to our efforts to reduce our paper consumption, we are encouraging our subsidiaries to give preference to purchases of paper that is recycled or certified according to FSC ([Forest Stewardship Council](#)) or PEFC ([Program for the Endorsement of Forest Certification schemes](#)) labels ensuring sustainable management of forests.

In France, at the end of 2008, 91% of the commercial documentation and 13% of internal printouts were made on recycled, FSC or PEFC paper.

In the United Kingdom, over 50% of paper purposes involve recycled paper.



Frédéric Lallemand
Information Systems Manager at Metarom

We wish to reduce our ecological footprint. Offering paperless information exchanges thanks to Business Everywhere has enabled us to eliminate the sending of faxes by our sales staff. This is an estimated savings of over 50,000 pages a year ! If we chose Orange Business Services, it was also due to its commitment to sustainability and to its ability to offer us 'green' solutions."

faktúry s prehľadom
využite výhody Elektronickej faktúry

Elektronická faktúra

Ak chcete šetriť svoj čas aj životné prostredie, aktivujte si Elektronickú faktúru a získajte tak pohodlnejší, bezpečný a neobmedzený prístup k svojim faktúram on-line.

Zákaznícka linka 905:
0905 905 905

Electronic billing awareness campaign conducted by Orange Slovakia.

preserving landscapes and biodiversity

our ambitions:

- limit the visual impact of our technical facilities by furthering the integration of relay antennas with the landscape and the burial of fixed lines
- preserve biodiversity by introducing measures to protect fauna and flora

Aware of the visual impact of our infrastructure, we have been making efforts for several years, working with local stakeholders to integrate our fixed lines and our relay antennas with the local architecture or blend them into the landscape. We also apply landscape integration principles to new sites and to the restructuring of existing sites.

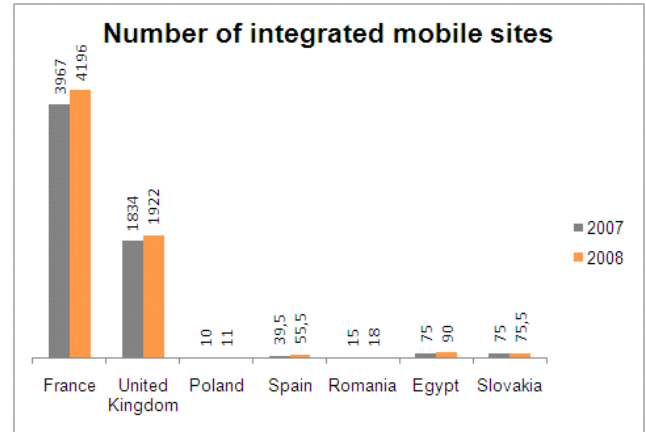
more discreet antennas

In France, for about a decade, we have turned to landscape architects to make our antennas as discreet as possible. Since 2003, we have participated in the working group of the French Association of Mobile Operators, the [AFOM](#) (Association Française des Opérateurs Mobiles) on the best practices for landscape integration of relay antennas. The objective is for new sites and refit sites to be 100% integrated.

Besides solutions such as sharing a single site with other operators and installing equipment on existing sites (water towers, buildings and high points), we make an effort to implement innovative technical solutions and specific developments designed to make our relay antennas less visible.



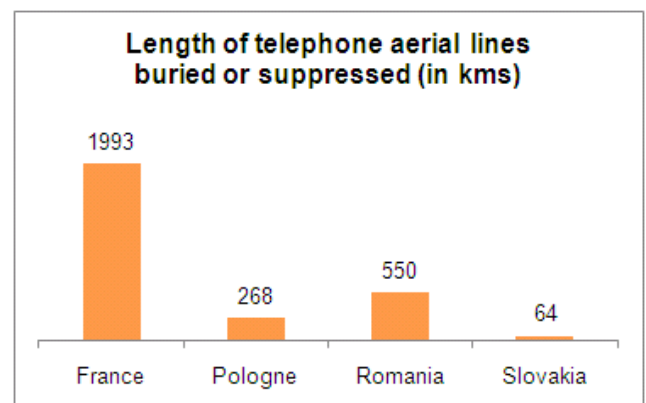
Example of landscape integration of antennas on a town hall roof in the municipality of Le Chesnay (Yvelines, France).



In the field, our staff works in cooperation with State services, mayor's offices and neighbourhood associations. All these players meet every two years at the antennas integration workshop. The objective of the latter, organized by one of our network direction units, is to present the range of available solutions in terms of landscape integration. To stimulate mobile network creativity in favor of improved landscape integration, we organize a challenge every two years entitled "portrait of a relay antenna".

burying fixed lines

In France, burying our fixed-line infrastructure continues in partnership with the French mayors' association ([Association des Maires de France](#)) and the National Federation of Local Governments and Authorities ([Fédération nationale des collectivités concédantes et régies](#)). Since 2002, more than 11,000 km of lines have been buried in France and more than 200,000 poles removed. Fixed-line burial programs are also being carried out in Poland, Romania and Slovakia.



preserving wildlife

Hollow metal posts are a hazard for a considerable number of species of birds and small mammals. So-called carnivorous birds (titmice, nuthatches, woodpeckers, and owls) and some small mammals (squirrels and dormice) which generally nest in cavities, can enter a post at the top and fall to the bottom of the tube, where they are trapped.

France Telecom and the League for the Protection of Birds (Ligue pour la Protection des Oiseaux – LPO) entered into a partnership several years ago, based on regional agreements. The purpose of the partnership is to equip the top of our metal posts with seals to protect birds. To date nine regional agreements have been signed with the LPO in Alsace, Auvergne, Aquitaine, Brittany, Champagne-Ardenne- Lorraine, Midi-Pyrénées, Nord-Pas-de-Calais, Pays de la Loire and Centre (department of Loiret).

Three types of birds are especially affected by the phenomenon: titmice, woodpeckers, and pygmy owls. The LPO is very helpful to us since it informs us of the places where there are greater numbers of these birds. Thus, we attempt to intervene first on poles in these areas. We pay special attention to places where pygmy owls nest, since this predator is an endangered species. In 2008, we installed more than 280,000 seals on metal poles as part of this program.



Seals for metal poles



Placing seals

an exemplary biodiversity preservation project in Romania

The countryside in south-eastern Transylvania is home to very rich flora and fauna, with many species in danger of extinction internationally. Since 2005, Orange Romania has provided financial support to the [ADEPT](#) Foundation to preserve biodiversity in an area of 100,000 hectares. The abandonment of pastures, irrational forestry management or the intensification of agriculture are just some of the threats to biodiversity. Preservation can be done only with the support of local communities. The project specifically helps farmers maintain traditional agricultural practices, while ensuring additional revenues (agricultural tourism and crafts). It has led to the classification of a 95,000 hectare area as a Natura 2000 zone, which makes it the site of greatest ecological interest in Romania. In 2008, several projects were conducted to make local populations aware of the challenges of preserving the environment and biodiversity. These included publications for schools and the general public, the production of a film on the project, projects at the schools, etc. There are marked walking paths and travel maps to help learn about this special environment. As part of a series of agro-environmental measures, 150 farmers received subsidies from the EU totaling 180,000 euros. They were also given an opportunity to take training courses to improve their production and marketing techniques. Thanks to this program, local products are now included at many gastronomy fairs, such as the Turin Taste Fair or the Slow Food fair in London, where the ADEPT Foundation was the only foreign guest.



innovating for environment

our ambitions:

- strengthen awareness of environmental challenges in the design of products and services
- develop eco-friendly design procedures in partnership with builders to improve the environmental performance of the products distributed by Orange throughout their life cycle
- assist our customers in meeting environmental challenges

improving the environmental performance of our products and services

Although we do not manufacture products directly, we place great importance on the environmental performance of the products and services distributed in the Orange network.

Several procedures are in progress to assess the environmental performance of our products and services, with preference given to the best performing ones.

criteria included in offerings in the design stage

Since 2004, we developed a methodology for taking into account the economic, social and environmental impacts of our products and services as early as the design stage of R & D projects.

Based on the use of a method for assessing the impact of our solutions, this procedure involves the Group's different departments, especially the strategic marketing department, to include sustainability requirements within the project launch process.

assessing environmental impact throughout of a product's life cycle

In order to identify the areas needing improvement in terms of the environmental performance of products, we have launched a program aimed at developing life cycle analysis procedures (LCA), a methodology used to assess the environmental impact of a product throughout its life cycle (manufacture, distribution, usage and end of life).

These LCA, which are complex and lengthy, are very useful for inferring general product design rules and setting priority guidelines. Thus, the LCA performed in 2008 by the ADEME ([Agence de l'Environnement et de la Maîtrise de l'Energie](#)) on a mobile phone revealed that most of the consumption came from the manufacturing stage.

On the other hand, the LCA performed on Livebox 1.2 has already helped to focus efforts on reducing the impact of the usage stage. This included low-consumption modes and the design of multifunctional

handsets to reduce energy consumption at the usage stage. In 2008, for instance, our researchers completed a Livebox prototype automatically disabling unused interfaces (Ethernet, Wi-Fi, etc.).

developing eco-friendly product design

We are working closely with our suppliers to develop eco-friendly design procedures for the products that we distribute.

Thus, a strategic partnership with Sagem Communications was signed in late 2007 to design products with an appreciably reduced impact on the environment. This partnership concerns all the Livebox, TV decoders and fixed-line telephones supplied by Sagem Communications.

Marketed since 2008 in France and the United Kingdom, the Livebox 1.2 or "mini" thus boasts eco-friendly design work conducted in partnership with Sagem Communications. Compared to the 1.1 version, the Livebox 1.2 has a 20% smaller environmental footprint:

- A 35% decrease in size, which translates into savings on materials;
- A 30% decrease in the size of the packaging box;
- Use of a single type of plastic, making dismantling easier at the end of its life cycle and facilitating recycling of the plastic;
- A 25% decrease in energy consumption compared to version 1.1.

our 2008 achievements

an eco-friendly design guide for technical center researchers

In order to strengthen awareness of product environmental performance in research and development projects, an eco-friendly design guide was issued in 2008 and distributed to technical center project managers. Some thirty people also took a training module on eco-friendly design.

analysis of the Livebox 1.2 life cycle

In 2008, our researchers performed a detailed LCA on the Livebox 1.2, and found that 75% of the energy consumption came from the usage stage. Another LCA was launched in late 2008 on the Video Conference remote attendance service. Its results are expected during 2009.

helping our customers meet environmental challenges

According to a recent study¹ carried out by the Climate Group in partnership with GeSI*, the telecommunications operators are responsible for only 0.7% of world CO₂ emissions. But the use of ICT could help reduce CO₂ emissions by 15% by 2020, which is tantamount to five times the sector's carbon footprint.

ecological solutions

Orange Business Services provides customers with the following work tools to help them reduce their own greenhouse gas emissions:

- Remote work tools that limit travel, telephone or video conferences, cooperative Internet-based work tools, etc.).
- Machine-to-machine (M2M*) applications, such as Fleet Advanced, enabling our customers to improve vehicle fleet management and reduce CO₂ emissions, thanks to better route mapping and to remote maintenance (decrease in distances covered, better tuned and thus less polluting engines);
- Paperless solutions, such as electronic billing, Web EDI, Contact Everyone ;
- Sharing of computer servers and virtual work stations, so companies can reduce their energy consumption and their operating costs;
- Point Visio Public lets people contact administrative services without travelling; in 2008, 800 virtual meetings were held using this solution..

🔗 **To learn more:** visit our website www.orange-business.com.

Plans for a universal charger

The Group is also participating in the work being done in the [GSMA](#) to design a common universal charger for mobile telephones. By 2012, the purpose of the project is to design and market a universal USB port charger. This would increase energy efficiency and meet the goal of reducing energy consumption on standby mode by 50%. This solution would also have ramifications throughout the industry by eliminating up to 51,000 metric tons of electronic waste associated with the accumulation of different chargers. At the same time the project would lead to improvements in customer service.

our 2008 achievements:

Orange CO₂ savings tool: a calculator for customers

In 2008, Orange Business Services completed the "Orange CO₂ savings tool", an online calculator allowing business or residential customers to evaluate the CO₂ emissions that could be avoided thanks to the use of video conferencing or telecommuting. This tool has been available free of charge since June 2008 on the Orange Business Services website.

more than 1.2 million users of Business Everywhere worldwide

In 2008, the number of users of our Business Everywhere solution, which allows mobile access to the workplace, regardless of the network available, went from 850,000 to over 1.2 million.

launch of a remote metering system for remote monitoring of gas consumption

On October 9, 2008, Primagaz officially launched the first French remote metering system for remote monitoring of consumption by its residential customers who are supplied with network propane gas. It also monitors more than one thousand of its industrial customers. With this new service, designed in partnership with Orange Business Services and the Portuguese firm ISA, Primagaz will have precise data on its customers' consumption without having to travel. This will help to prevent supply interruptions while reducing travel-related CO₂ emissions.



Massih Niazi, Primagaz
Operations Manager



This service of remote metering of the level of gas in the tanks and remote gathering of meter indices has been awaited for many years by all of the staff at Primagaz. We are going to improve our gas distribution, customer billing and inventory management procedures – under economically attractive conditions – by using a comprehensive, reliable and time-tested solution. As a result, this will lead to improved customer satisfaction. Beyond the improvement in the service provided and the financial gain, the decrease in the number of kilometers covered, estimated at 80,000 for 2009, will help reduce our annual CO₂ emissions on the order of 48 metric tons."

¹ [SMART 2020: Enabling the Low Carbon Economy in the Information Age](#) –July 2008

increasing customer awareness

The only way we can reduce the environmental impact associated with the use of our products and services is with the involvement of our customers. That is why we have undertaken several initiatives aimed at making our customers aware of what is at stake in terms of environmental protection. For example, we encourage them to return their electronic equipment at the end of its life cycle (see p. 46) or to adopt electronic billing (see p. 48). In France, the strategic partnership signed between Orange and the WWF includes a specific component focusing on public awareness of this issue. In 2009, we plan to bolster our customers' awareness of environmental challenges, for example, by encouraging them to keep their mobile phones longer.



Jérôme Dupuis
Strategic Partnership Unit
Manager, WWF France

The WWF is one of the largest environmental protection organizations in the world. What sets us apart is our willingness to work with all contributors of solutions: the general public, local governments, public authorities, businesses, etc. It is in this spirit that in March 2008 we signed a strategic partnership with Orange in France. In 2008, our efforts led first to the handset environmental display mechanism. As I am fond of saying, great successes come from bold decisions. For a distributor such as Orange, which does not manufacture products directly, this approach did not seem to fit at first. However, we're very glad we made the decision. This solution is highly relevant from an environmental point of view because it displays multiple criteria covering the entire product life cycle. This solution meets a definite need among consumers, who wish to have clear information on the environmental impact of the products they buy. It meets one of the commitments made by the Grenelle de l'Environnement, which is to steer consumers toward products with a lower impact on the environment. We have also teamed up with Orange on other projects such as eco-friendly store renovations or making the public aware of usage precautions associated with electromagnetic waves. We hope they will be carried out with the same energy."*

our 2008 achievements

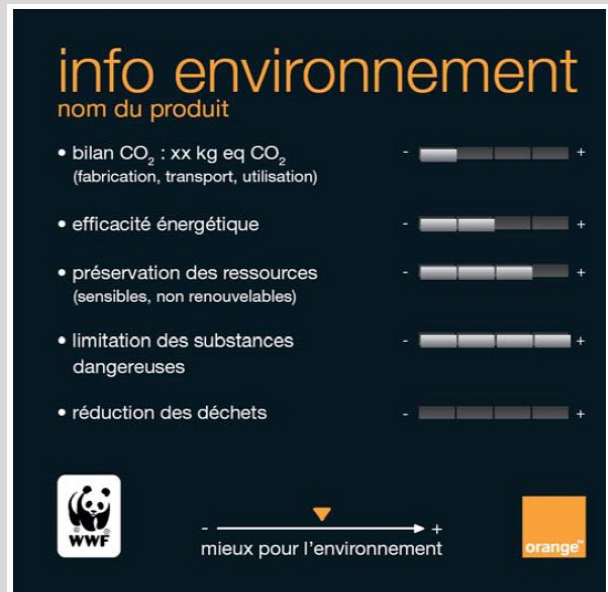
France: ecological product labeling

As part of the partnership signed in March 2008, Orange and WWF-France have started a system for assessing products in terms of environmental performance. Since October 2008, consumers have been seeing ecological labels on some fixed and mobile phones throughout the Orange distribution channel. Each product is assessed according to five key indicators representative of their environmental impact throughout their life cycle:

- CO₂ assessment
- Energy efficiency
- Preservation of natural resources
- Limiting hazardous substances
- Waste reduction

Each product's environmental performance is assessed compared to the performance of products in its class; for example, one mobile phone is compared to another mobile phone. Product ecological profiles are available at www.orange.fr and will soon be displayed at stores.

This ecological display, which is a worldwide first in the telecommunications sector, will be extended progressively in 2009 to all the products marketed by Orange in France.



To find out more: see the [press release](#) at www.orange.com.

2009 roadmap

| objectives | deadline |
|---|--|
| environmental management | |
| Continue SME* deployment in compliance with ISO 14001* throughout the 14 countries involved in the initiative (France, the United Kingdom, Poland, Spain, as well as Belgium, Romania, Slovakia, Egypt, Jordan, Côte d'Ivoire, Senegal, Madagascar, Cameroon, and Mauritius) accounting for 83% of the Group's 2008 revenue. This is assessed using three indicators: <ul style="list-style-type: none"> - Managing the main environmental impacts and risks in 65% of the entities involved - Making employees aware of the environmental impacts connected with their activities: organizing a "green behaviour" campaign in 75% of the entities involved - Evaluating the implementation and performance of the SME* during managerial reviews in 50% of the entities involved | 2009-2011 2009 2009 2009 |
| climate change | |
| Global objective: Reduce our total greenhouse gas emissions by 20% between 2006 and 2020 | |
| Continue activities aimed at improving energy efficiency in buildings, in the network and in transportation <ul style="list-style-type: none"> - Continue deployment of the server virtualization program to save 20 GWh in 2009 | 2009-2020 2009 |
| Continue upgrading the vehicle fleet to achieve an average emission level of 130 g/km in 2020 <ul style="list-style-type: none"> - Upgrade 4,000 vehicles in 2009 | 2006-2020 2009 |
| Deploy solutions using renewable energy and increase their share of overall energy consumption <ul style="list-style-type: none"> - Acquire 50,000 metric tons of CO₂ equivalent in 2009 in renewable energies or green certificates | 2006-2020 2009 |
| paper consumption | |
| Global objective: preserve forests and reduce amounts of waste connected with office paper use | |
| Progressively reach electronic billing of over 40% at all European entities between by the end of 2012 | 2012 |
| Develop the use of recycled or FSC certified paper (or equivalent labels) | 2009 |
| Reduce internal paper consumption by making employees aware of the need to save paper and by configuring printers for double-sided printing | 2009 |
| waste management | |
| Global objective: implement the action plans per country for waste management for the 4 major countries by the end of 2009 and progressively in the others between now and 2011 in accordance with the following three criteria: | |
| Finalize inventories | 2009-2011 |
| Continue to structure waste treatment by signing contracts with local partners and formalizing the entire processes | 2009-2011 |
| Tracing waste sent to treatment channels by making a map outlining the entire process | 2009-2011 |
| Continue the collection and recycling of our business customers' routers in France and develop this internationally to reach 70% in 2009, 75% in 2010, and 80% in 2011 | 2009-2011 |
| environmental performance of products and services | |
| Develop eco-design procedures in partnership with our suppliers for all our products and services | 2009-2010 |
| Progressively generalize the life-cycle analysis procedures for products and services | 2009-2010 |
| solutions furthering sustainability | |
| Develop external communications on the benefits of our solutions in terms of sustainability both in France as well as internationally | 2009 |
| customer awareness | |
| Provide eco-labelling for all the mobile handsets most often sold, for all of the European entities <ul style="list-style-type: none"> - In France, generalize the eco-labelling for all products distributed | 2010 2009 |
| Implement communications activities and devices to encourage our customers: <ul style="list-style-type: none"> - To keep their mobile telephones longer - To recycle their mobile telephones | 2009 |