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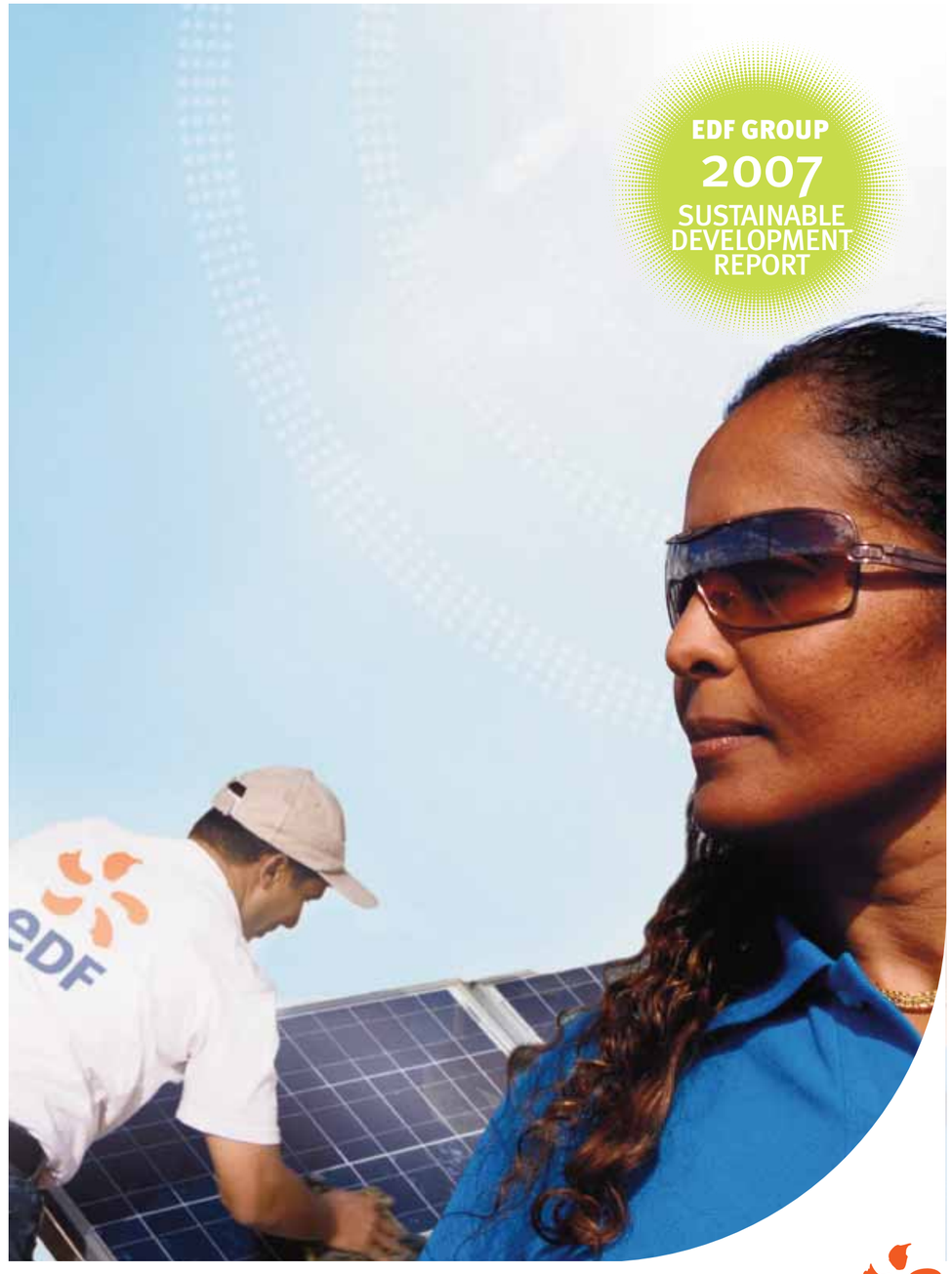
EDF GROUP - 2007 SUSTAINABLE DEVELOPMENT REPORT

EDF GROUP 2007 SUSTAINABLE DEVELOPMENT REPORT



EUROPEAN LEADER FOR TOMORROW'S ENERGIES

contents

DR

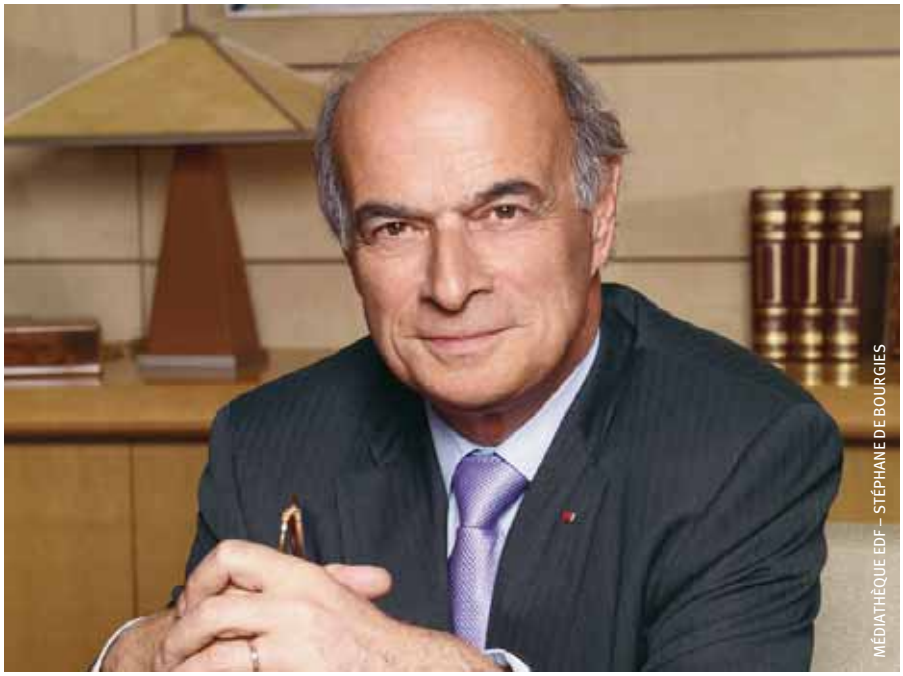
Group profile

The EDF Group

is a leading player in the European energy industry, active in all areas of the electricity value chain, from generation to trading and network management. The leader in the French electricity market, the Group also has solid positions in the United Kingdom, Germany and Italy, with a portfolio of 38.5 million European customers and a generation fleet which is unique in the world. It intends to play a major role in the global revival of nuclear and is increasingly active in the gas chain. The Group has a sound business model, evenly balanced between regulated and deregulated activities. Given its R&D capability, its track record and expertise in nuclear, fossil-fired and hydro generation and in renewable energies, together with its energy eco-efficiency offers, EDF is well placed to deliver competitive solutions to reconcile sustainable economic growth and climate preservation.

Group actions that illustrate implementation of Global Compact principles are indicated throughout the rest of the report by the Compact logo. Further information on www.unglobalcompact.org

CHAIRMAN'S STATEMENT
Pierre GADONNEIX


MÉDIATHÈQUE EDF – STÉPHANE DE BOURGIES

These are truly times of "planetary emergency", to cite former Vice-President and Nobel Peace Prize laureate Al Gore. Today, it is universally recognized that the growth model of the past is no longer sustainable: as we know, it is disrupting the ecosystem by provoking climate change. Nor is curbing growth an option, as it would increase inequality. We need to move towards responsible growth, reconciling economic development, climate preservation and the reduction of global inequalities.

WE CAN RISE TO THIS UNPRECEDENTED CHALLENGE.

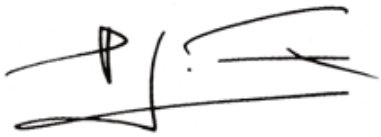
Energy investment is being ramped up across the globe, creating a historic opportunity to make progress in reducing CO_2 emissions. We already have mature, competitive technologies both on the demand side, including insulation, solar water heaters and heat pumps, and on the supply side, with hydro, nuclear and wind power.

THE CAPACITIES ARE AVAILABLE. WHAT IS REQUIRED IS THE DETERMINATION TO FOSTER INNOVATIVE POLICIES.

Power industries and markets require appropriate regulatory frameworks and energy policies. These should be forged on the basis of exchanges that make all stakeholders – citizens, industrial groups and NGOs – aware of the role they can play. A good example of this kind of productive dialogue was the French national conference on the environment *(Grenelle de l'environnement)*.
Policy frameworks must provide consumers with standards and incentives to guide their choices, and encourage investment in lower-carbon generation. Safety measures should be clearly set out. Appropriate policies can also help foster public acceptance of necessary infrastructures. They can also make it possible to promote research on the technologies that will be mature in the second half of this century. Our role as industrial groups is to provide information to policymakers regarding the choices that are available and realistic.

IN SHORT, WE NEED COOPERATION ON ALL LEVELS TO MOVE FORWARD.

This means cooperation between public and private actors, and between developed and developing countries, to sow new seeds of solidarity. Global cooperation on climate change must include developing countries.
To take this a step further we must ensure cooperation between the energy, construction and automobile industries, and thus stand a better chance of designing a brighter ecologically friendly future for housing and transport. Naturally, all stakeholders, including local populations, elected officials and NGOs, will need to be involved.
Dr. Pachauri, Chairman of the IPCC, the co-laureate of the 2007 Nobel Peace Price, suggested that we need to "reinvent the energy future". This means changing our approach, moving outside our comfort zone and accepting the discomfort that goes with change. It means forging ties with new players, working with them, listening to them, and respecting them. Only then can we learn to establish common ground and share a common language.



EXPERT PERSPECTIVE
Rajendra K. Pachauri

THE YEAR 2007 WILL PERHAPS BE REMEMBERED AS THE PERIOD WHEN THE WORLD FINALLY WOKE UP TO THE GROWING THREAT OF CLIMATE CHANGE.

First, the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC) was finalized, culminating in the approval and release of its Synthesis Report in November 2007. This was the result of more than five years of intense work from thousands of scientists associated with the IPCC, which created a profound increase in global awareness on the subject. A few weeks later, the Norwegian Nobel Committee recognized the issue of climate change as a major threat to global peace by awarding the IPCC and Al Gore the Peace Nobel Prize for 2007. In December 2007, world leaders agreed at the Bali Conference to reach agreement on a plan of action to combat climate change by the end of 2009. Last but not least, 2007 witnessed and confirmed the reality of climate change, as being one of the warmest years on record.

One major finding of the AR4 is that warming of the climate system is now unequivocal and the human influence on the Earth's climate is now very well established. Projections of temperature increase in the 21st century have been made on the basis of assessed scenarios of the future. At the lower end of these scenarios, the best estimate of temperature increase by the end of the 21st century is put forward as 1.8°C and at the upper end of the scenarios the best estimate is 4°C. These projections are based on the assumption of no specific action towards mitigation of emissions of greenhouse gases (GHGs).

IN ORDER TO MEET THE CHALLENGE POSED BY CLIMATE CHANGE, THE WORLD WILL HAVE TO CREATE AND ADOPT INNOVATIVE SOLUTIONS,

but to begin this process all the technologies required are either currently available or close to being commercialized. Since the energy sector accounts for 26% of global GHG emissions, mitigation measures in energy production and distribution are particularly important. Electricity providers have a special responsibility, starting with encouraging users to save energy. The investment decisions that are taken today in terms of energy infrastructure will determine our GHG emissions for decades to come. EDF, as one of the world's largest utilities, can assume a leadership role in meeting the global imperative of a move towards a low-carbon future. This will require wise choices and a long-term vision in adopting a portfolio of low emission technologies (from nuclear to renewable energies), as well as employing instruments by which consumers can be engaged in reducing their energy consumption.

I had the pleasure to be invited in January 2008 by President Pierre Gadonneix to deliver an address to all the managers and directors of the EDF Group, on the occasion of the first Sustainable Development day he organized. I also invited and received President Pierre Gadonneix in February as a keynote speaker among several heads of state and government at the Delhi Sustainable Development Summit 2008 that my institution, TERI, organizes annually. These events represent the first steps in the collaboration agreement we have signed between TERI and EDF for working jointly to promote global sustainable development.

EDF has positioned itself as the "After Oil Company", thus showing not only its ability to respond to one of the world's most pressing challenges of our time, but also demonstrating the business opportunities that this challenge can offer.

MÉDIATHÈQUE EDF – WILLIAM BEAUCARDET

"Electricity providers have a special responsibility, starting with encouraging users to save energy"

—

EDF MUST PURSUE THAT ROUTE AND EXPAND ITS INFLUENCE AS A VISIONARY, RESPONSIBLE CORPORATE PLAYER.

One of my wishes would be to see EDF more and more committed to deploying its capabilities in tasks to be accomplished in the developing countries. These countries, and particularly my own, India, urgently need the support, expertise and technology that companies like EDF can provide in order to meet their growing energy demand in a way that is both environmentally and socially acceptable. EDF must become the torch-bearer in the international movement towards a low carbon world on behalf of industry, but most importantly as a model for others to emulate in the energy sector and beyond.

Kajendra K. Pachauri
Nobel Peace Prize Laureate

SUSTAINABLE DEVELOPMENT: the panel's perspective

MÉDIATHÈQUE EDF – GILLES LARVOR

I have been planning and running the meetings of the international experts that make up the EDF Group's Sustainable Development Panel for several years now. Our aim is to monitor Group strategy independently, and to compare our views against those of EDF specialists and executives on a regular basis. The common goal of all parties is to make rapid progress in the area of sustainable development.
The 2007 report allowed me to see what has been achieved.
The men and women we meet in the course of our work have an outstanding commitment to EDF's success and to demonstrating solidarity with the companies served by the Group. Their dedication is impressive. One characteristic seems to set EDF apart from other groups: at every level of the decision-making process, ethics and social responsibility are taken into account along with financial considerations and objectives in terms of competitiveness. I would even go so far as to say that the initial public offering and deregulation of the energy market intensified the focus on ethics, on achieving quality dialogue with stakeholders, and developing innovative solutions allowing this large energy group to uphold its deep-rooted commitment to quality public service and limit its environmental footprint. In sum, these concerns are seen as a way of enhancing competitiveness and value creation.
In the early part of year, the effects of the Stern Report of October 2006 and the partnership with the Nicolas Hulot Foundation were still being felt. Then Al Gore won the Oscar for "An Inconvenient Truth", the European Commission introduced its new Energy Package, the IPCC issued its fourth assessment report, France held its National Conference on the Environment, the Nobel Peace Prize was awarded and the 13th UN Climate Change Conference brought signatories of the Kyoto Protocol together in Bali. The end result was unprecedented awareness of climate risks and the need to take action. In the meantime, climate change and the resulting clement winters, droughts and storms had a marked impact on financial results.
All of this could have caused EDF to issue strong statements about its determination to reduce climate risk, based on analyses by its specialists and their exchanges with outside experts.

Indeed, we can see and hear a real commitment to nuclear revival and the development of wind power, photovoltaic and energy efficiency services. However, investments geared to optimizing and expanding fossil-fired capacity still exceed the amounts being devoted to renewable energies. EDF remains the second largest emitter of carbon dioxide in France.
Its sustainable development reports show a decrease in emissions between 2002 and 2007, but do not specify how the trends were affected by peaks or swings in electricity consumption.
In sum, we would like to see a clear and ambitious target set, one that is in keeping with France and Europe's political commitments for 2020. The development of windfarms across the country and photovoltaic systems for off-grid locations or integrated into buildings will make generation more reliable and cut the use of the least efficient thermal generators. In addition to its strategic objective of achieving a nuclear availability rate of above 85%, we would like to see the Group commit to reducing its CO_2 emissions by 50% on the 1990 level over the medium term. This target would be feasible, though not easy to meet. Such an initiative would not only set an example for other large CO_2 emitters but also encourage innovation inside the Group. It would undoubtedly create additional pressure to deliver on the promises made to corporate and residential customers of demand-side management and energy eco-efficiency services. To date, 45,622 *Equilibre* contracts have been signed, certifying that the energy delivered by EDF is indeed from renewable sources; this number seems quite small compared with the more than 28,000,000 meters in service. The new *Bleu Ciel* program is being presented in an attractive way, but specific targets are needed to stimulate progress, and measurable results to calculate actual benefits.
The fact is that, like with most companies, there is a huge difference at EDF between how precisely the financial strategy is expressed and monitored at the highest levels and how statements about sustainable development, which are rare and often vague, are followed up upon.

Sustainable companies create added value and limit their environmental impact and seek to contribute more to society. They know exactly which direction they want to move in and advance toward their goals year after year. Their sustainable development strategy and targets should be laid out as clearly as their financial objectives, and monitored just as closely.

I have studied the reports since 2003 and seen how insight into environmental, ethical, social and economic issues has deepened, how the scope of sustainable development indicators has been expanded, and how performance and progress monitoring has developed.

We recognize that strides have been made up to the end of 2007.

Our question is, where does EDF want to be by 2012 or by 2020?

Claude Fussler
Chairman of the Sustainable Development Panel
Program Director of the United Nations Caring for Climate initiative

THE EDF GROUP SUSTAINABLE DEVELOPMENT PANEL

Brenda Boardman,
University of Oxford, UK
Head of Energy Section of Environmental Change Institute, Oxford University.

Claude Fussler,
France
Advisor on Sustainable Development and Innovation Strategies.

Peter Goldmark,
United States
Climate Campaign Director at US Environmental Defence Fund.

Daniel Lebègue,
Transparency International, France
President of French Section of Transparency International.

Philippe Levèque,
Care International, France
Head of French Section of Care International.

Ezio Manzini,
Politechnico Milano, Italy
Professor of Strategic design at the Milan Polytechnic and Tohoku University, Japan.

Fritz Vahrenholt,
Repower, Germany
Chairman of the Board or Repower Systems AG.

Farid Yaker,
Enda, France
Head of Enda Europe, France.

Rajendra. K. Pachauri,
TERI, India
Special Advisor to the Panel. Director general of the Energy Research, Institute of India. IPCC Chairman.

Jean-Louis Mathias,
EDF Group
Top 4, Chief Operating Officer, Integration and deregulated Operations in France.

Yann Laroche,
EDF Group
Top 4, Chief HR and Communications Officer.

Claude Nahon,
EDF Group
Executive Vice President, Sustainable Development.

A EUROPEAN GROUP WITH GLOBAL REACH

Other European countries

AUSTRIA

ESTAG Group (EDF 20% owned, 25% of voting rights)
- Electricity, Gas and Heat Distribution
- Electricity, Gas and Heat Sales
- Services

406,459 customers

BELGIUM

EDF Belgium (EDF 100%)
EDF Belgium owns 50% of the Tihange 1 nuclear power plant, 50/50 with Electrabel
- Electricity Generation
- Electricity and gas Sales
- Services

Electric installed capacity: **419 MW**

SPAIN

Hispaelec Energia S.A. (EDF 100%)
- Electricity Sales

Numbers of customers: approximately 50 sites

—

Elcogas (EDF 31.39%)
- Electricity Generation

Electric installed capacity: **335 MW**

HUNGARY

BERt (EDF 95.57% owned and voting rights)
- Electricity and Heat Generation

Electric installed capacity: **356 MW**
Thermal installed capacity: **1,471 MWth***

—

Demasz (EDF 100%)
- Electricity Distribution
- Electricity Sales

770,887 customers

* MWth: thermal MW for cogeneration, as opposed to electric MW.

POLAND

ECW (EDF 77.52% owned and voting rights)
- Electricity and heat Generation

Electric installed capacity: **353 MW**
Thermal installed capacity: **1,225 MWth***

—

Elektrownia Rynnik S.A. – ERSA (EDF 78.63% owned, 97.05% of voting rights)
- Electricity Generation

Electric installed capacity: **1,775 MW**

—

ECK (EDF 66.26% owned and voting rights)
- Electricity and heat Generation

Electric installed capacity: **460 MW**
Thermal installed capacity: **1,258 MWth***

—

Kogeneracja (EDF 35.61% owned, 50% of voting rights)
- Electricity and Heat Generation

Electric installed capacity: **363 MW**
Thermal installed capacity: **1,059 MWth***

—

Zielona Gora (EDF 35.56% owned, 99.87% of voting rights)
- Electricity and Heat Generation

Electric installed capacity: **221 MW**
Thermal installed capacity: **322 MWth***

SLOVAKIA

SSE (EDF 49% owned and voting rights)
- Electricity and heat distribution
- Electricity, Gas and heat Sales

699,665 customers

SWITZERLAND

Atel Group (EDF 24.83% owned, 25% of voting rights)
- Electricity Generation
- Electricity Trading and Sales
- Electricity transmission and distribution
- Services

Electric installed capacity: **3,714 MW**
Thermal installed capacity: **918 MWth***

—

Emosson/Chatelôt/Mauvoisin (EDF 50% owned and voting rights)
- Hydropower Generation

0.4 TWh made available

WORLDWIDE

The Group invests and is involved in generation outside Europe as well, bringing its engineering and operating expertise to different projects. EDF also leverages this expertise by offering its services to large national electricity companies.

UNITED STATES

UniStar Nuclear Energy, LLC.
50/50 joint venture between EDF and Constellation Energy (EDF 3.1%). UniStar will build, own and operate European pressurized water reactor (EPR) nuclear plants in the US.

CHINA

Figlec (EDF 100% – Laibin thermal plant)
Installed capacity: **720 MW**

—

Shandong Zhonghua Power Company (EDF 19.6%)
Installed capacity: **3,000 MW**

LAOS

Nam Theun Power Company (EDF 35%)
Installed capacity: **1,070 MW**
(Hydro plant under construction)

VIETNAM

Mekong Energy Company Ltd (EDF 56.25%)
Installed capacity: **715 MW**

Gross values, not adjusted for percentage of ownership interests (including the minority interests).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FRANCE

EDF
Sales: €32.2 billion

DEREGULATED ACTIVITIES (activities open to competition)
- Electricity generation
- Electricity and gas supply and optimization in mainland France.
- Sales of engineering and consulting services

27.2 million customers (including gas) excluding Corsica and overseas Department.

Electricity installed capacity in mainland France: **96.2 GW**.

REGULATED ACTIVITIES
- Generation and electriciy distribution by EDF in Island Energy Systems (IES)

—

RTE-EDF Transport (EDF 100%)
- Transmission in mainland France. RTE owns, operates, maintains and develops the transmission networks high and ultra high voltage.

Around **100,000 km** of high voltage and ultra high voltage grids
44 cross-border lines

—

ERDF (EDF 100%)
- Distribution in mainland France. ERDF (created on January 1, 2008) owns, generates, maintains and develops the electricity distribution networks (high and low voltage)

596,200 km of 20,000 volt **high voltages lines**
669,300 km of 400 volt **low voltage lines**

—

EDF Énergies Nouvelles
(Owned 50%)
- Development, construction and operation of electricity generation assets, mainly from renewable energy sources
- Sales to third parties of electricity generation assets based on renewables it has developed and built
- Operation and maintenance of wind farms

Installed electric capacity:
1,442.7 MW (total)

UNITED KINGDOM

EDF Energy (EDF 100%)

Sales contribution:
€8.4 billion
- Electricity Generation
- Electricity Distribution
- Electricity and Gas Sales
- Services

Numbers of customers – accounts : approximately **5.5 million** (including gas)

Electric installed capacity: **4.9 GW**
Gas activity: **39.6 TWh***

EDF Trading (EDF 100%)

Sales contribution:
€670 million
- Energy trading for the Group's own account in Europe.

Volumes traded:
Electricity: **1,207 TWh**
Natural gas: **186 Gm³**
Coal: **454 Mt**
Oil: **205 Mb**
Emission certificates of CO_2: **325 Mt**

*Gross global gas volumes handled by the Group's companies including plants' internal consumption.


MÉDIATHÈQUE EDF – PHILIPPE ERANIAN


GETTY IMAGES – ©GARY YEOVELL

ITALY

Sales contribution:
€4.7 billion

Edison (EDF 48.96% owned and 50% of voting rights)
- Electricity Generation
- Electricity Sales
- Gas Production, Storage and Sales

187,000 customers (including gas)

Electric Installed capacity:
12.5 GW
Gas activity: **13.8 Gm³***

—

Fenice (EDF 100%)
- Electricity Generation
- Energy and Environmental services

Electricity installed capacity:
328 MW
Thermal installed capacity:
2,886 MWth**

—

*Gross global gas volumes handled by the Group's companies including plants' internal consumption.
** MWth: thermal MW for cogeneration , as opposed to electric MW.

GERMANY

EnBW (EDF 46.07% owned and voting rights)

Sales contribution:
€6.9 billion
- Electricity Generation
- Electricity Transmission and Distribution
- Gas Transmission and Distribution,
- Electricity and Gas Sales
- Services

Numbers of customers: approximately **6 million** (including gas).

Electricity installed capacity:
15.0 GW
Gas activity: **75.2 TWh***

*Gross global gas volumes handled by the Group's companies including plants' internal consumption.


GETTY IMAGES – ©ALLAN BAXTER

Gross values, not adjusted for percentage of ownership interests (including the minority interests).

ENERGY CHALLENGES: world energy outlook?

Global awareness of climate risks has come of age, as the attribution of the Nobel Peace Prize to Al Gore and Dr. Pachaury for the IPCC [1] demonstrates. The discussions held at the United Nations Climate Change Conference in Bali were significant in this respect. The negotiations proved tough, but disagreement lay not with whether the climate is changing or if its causes are anthropic, but with solutions. The latest IPCC forecasts paint a grim picture that requires us all to radically change the way we think about our energy future.

MÉDIATHÈQUE EDF – SAMUEL BOLLENDORF

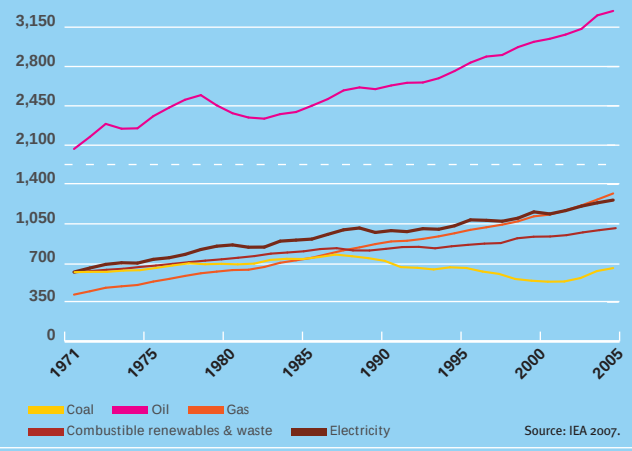
Between 2005 and 2030, global energy needs are expected to increase by 55% and CO_2 emissions by 57%.

GROWING ENERGY NEEDS

According to the International Energy Agency (IEA), world consumption of energy is expected to increase by 50% between 2004 and 2030, keeping apace of population and economic growth. Electricity companies are particularly concerned since consumption of electricity is likely to increase twice as fast as energy consumption on the whole (+100%). Building the facilities to meet this demand is going to require tremendous investment, not to mention that the old generation plants of industrialized nations also need replacing. According to the European Commission, between 2004 and 2030 Europe alone will need to build 600 to 700 GW, half of which to cover new demand and the other half merely to replace existing facilities. In just two years (2006 and 2007), China added generation capacity equal to twice that of France.

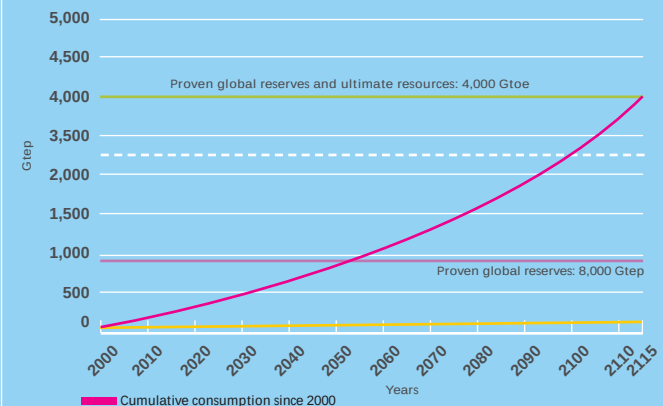
Today, fossil fuels account for 80% of global energy consumption and over 65% of electricity generation. This situation is not sustainable, since fossil fuels are the leading cause of greenhouse gas emissions and reserves are limited.

WORLD CONSUMPTION OF ENERGY (Mtoe)



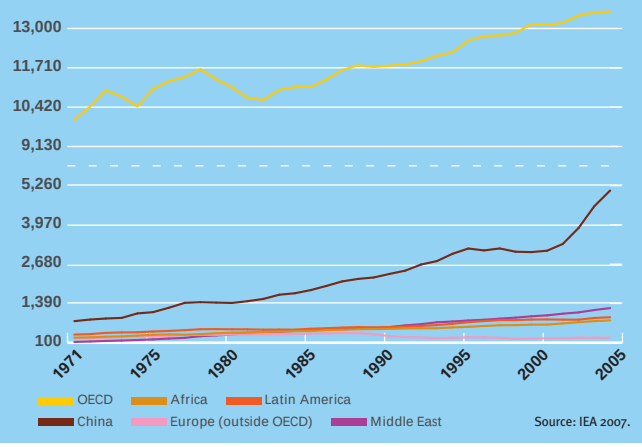
Source: IEA 2007.

GLOBAL ENERGY CONSUMPTION BASED ON 2% ANNUAL GROWTH



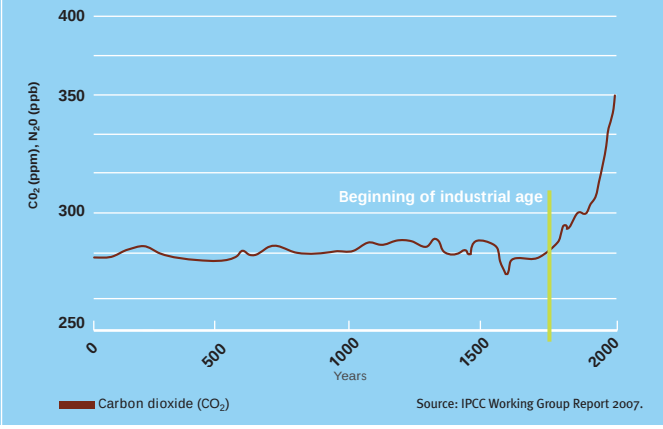
Source: Jean-Marc Jancovici.

CO_2: GLOBAL EMISSIONS BY REGION (in $MtCO_2$)



Source: IEA 2007.

GREENHOUSE GASES: ATMOSPHERIC CONCENTRATIONS



Source: IPCC Working Group Report 2007.

RISING GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Greenhouse gases such as carbon dioxide (CO_2) accumulate in the atmosphere, bringing about global warming. According to the IPPC, the earth's temperature will increase by 1.8 to 4 °C over the course of the century. The consequences? Rising sea levels and extreme weather patterns. The IPPC is continuing to narrow down its figures. A stabilization target of 550 ppm [2] by 2050 is no longer deemed sufficient if we are to remain within the acceptable 2 °C temperature increase, but rather 450 ppm. This makes action all the more urgent.

DWINDLING FOSSIL RESOURCES

Growing energy consumption also gives rise to concern over security of supply. Oil production is expected to decline as of 2030 and natural gas as of 2050. The five-fold increase in the barrel price of oil (on which the price of gas is calculated) from $20 to $100 in five years reflects the tight supply. Even the price of coal increased in 2007.

IMPOVERISHED NATURE AND BIODIVERSITY

The GEO4 report published in 2007 by UNEP predicts that greenhouse gas emissions accelerate the loss of biodiversity already underway due to human activity. Humans have modified nature more rapidly in the last five decades than ever before. The rate of species extinction is 100 to 1,000 times higher than in the past. Regardless of the scenario, species are likely to disappear ten times faster in the 21st century, with climate change alone accounting for one-quarter of these.

1.8 to 4° Celcius

Increase of the average temperature on earth over the course of the century, according to the IPCC

1. Intergovernmental Panel on Climate Change, a G7 initiative launched in 1988.
2. Ppm (parts per million) or ppb (parts per billion) indicates here the proportion of greenhouse gas molecules to molecules of compressed air.

MAP OF ENERGY CONSUMPTION PER CAPITA AND CONTINENT, IN 2005

Source: IEA Energy Statistics.

2007: a year of reckoning and early measures

> Al Gore and the IPPC win the Nobel Peace Prize
> France: the national conference on the environment *(Grenelle de l'environnement)*
> UK: Energy Review: Nuclear Whitepaper (01/10/08)
> European Union: Green Book
> UN: GEO4 report
> World: Climate Change Conference in Bali
> Global electricity companies: WBCSD [3] report.

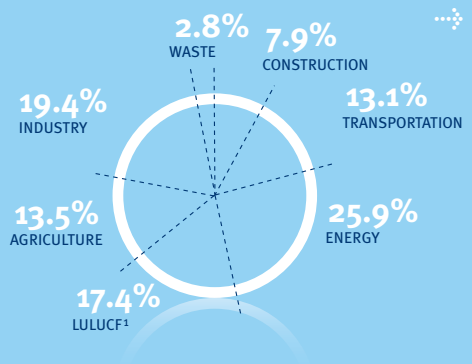
WIDENING GAP IN ACCESS TO ENERGY

Access to energy was a priority at the 2002 Johannesburg Earth Summit. Energy, and especially electricity, is indispensable to group and individual development. It is a condition for a healthy economy and a healthy population, for alphabetization, education and social life. Two billion people in developing countries have insufficient energy and 1.6 billion are without access to electricity. Even in industrialized nations, the poorest share of the population does not have sufficient access to energy: 15% of the population of Europe according to the OECD.

2007: A YEAR OF RECKONING AND EARLY MEASURES

EDF contributes to global efforts and supports alongside more than 180 other companies the Caring for Climate initiative by Global Compact, UNEP and WBCSD. Participants commit to developing strategies to reduce their greenhouse gas emissions and to communicating their progress annually. The first joint report is due to appear in 2008. EDF and other major companies are also involved in the WBCSD's Energy Efficiency in Buildings project, based on the concept of net zero energy buildings, aimed at drastically reducing CO_2 emissions in the construction industry by 2050.
The Group participates in international organizations like the WBCSD, WEC [4] and the e8 [5] to assess energy issues and seek operating solutions.

GLOBAL GREENHOUSE GAS EMISSIONS BY SECTOR IN 2004



Since 1970, six greenhouse gases[2] covered by the Kyoto Protocol have increased by 70%, reaching 49 $GtCO_2$-eq.[3] in 2004.

1. Land use, land use change and forestry.

2. Carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6).

3. Emissions are expressed in CO_2 equivalent (CO_2 eq.), a way to measure the global warming potential (GWP) of any greenhouse gas.

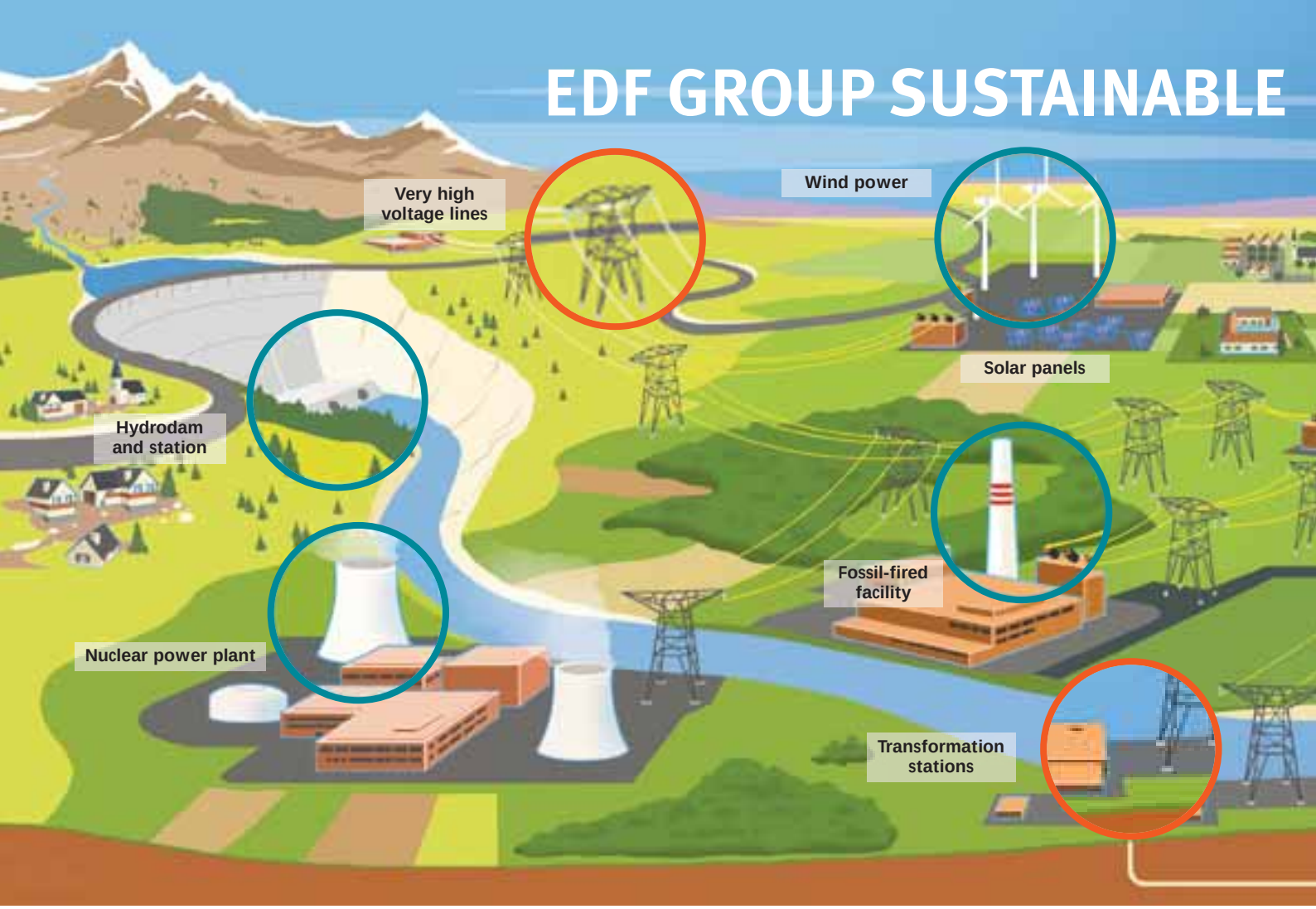
3. World Business Council for Sustainable Development.
4. World Energy Congress.
5. Organization bringing together eight electricity companies involved in sustainable development.
6. International Energy Agency report: Electricity Information 2007.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

How is EDF meeting these challenges?

Access to energy is a necessary condition not only for economic growth but also for health, education and social development.

EDF GROUP SUSTAINABLE



Generation/industrial activities

•• ENVIRONMENTAL ISSUES

- **Guarantee** safety of facilities
- **Reduce** greenhouse gas emissions thanks to an adapted energy mix and the development of renewable energies
- **Limit** the impact of industrial activities on the environment and health in keeping with regulations by:
  - Close control and tracking of effluents and emissions
  - Management of radioactive waste
  - Reduction and recycling of conventional waste
- **Take action** to protect biodiversity
- **Ensure** rational use of water and foster consensus on the sharing of this resource
- **Dismantle** decommissioned nuclear plants and track radioactive waste

•• SOCIAL ISSUES

- **Anticipate** and participate in renewal of talent with an eye to a sound balance of generations
- **Manage** restructuring and disposals in a responsible manner
- **Work side-by-side** with subcontractors and suppliers toward sustainable development
- **Promote** diversity in all its forms
- **Improve** safety in the workplace
- **Respect** human and labor rights and ensure they are respected by subcontractors

•• ECONOMIC AND SOCIETAL ISSUES

- **Guarantee** security of energy supply
- **Generate** electricity at best cost
- **Invest** to be able to meet rising demand
- **Guarantee** safety of populations living near facilities
- **Ensure** local acceptability of activities through dialogue with stakeholders
- **Inform** stakeholders on industrial activity as transparently as possible
- **Contribute** to regional economic and cultural life
- **Limit** the social and economic impact of our worksites and facilities on populations living near

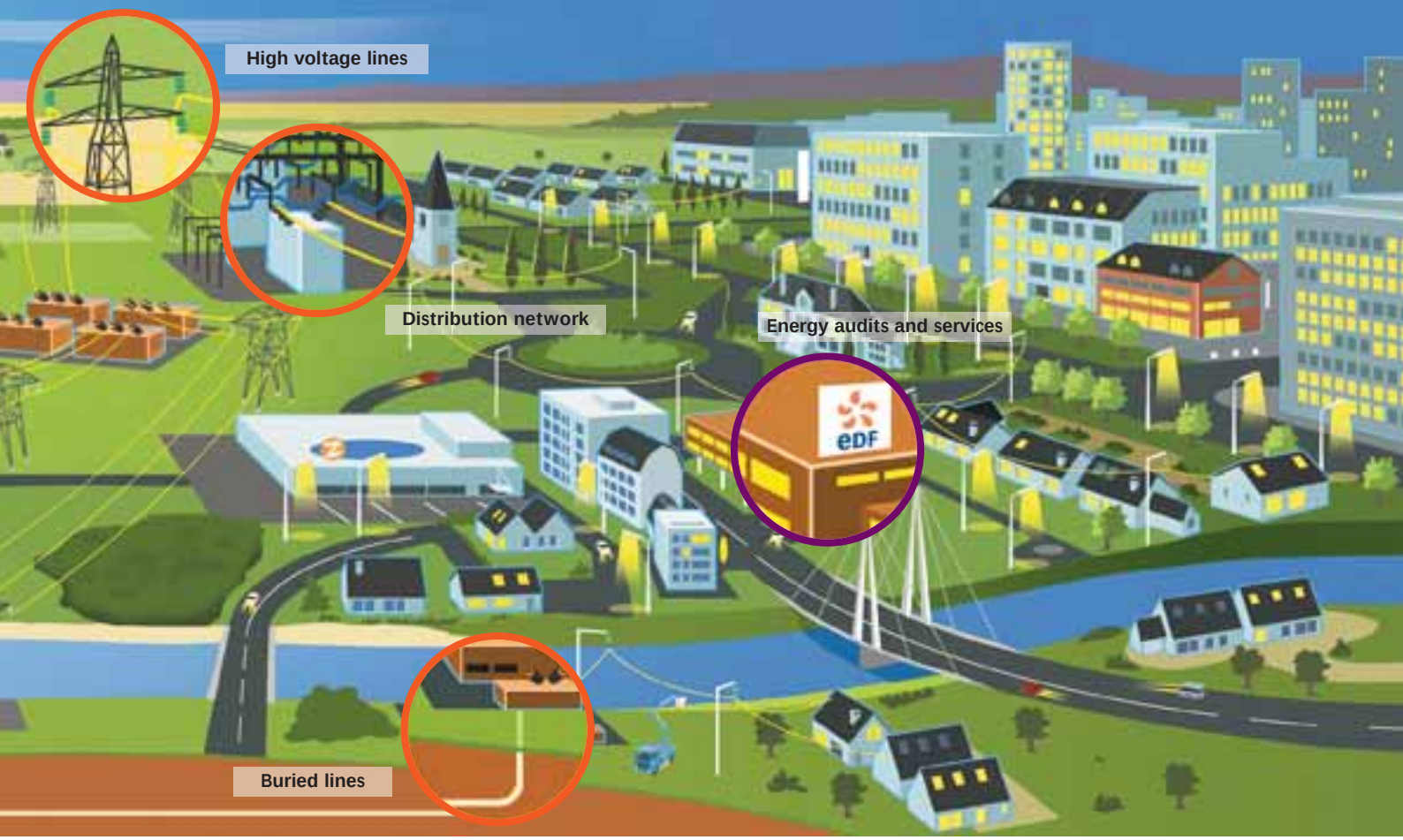
Regulated network

•• ENVIRONMENTAL ISSUES

- **Take action** to protect biodiversity
- **Improve** sorting and recycling of waste, encourage all employees to recycle
- **Preserve** quality of residential life by burying power lines
- **Raise** awareness of electricity risks

Challenged by energy issues (greenhouse effect and dwindling fossil resources),
Encourage **career advancement throughout the professional**

DEVELOPMENT ISSUES



activities in Europe

•• SOCIAL ISSUES	•• ECONOMIC AND SOCIETAL ISSUES
• **Carefully prepare** employees for the separation of distribution and sales and marketing activities (market opening 2007) • **Constantly improve** the safety of people in the workplace • **Promote** diversity	• **Sustainably satisfy** the needs of customers and society as a whole • **Guarantee** system security for reliable supply • **Ensure** network acceptability through ongoing dialogue and consensus • **Ensure** access to electricity for all regions • **Develop** local rapport with customers thanks to accessible employees and customer service centers

Supply, services and trading

•• ENVIRONMENTAL ISSUES	•• SOCIAL ISSUES	•• ECONOMIC AND SOCIETAL ISSUES
• **Develop** offers to supply electricity from renewables • **Help** customers produce renewable energy for their own usage • **Develop** energy saving offers and services • **Assist** customers in limiting their carbon emissions	• **Accommodate** and train a large staff transferring from distribution •**Develop** a diversity policy that reflects society as a whole	• **Develop** energy saving services • **Contribute** to the development of eco-neighborhoods •**Guarantee** access to energy for vulnerable populations

invest **in research that contributes to preparing a sustainable energy future in France and in Europe**
lives of employees and promote **workplace dialogue**

REGULATED AND MARKET ACTIVITIES in the European Union

In Europe, as of January 1, 2007, generation, sales and marketing, and trade of energy are fully open to competition.

MÉDIATHÈQUE EDF – SAMUEL BOLLENDORFF

UNDERSTANDING

RTE missions

> Maintain, operate and develop the French electricity transmission network
> Ensure the smooth running and security of the electric system
> Guarantee the reliability and quality of electricity supply to network users: industry and electricity distributors, generators and suppliers
> Guarantee all users, without discrimination, access to a transparent network
> Ensure the interconnections with other transmission networks

ERDF missions

> Operate, maintain and develop the French electricity distribution network through a concession agreement with local authorities
> Guarantee all users, without discrimination, access to a transparent network
> Ensure the interconnections with other networks

Management of public transmission and distribution networks is entrusted to independent network operators, and is subject to legal and regulatory frameworks controlled by a regulatory authority. These are the regulated activities.
Whenever operators are part of a group that, like EDF, also runs market activities, the network business is transferred to an independent subsidiary within that group to guarantee neutrality of services rendered to users.

DISSOCIATION OF EDF'S REGULATED AND MARKET ACTIVITIES IN FRANCE

In mainland France, RTE is the independent subsidiary responsible for operation, maintenance and development of the public electricity transmission network. Fully-owned by EDF, RTE has been an independent fully-owned subsidiary in accordance with regulations since 2005. Under the control of the Energy Regulation Commission (*Commission de Régulation de l'Energie* - CRE [1]), it is subject to a legal and regulatory framework that guarantees its independence and neutrality (see website: http://rte-France.com).
With the opening of the residential market in France in 2007, EDF separated distribution and sales and marketing, creating EDF's distribution subsidiary ERDF, (*Electricité Réseau Distribution France)* on January 1, 2008. This EDF subsidiary, also fully-owned, was operational from the outset. ERDF's Supervisory and Executive boards, as well as its provisions of governance, ensure its independence.

Transmission and distribution tariffs are proposed by the Energy Regulation Commission and laid down by ministerial decree.

OTHER REGULATED ACTIVITIES IN THE GROUP

Several EDF Group companies outside France are involved in regulated distribution: EDF Energy in the UK, EnBW in Germany, SSE in Slovakia and Demasz in Hungary. Demasz and SSE separated network and sales and marketing in 2007.

ISLAND ENERGY SYSTEMS

Island Energy Systems (*Système Energétiques Insulaires* - SEI) cover electric systems that are not, or not well, interconnected with continental mainland France: Corsica and Saint-Pierre-et-Miquelon, French overseas departments (Guadeloupe, French Guiana, Martinique, Reunion Island) and overseas collectivities (Saint-Barthélémy and Saint-Martin). These areas benefit from the same tariffs as continental France, despite much higher generation costs. The extra cost is offset by the contribution to the public service charges for electricity *(Contribution au service public de l'électricité)*. Competition among producers was introduced in a context of public bidding, with EDF acting as sole buyer. EDF is separating its market activities, creating a subsidiary for generation: Island Energy Generation (*Production Electrique Insulaire* - PEI).

1. (*Commission de Régulation de l'Energie* - CRE).

A RESPONSIBLE approach

DR

EDF's overall sustainable development policy revolves around the Agenda 21, which the Group adopted in 2001 at the same time as it was committing to the Global Compact. Specific Group policies set out targeted priorities and objectives. The Group is continuing to roll out its Environmental Management System and to uphold its formal commitments to acting responsibly toward stakeholders. Group employees are more and more motivated by this issue.

FORMAL COMMITMENTS

EDF reworked its environmental policy in June 2005 and set Group priorities in this area: low-emissions electricity generation, development of renewable energy, energy efficiency services, controlled environmental and health impacts, protection of biodiversity, investment in research, dialogue with stakeholders and informed employees. A year later in 2006, a biodiversity policy was drawn up.

In France, the national conference on the environment *(Grenelle de l'environnement)* in 2007 brought these same issues to the fore nationally, enabling the Group to reaffirm its choices. Quantitative targets with regard to climate change are currently being defined and adopted.

The corporate social responsibility policy adopted in 2007 lays down Group commitments in three main areas:

> Facilitate access to essential energy services for the vulnerable,

> Work closely with partners and local authorities in support of local projects that reflect Group strategy,

> Expand education and awareness, especially with regard to energy savings, and support work-study programs.

These Group policies take the form of action plans in each branch, division, subsidiary or affiliate.

GROUP ETHICS

In 2007, the EDF Group bolstered its approach to ethics. A clear, practical new reference manual, the Handbook of Ethics, was rolled out across EDF. This handbook presents the company's principles of action and provides guidelines for each and everyone based on Group values. The Group values themselves were communicated to all units in the form of brochures and posters and thanks to ethics representatives.

Following the series of painful events at the beginning of 2007 in France affecting life at work, including the suicide of an EDF employee from the Chinon power plant, executive management created a workplace observatory on quality of life in the workplace *(Observatoire national de la qualité de vie au travail)* that brings together specialists, managers and social partners. A number of measures in favor of local management were taken and implemented. Ethics representatives were entrusted with ensuring that Group values are respected on the ground. A free, confidential, experimental hotline was created for six months and for 30,000 employees.

Group values

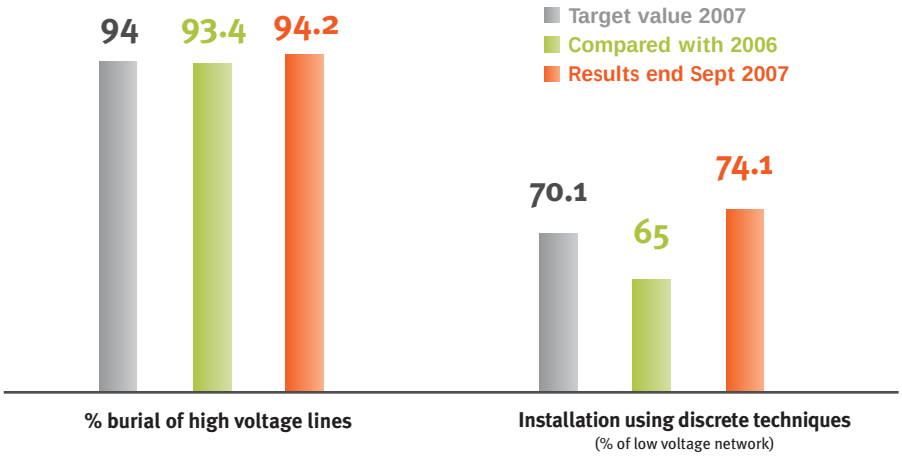
> respect for individuals,
> environmental responsibility,
> striving for excellence,
> a commitment to the community,
> the necessity of integrity.

Publication

in 2007 of Kogeneracja's ethics principles in Poland.

CSP RESULTS FOR THE DISTRIBUTOR

ERDF AS OF JANUARY 1, 2008



Eco-responsible Exhibition stands

The Communication Division uses eco-responsible exhibition stands: eco-certified wood, low-energy light bulbs, recycled paper, and organic or free-trade products. This initiative earned the Division ISO 14001 certification during the 2007 Pollutech trade fair.

EDF GROUP ENVIRONMENTAL MANAGEMENT SYSTEM

Certification

The certification process was launched in 1999 with one option: a single ISO 14001 certificate for all of EDF, a guarantee of consistency. Obtained in April 2002 and renewed for three years in April 2005, the company's ISO 14001 certification pays tribute to its commitment toward the environment. With certification of the distributor in 2007, EDF is now ISO 14001 certified in its entirety. The second renewal of Group certification is expected in April 2008.

EDF Energy, the six Polish generation subsidiaries and affiliates, the SSE companies in Slovakia, BERt and Demasz in Hungary, Figlec in China, Norte Fluminense in Brazil and the generation facilities of Fenice in Italy, Poland and Spain have all been ISO 14001 certified. In 2007, EDF Trading Logistics, Sodetrel and Meco in Vietnam obtained or renewed certification. EnBW (46.07% EDF owned) obtained certification for its main entities, covering most of its personnel. All of Edison's generation facilities obtained environmental certification and are also security certified.

Environmental Management Program (PME)

The Group formalized entity action in an Environmental Management Program (*Programme de Management Environnemental* - PME) that reflects the ten objectives set down in its environmental policy. These actions are monitored by the environmental management system Steering Committee. A significant portion of EDF's employee profit-sharing is indexed on the achievement of the targets outlined in the Program.

CONTRACTUAL COMMITMENTS

Corporate Social Responsibility Agreement

The CSR agreement was concluded with social partners in 2005 for all activities worldwide. The global Committee for Dialogue on Corporate Social Responsibility (*Comité mondial de Dialogue sur la Responsabilité Sociale du Groupe* - CDRS) reported on the agreement's rollout. Given the substantial progress made, the partners extended the agreement for one year, until January 2009. The CDRS also retained CSR priorities for 2007, namely: fighting discrimination (§ 5), measures for vulnerable customers (§ 9) and employee profit-sharing (§ 7). Best CSR practice among Group entities was widely shared through Group intranet and the Sustainable Development Awards showing actions undertaken and results achieved in these areas.

Public Service Agreement

Signed in 2005, the Public Service Agreement (*Contrat de service public* - CSP) represents the sustainable development commitments

FOCUS ON

REGULATED ACTIVITIES

So that public transmission networks better blend into local landscapes, RTE sometimes buries new power lines. Because of changing costs and the techniques involved, this solution is more viable financially for high voltage lines. In 2006, RTE buried 36% of new high voltage lines. RTE can also bury certain sections of the existing high voltage network as part of an agreement with regional authorities to co-finance the works.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

Combined-cycle gas turbine plant at Altomonte. All of EDF's generation facilities have been awarded environmental certification.

made by Group entities, EDF (of which the distributor, ERDF as of January 1, 2008) and RTE EDF Transport SA, towards the French government. The Agreement sets several priorities: security of supply, safety and security of facilities, rural and urban planning, inflation-based residential tariff increases, climate change mitigation, protection of the environment, national solidarity, tackling exclusion, and quality local service.

MANAGERIAL RESPONSIBILITIES

The Sustainable Development Division monitors EDF's commitments and ensures coordination and reporting on initiatives undertaken. It also assists other branches and divisions of EDF and Group companies with implementing these commitments. The Commitments and Shareholdings Committee assesses investment projects against an analytical grid comprised of sustainable development criteria. Similarly, reporting by Group companies includes a section on sustainable development.

EMPLOYEE AWARENESS AND MOBILIZATION

In 2007, the Group-wide Sustainable Development Awards inspired broad employee mobilization on sustainable development issues. In France, EDF launched Action Planète, an in-house information and awareness campaign on everyday energy savings for the planet.
The program included special offers: energy efficient lamps, refrigerators and freezers, and assistance with certain renovation work. In the UK, a dedicated team has been steering the Sustainable Future initiative since June 2006, while the Corporate Responsibility and Environment Panel, comprising operating managers, provides insight from the field on sustainable development strategy and how to implement it.

TRANSPARENCY

The EDF Group publishes indicators of its impact and assessments of its environmental, social and societal performance in its yearly Sustainable Development Report. In 2005, Statutory Auditors began progressively checking the quality of environmental and social indicators. In 2007, the Sustainable Development Division hoped to achieve a higher level moderate assurance. The EDF Group Sustainable Development Report is posted on the edf.com website along with a wealth of additional information.

2007 Sustainable Development Awards
EDF GROUP

The 2007 Sustainable Development Awards (first edition 2004) sparked wide mobilization throughout the Group: over 600 concrete projects, of which 200 from outside France, focused on saving energy, protecting the environment, renewables, community involvement, access to energy, social insertion, integration of the disabled, etc. The branches and divisions eventually narrowed their submissions to 56 projects which were then presented to a jury composed of Group top executives and international experts. Twenty one projects won awards.

STAKEHOLDER dialogue

Electricity is an essential commodity, the generation, transmission and sales of which are fundamental to structuring the activities of society. The EDF Group, in every country where it is active, endeavors to build constructive dialogue with numerous stakeholders: public authorities, local authorities, customers, service providers and subcontractors, associations, shareholders, employees and unions.

Publication

of a booklet on "60 citizen initiatives for society" and distribution to all EDF stakeholders.
The publication can be consulted online at *developpement-durable.edf.com*

LISTENING TO THE EXPERTS

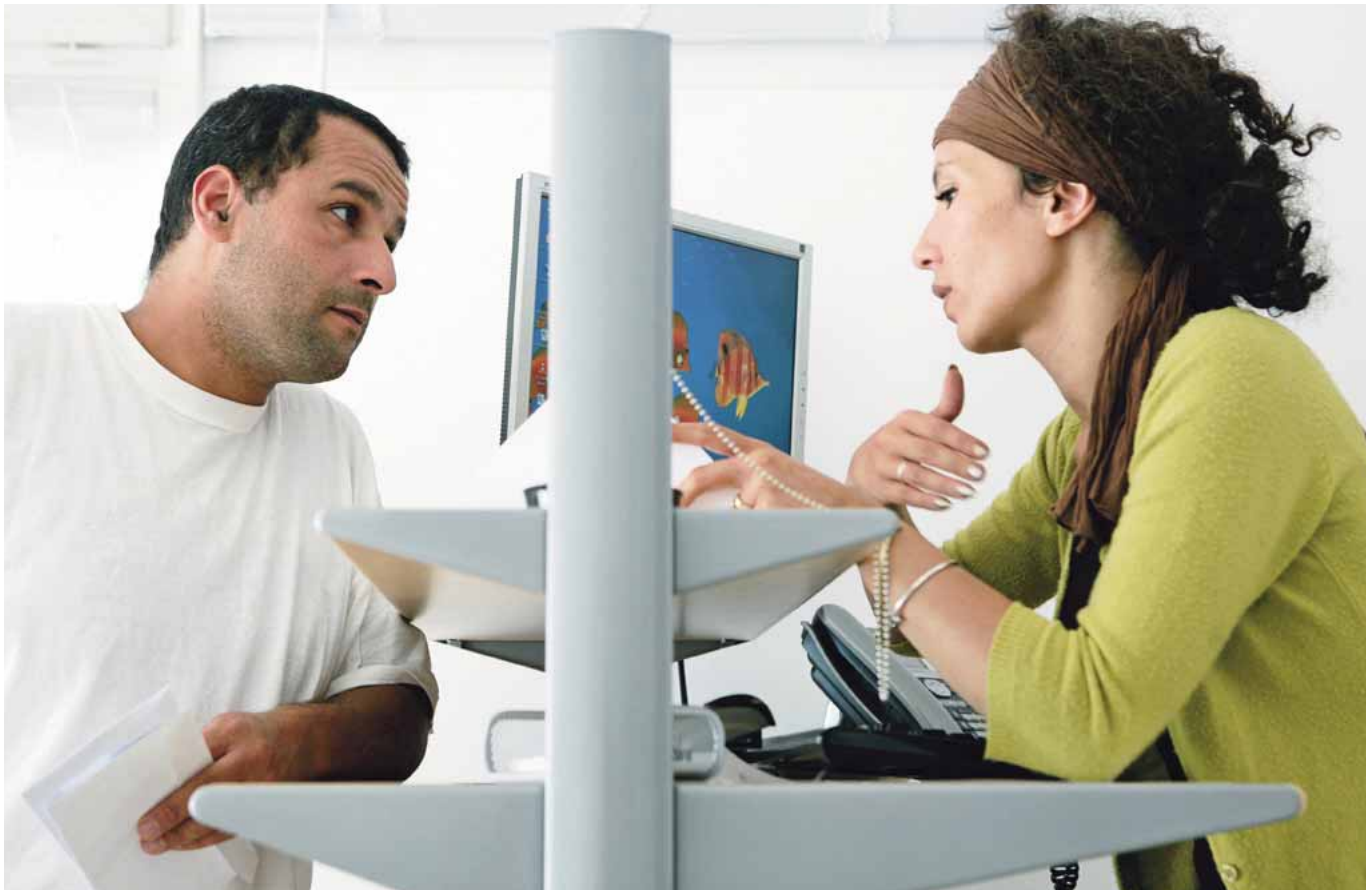
The EDF Scientific Advisory Board was created twenty years ago. Chaired today by Pierre-Louis Lions, *Collège de France* Professor and member of the French *Académie des sciences,* the Scientific Advisory Board provides EDF with insight from eminent scientific personalities that helps to direct decision-making on middle and long range research priorities. In 2007, the Board examined two issues directly related to sustainable development: research on energy efficiency and research on climate change. On both issues, the Board stressed the wealth of EDF R&D research and the quality of collaboration with the scientific community. The Scientific Advisory Board also joined with the Environment Board and the Sustainable Development Panel in thinking led by EDF on the occasion of France's national conference on the environment *(Grenelle de l'environnement).* The discussions revolved around EDF initiatives for reducing CO_2 emissions in end-uses, particularly construction, and in electricity generation. Issues of governance were also broached.

PARTICIPATING IN NATIONAL AND INTERNATIONAL DISCUSSIONS

The national conference on the environment *(Grenelle de l'environnement)* held in France in 2007 was a major event gathering together companies, public authorities, consumer associations and environmental organizations. EDF experts contributed actively, underscoring the indispensable contribution of electricity generation based on fossil-free resources and of the use of fossil-free energy in all sectors (domestic, transportation, housing) to reducing CO_2 emissions. In terms of its generation fleet, EDF announced its intention to go beyond the European target of 20% emission reduction by 2020. It also stressed its determination to lower emissions in end-uses by using very low-emission electricity and optimal insulation.
EnBW sponsored the 2nd German Climate Congress on "The Economics of Climate Change". This congress gathered a number of government officials and international experts, including speaker Al Gore. In conjunction with the Land and its research foundation, EnBW organized the second Baden-Württemberg Forum on Nuclear Energy. In the UK, EDF Energy contributed to thinking on national energy choices in the

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

The main expectations of local authorities (here, London): proximity, social cohesion, and a commitment to helping vulnerable customers.



MÉDIATHÈQUE EDF – SOPHIE BRANDSTROM

EDF is working with the Foundation for Action to Combat Exclusion (*Fondation agir contre l'exclusion* - FACE) to help the reintegration of those in difficulty.

face of dwindling gas production in the North Sea and of climate change. The company demonstrated the advantages to combining energy efficiency, nuclear and renewable energy.
At Group level, EDF participated in global thinking "after Kyoto". Its experts shared their insights at the UN Climate Change Conference in Bali. The Group also contributed actively to drafting the WBCSD report, which recommends the technical solutions proposed by major energy players to reduce greenhouse gases by 50% between 2003 and 2050 without compromising economic development. In 2007, EDF's Chairman and CEO, Pierre Gadonneix was named Chair of the World Energy Congress, which brings together energy companies from more than 100 countries.

ENGAGING IN LOCAL DIALOGUE

EDF's business is deeply rooted in every corner of France. EDF representatives participate in numerous discussions in areas surrounding generation facilities (hydro, fossil-fired, nuclear, wind). Its specialized subsidiaries RTE and the distributor, now ERDF, also organize dialogue around their infrastructures, especially where new power lines are concerned.

FOCUS ON

The Dismantling Observatory for the Brennilis nuclear power plant brings all of the site's stakeholders together for regular discussions on monitoring the local environment. In 2007, a study conducted by a radioactivity monitoring association for western France [1] and the Laboratory for Climate Sciences and the Environment [2] revealed that traces of radioactivity detected in the environment in 2002 (actinium 227) were of natural origin. These results were presented to the Observatory in 2007, concluding several years of study on the subject.

1. (*Association pour le Contrôle de la Radioactivité dans l'Ouest* - ACRO).
2. (*Laboratoire des Sciences du Climat et de l'Environnement* - LSCE).

UNDERSTANDING

Local Information Commissions (CLI)

For each of EDF's nuclear sites, a Local Information Commission (*Commission locale d'information* - CLI) brings together 50% local authorities and 50% government representatives, chambers of commerce, labor unions and environmental associations. The final composition is set down by decree by county commissions.
The CLI meets with EDF, organizes visits, publishes newsletters and finances outside experts. The law of June 13, 2006 reinforced the CLI's role in monitoring, information and dialogue, and enables it to refer cases to the French Nuclear Safety Authority (*Autorité de sûreté nucléaire* - ASN).

Our stakeholders

MÉDIATHÈQUE EDF – WILLIAM BEAUCARDE

Customers and consumer associations

MAIN EXPECTATIONS
- Quality-price ratio, service, reliability of supply, market and product information, transparency, advice, fair treatment, consideration.

VEHICLE
- Satisfaction surveys.
- Organized consultative processes.
- Claims service.
- Social mediation and representatives.
- Business clubs.
- Customer Relations Charter.

MAIN ACHIEVEMENTS 2007
- Creation of a National Consumer Service notably in charge of measures toward vulnerable customers.
- CSR Agreement dialogue committee review on handling of vulnerable customers before and after market opening.
- Development of energy offers and/or services that promote customer energy efficiency.
- Development under industrial partnerships of "distributed" renewable energies on the scale of entire buildings.
- In the UK, partnership between EDF Energy and Mencap.
- In France, continued implementation of agreement to promote social cohesion in the city for 2005-2007.
- In Poland, launch of a project for vulnerable customers by EC Krakow in partnership with Krakow City Hall.

Government, local authorities, populations living near facilities

MAIN EXPECTATIONS
- Quality public service.
- Regional responsibility: local service, social cohesion, vulnerable customers, local development.
- Responsibility to society at large: human rights, principles of the Global Compact.

VEHICLE
- Contracts, agreements, partnerships, cooperation with government and local officials.
- Support for local employment and economic development.

MAIN ACHIEVEMENTS 2007
- Continued application of Public Service Agreement signed with French government.
- In France, participation at all power plants in Local Information Commissions that bring together local officials and representatives from unions and environmental associations.
- In the UK, EDF Energy cooperation with British authorities on future energy strategy as part of the "Energy White Paper" program.
- Continued partnership with the French Agency for Environment and Energy Management Ademe to promote access to energy through lasting, environmentally sound solutions in developing countries.
- Participation in the economic development committee and continuation of program in Meuse Haute Marne, France.

Civil society

MAIN EXPECTATIONS
- Respect for Group values and commitment to sustainable development.
- Transparency and open dialogue.

VEHICLE
- Measures taking into account the legitimate expectations and interests of organizations representing civil society.
- Dialogue bodies: Environment Board, SD Panel, Scientific Advisory Board, etc.

MAIN ACHIEVEMENTS 2007
- In France, creation and deployment of a new ethical reference framework and of a network of correspondents in all EDF branches and divisions.
- Adoption of the EDF corporate social responsibility policy in October 2007.
- Meeting of EDF's SD Panel, Scientific Advisory Board and Environment Board in follow-up to the French national conference on the environment.

Employees and unions

MAIN EXPECTATIONS
- Working conditions, health, safety, respect for social and union rights, equality, recognition of work, training, diversity.
- Extension of employee rights to subcontractors.
- Awareness and training on sustainable development.

VEHICLE
- In-house surveys and communication: yearly reviews.
- Local, national and European (European Works Council) bodies of social dialogue.
- Social agreements and equality tracking.

MAIN ACHIEVEMENTS 2007
- Meeting of the EDF Group's global CSR Agreement dialogue committee in April 2007.
- Toll-free number "life in the workplace" for 30,000 EDF employees tested for six months.
- In France, signature of eight agreements in 2007, notably one on gender equality.
- In France, negotiations on the reform of special pension schemes and signature of an employee agreement on January 29, 2008 by four union federations. Employee communications campaign on the reform.
- Organization of Group-wide Sustainable Development Awards.
- Launching of the in-house information program *Action Planète*.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

MÉDIATHÈQUE EDF – PATRICK GAILLARDIN

Suppliers and subcontractors

MAIN EXPECTATIONS
- Loyalty, fair treatment, lasting business relationships.

VEHICLE
- Information sessions.
- Supplier clubs.
- Partner clubs.
- CGPME (French federation of SMEs) watch committee.

MAIN ACHIEVEMENTS 2007
- Supplier charter included as appendix to all EDF contracts.
- First supplier audits by EDF and Demasz.


MÉDIATHÈQUE EDF – PATRICE COPÉE

Shareholders, investors, financial community, rating agencies

MAIN EXPECTATIONS
- Economic performance profitability.
- Transparent, reliable, exhaustive information on the organization, business results, strategy and sustainable development.

VEHICLE
- Reporting.
- Information sessions.
- Specific actions aimed at shareholders.

MAIN ACHIEVEMENTS 2007
- SD Report, *Document de référence*, Management Report.
- Improved procedure for upward flow of a selection of environmental and social indicators published in EDF Group's Sustainable Development Report (moderate assurance).
- Processing of investor survey on CSR during roadshow.
- Free distribution of shares to employees.

Non-governmental organizations (NGOs), associations that help the vulnerable and environmental associations

MAIN EXPECTATIONS
- Open dialogue and transparency.
- Partnerships.
- Support for general operations and specific projects.

VEHICLE
- Partnerships, cooperation, support through foundations.

MAIN ACHIEVEMENTS 2007
- Cooperation with Care France to roll out a prevention program against HIV/AIDS.
- Electrification operations using renewables in the Mékong region and in West Africa with the Energy for the World Foundation (*Fondation Energies pour le Monde* - Fondem).
- EDF Foundation support for *Samu Social*, *Secours Populaire*, Red Cross, *Restos du Cœurs*, French paralytic association, French muscular dystrophy associations (Telethon).
- See EDF Foundation report 2007 at www.edf.com.
- Global Village Energy Partnership (GVEP): EDF participation on project committee.
- Continued skills support for ESF (new and existing projects).
- Signing of partnerships between EDF Foundation, *Diversiterre*, the French Nature Reserves, the Littoral Conservancy, the Nicolas Hulot Foundation and the French birding association the *Ligue de Protection des Oiseaux*.
- Distribution in China of a booklet for children in the countryside on wise use of electricity thanks to the women's association *Association des femmes de Chine*.
- Partnership with Aquitaine regional environmental office (*Direction régionale de l'environnement* - DIREN) for the protection of the bearded vulture in the Pyrenees Mountains.
- Signature of a three-year partnership agreement between EDF and the Berre Marsh fishermen's federation in September 2007.

International organizations

MAIN EXPECTATIONS
- EDF contribution to public energy policy.

VEHICLE
- Participation in international organizations and meeting on energy and on sustainable development.

MAIN ACHIEVEMENTS 2007
- Pierre Gadonneix named Chairman of the World Energy Council in 2007.
- Active contribution to developing the WBSCD's "Caring for Climate" project.
- Cooperation with the World Bank, European Development Fund, the German development bank KfW and the French Development Agency to define models on how to improve access to energy in developing countries.
- Participation in hydroelectric plant project in Madagascar within the framework of the Clean Development Mechanisms (CDM) supported by the e8.

Research partners (schools, universities, international institutions)

MAIN EXPECTATIONS
- Support for university research and training.
- Cooperation with research organizations.

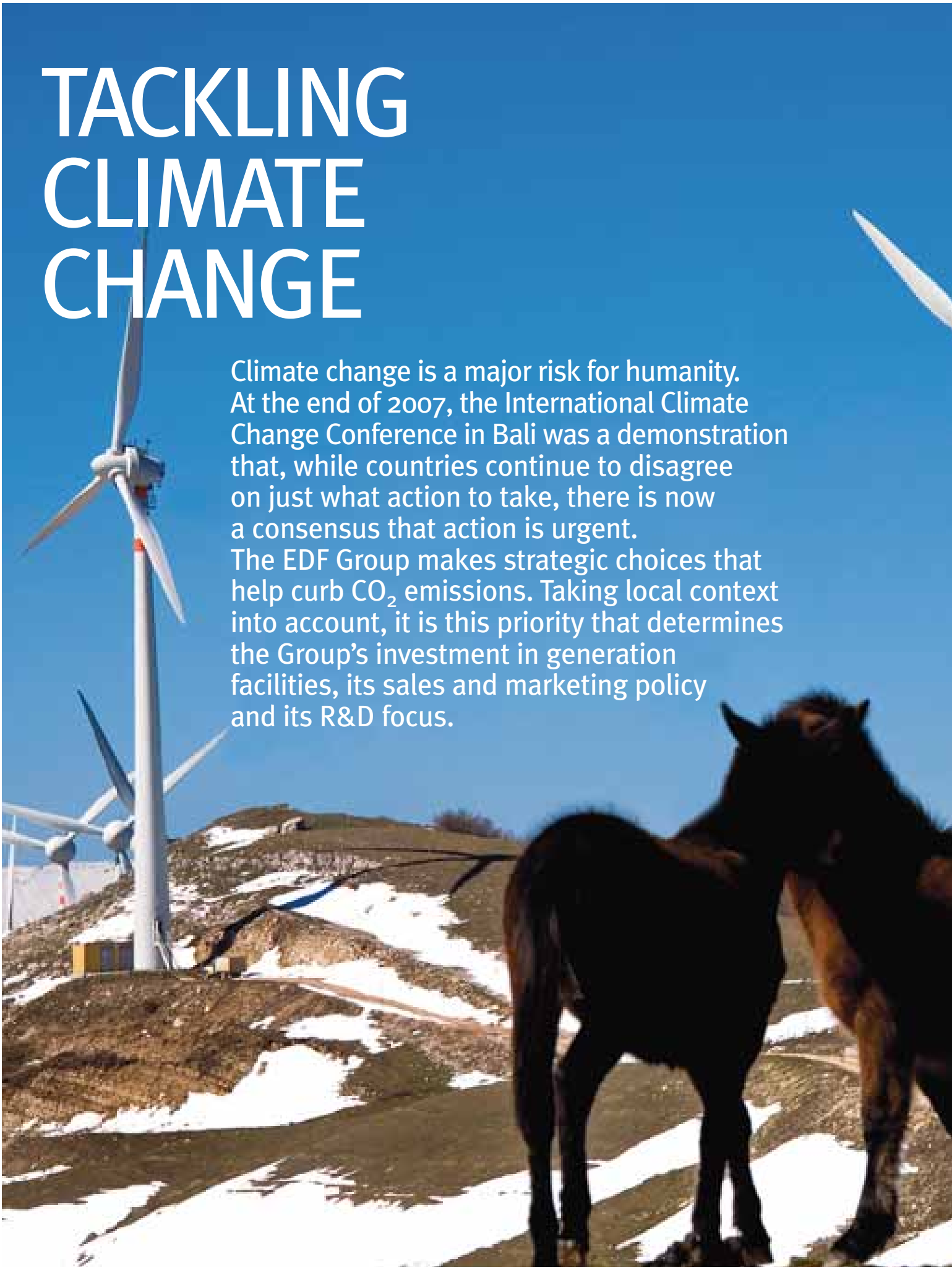
VEHICLE
- Partnerships with universities.
- Participation in conferences.
- Learning institutions (Chairs).

MAIN ACHIEVEMENTS 2007
- Creation of the European Center and Laboratories for Energy Efficiency Research (Ecleer) in Renardières, France, in association with the Paris *Ecoles des Mines* and the Lausanne Federal Polytechnic.
- In Germany, EnBW hosted the 2nd German Climate Congress gathering government officials and scientists.
- Continued EDF support for Chairs of sustainable development at the *Ecole Polytechnique*, Paris Dauphine and the University of Troyes.

MÉDIATHÈQUE EDF – PATRICK GAILLARDIN

TACKLING CLIMATE CHANGE

Climate change is a major risk for humanity. At the end of 2007, the International Climate Change Conference in Bali was a demonstration that, while countries continue to disagree on just what action to take, there is now a consensus that action is urgent.
The EDF Group makes strategic choices that help curb CO_2 emissions. Taking local context into account, it is this priority that determines the Group's investment in generation facilities, its sales and marketing policy and its R&D focus.



Wind turbines at Castiglione Messer, in Italy.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

Another world lies ahead

Nicolas HULOT
President of the Nicolas Hulot Foundation for Nature and Mankind

Tackling climate change is an unprecedented challenge, and all will need to get involved if we are to create a sustainable world.
We can either let time put us face-to-face with inevitable, radical change, or manage the transformation ourselves, over time. In any case, there is no denying that we will be living in an utterly different world tomorrow.
If nothing is done, there is not a democracy, social system or economy in the world that will be able to withstand the combination of fossil fuel depletion, sudden climate turmoil and poverty. I want to believe that it will not come to this, that another world can be created.
We have to change if we are to survive. This reality is forcing societies to examine their conscience, individually and collectively, to understand where we went wrong and the direction in which we now need to move to make progress and improve the human condition, over the long term and in an equitable way. Is this not what civilizations are meant to do?
The ecological threat is such that we need to use our tools differently. We must be more creative, more inventive; we have to create a new paradigm. If we are to avoid scarcity, we must learn to live with less material goods and to tap further into the resources of human interaction in order to strike a balance between material and immaterial capital.
A positive and constructive future thus lies ahead."

CHOOSING wisely

Electricity can be produced from a variety of primary energy sources. Our choice of these sources is crucial to address climate change. Two-thirds of the world's electricity generation now uses fossil fuels, the main cause of greenhouse gas emissions. Fossil fuels are not, however, replaceable and each of them has its own specificity, impact and utility. But the choice of energy source must go hand in hand with energy efficiency, which has a great potential for lowering CO_2 emissions.

DR

ELECTRICITY: A UNIQUE FORM OF ENERGY

Electricity cannot be stored. Electric systems therefore require continuous balancing of generation and consumption. A surge in demand that cannot be met or an injection of unused MWh into the network can cause a blackout of the entire system. Two types of generation facilities are needed: 1.) base facilities that operate around the clock: nuclear, coal, biomass, geothermal, run of river hydro, wind power and 2.) peak facilities that can be called into service instantly to meet extra demand: hydro dams, combustion turbines (gas/fuel oil) and oil-fired plants.

UNDERSTANDING

Energy units

W: Watt, unit of power (1 kW = 1,000 Watts, 1 MW = 1 million Watts, 1 GW = 1 billion Watts). Capacity of EDF's generation fleet in continental France = 96.2 GW.
We: Watt electric.
Wth: Watt thermal.
Wc: Watt peak, capacity of a solar panel at peak sunlight.
Wh: Watt hour, unit of energy produced or consumed (capacity of one Watt running for one hour).
TWh: Tera Watt hour = 1,000 billion Wh. Capacity of EDF's fleet in continental France = 477.4 TWh.

WBCSD scenarios for 2050 based on IEA data

1- *Status quo*:

- Business as usual: 26 Gt[1] of CO_2 emissions from global electricity generation (compared with 10 Gt in 2003)
- + 2 to 4 °C

2- Conditions for a scenario with 5 Gt of CO_2 emissions:

> energy efficiency	– 8.2 Gt
> CO_2 capture and storage	– 4.4 Gt
> development of nuclear	– 2.7 Gt
> of renewables	– 3.8 Gt (of which hydroelectricity – 0.5 Gt)
> of CCG and gas turbines	– 2 Gt
> optimization of power plants	– 0.3 Gt
	Total – 21.4 Gt

1. Gigatonne, one billion tonnes.

2. International Energy Agency report: Electricity Information 2007.
3. Figures from the 2004 global electricity review published in the IEA's 2006 World Energy Outlook.
4. Source: Observ'er 2006.
5. Life Cycle Assessment: method for overall environmental assessment aimed at integrating the CO_2 content (or CO_2 equivalent greenhouse gas emissions) of a plant's activity as a whole, from the supply chain to emissions linked to operations, transmission or distribution, including indirect impact such as methanization in the major hydro reservoirs in tropical regions.

Choice of primary energy sources: advantages and drawbacks

ENERGY SOURCE	Capacity per generation unit	Share of global electricity generation in 2005	Use in electric system	Advantages	Challenges
FOSSIL ENERGY SOURCES:		**66.5% of global electricity generation [2]**			
COAL	250 to 800 MW	**40.2%**	Base and semi-base	• Most abundant resource • Broad geographic distribution • Storable • Easy to use • High output • Flexible	• Heavy • Mining risks • Pollutants (SO_2, NO_x, dust) CO_2: 950g/kWh in older plants; 750 g/kWh in the best; lignite: 1,100g/kWh • Price fluctuation
OIL (heavy oil)	40 to 800 MW	**6.6%**	Peak and extreme peak. Semi-base in some countries	• Easy to use and transport • Storable • Quick to fire-up • High output • Flexible and quick to react	• Depleted within next half century • Pollutants (SO_2, NOx, dust) • Risk of other pollution (oil spills) • CO_2: 850g/kWh • Irregular geographical distribution • Price volatility
GAS	40 to 800 MW	**19.7%**	Base (turbine), semi-base (combined cycle) and peak on short base	• Easy to use • Low-polluting • High output • Flexible and quick to react	• CO_2: 400 g/kWh (combined cycle) • Risk of explosion • Irregular geographical distribution • Price volatility
		Every fossil toe used is one that future generations will not have			
NUCLEAR ENERGY:		**15.0% of global electricity generation[3]**			
NUCLEAR FISSION (uranium)	900 to 1,400 MW	**15.0%**	Base and semi-base	• Mass generation • Vast uranium reserves • Low cost fuel (price stability) • Limited space required	• Legal framework for high level long-lived waste • A certain level of technological and societal development • External, national and international control of facility safety and security levels • Acceptability and information for local residents
		Main substitute for fossil energy with regard to electricity generation, subject to acceptability			
RENEWABLE ENERGY[4]:		**18.5% of global electricity generation (2.44% excluding hydro)**			
HYDROPOWER	250 to 800 MW	**16.6%**	Base and semi-base	• CO_2: 4 to 7 g eq CO_2 /kWh (LCA)[5] • Quick start-up (storage) • Low operating cost • High output	• Geographical constraints • Subject to weather conditions •Environmental impact • Acceptability
WIND POWER	0.2 to 5 MW	**0.6%**	Limited use: when wind is up but not too strong	• CO_2: 3 to 22 g/kWh (LCA) • Not polluting	• Geographical constraints • Random generation • Limited output • Acceptability
SOLAR PHOTOVOLTAIC	100 MW^2 (incident power)	**0.03%**	Decentralized	• CO_2: 50 to 150 g eq CO_2/kWh (LCA) • Integrated in the house or building (roof…)	• Cost of cells • Environmental impact (manufacture) • Day-use only (or batteries) • Space required (2 ha/MW) • Low output
BIOMASS	Up to 500 MW	**1%**	Base and semi-base	• Renewable (if replanted) •Abundant • Substitution for fossil resources • Solution for waste • High output	• Emissions if no replanting to compensate • Choice to make: agriculture for energy or food • Local pollutant (dust, SO_2)
GEOTHERMAL		**0.3%**	Base	• Not polluting	• Geographical constraints • Technically difficult

Energies that do not emit greenhouse gases, excluding LCA, substitutability dependent on: availability (wind, sun), acceptability (hydro, wind), and technical and economical maturity (solar, biomass, geothermal)

OPTIMIZING
the generation mix

The EDF Group has opted for an industrial investment strategy aimed at safely meeting the rising demand for electricity. Its choices are based on striving to be competitive and tackling CO_2 emissions, all the while taking into account the context of the countries where it is active.

UNDERSTANDING

Electricity's ecological role

Electricity is a major asset in tackling climate change. Production of electricity depends on an energy mix which invariably includes a share of carbon-free sources (nuclear, hydro and other renewables). In the long term, the quantity of CO_2 emitted is bound to decrease as best available technologies replace those that are less ecologically sound.
Electricity, whether used for transportation, industrial motors, heating, etc., does not emit any greenhouse gases. It also eliminates local forms of pollution such as noise, dust, harmful gases, grime and odors. Giving preference to electricity has a decisive impact on lowering CO_2.

ADAPTING ENERGY CHOICES

The EDF Group selects the energy mix best suited to the circumstances of each country: resources, structure of the country's existing generation capacity, cultural acceptability of the various energy forms, etc. It also aims to reduce its emissions beyond the 20% reduction set by the European Union for 2020. To this effect, the EDF Group is planning to renew its nuclear fleet, maintain its hydro capacity, develop renewables, modernize fossil-fired plants and downgrade its most polluting plants.

France

Electricity generation in France is 95% CO_2 free (excluding LCA [1]) thanks to its nuclear and hydro facilities. EDF is also investing in renewable energy (wind power, solar photovoltaic and biomass) and bringing up to date the fossil-fired plants used to meet peak demand. In the overseas departments and in Corsica, which are very dependent on imported fossil fuels, EDF is continuing to invest in renewables, which already provide 24% of energy consumed.

Italy

Edison is banking on CCGT [2] for its very high output combined with CO_2 emissions that are only half that of traditional plants. From 2001 to 2007, this company brought into service eight CCGT plants (for a total of 7,000 MW) of which four held by Edipower. It also operates 68 hydro plants (1,840 MW) and 23 windfarm concessions (256 MW). With regard to wind power, Edison brought 10 MW into service in 2007, launched construction of another 84 MW, and obtained authorization to build 30 MW more.
Fenice, which operates industrial cogeneration in Italy, Spain and Poland, signed three contracts in 2007 for new facilities totaling 50 MW.

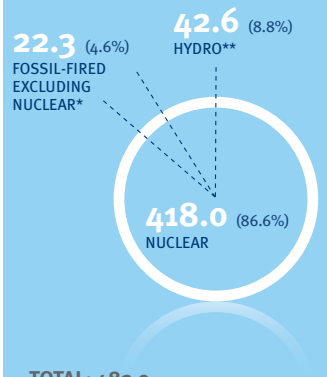
Germany

EnBW emits the least CO_2 per kWh of any German electricity company thanks to its hydro and nuclear plants. In keeping with Germany's policy of withdrawal from nuclear, the Obrigheim plant (357 MWe) was shut down in May 2005. EnBW is going to build a very high output coal-fired plant (900 MW) in Karlsruhe.

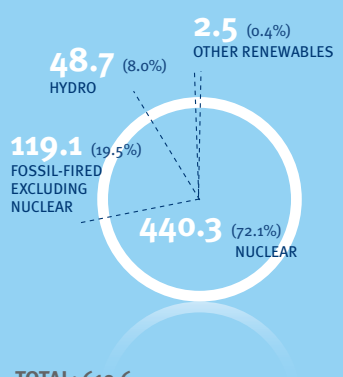
United Kingdom

EDF Energy, which relies on gas and coal, committed in 2007 to reducing its carbon emissions per kWh generated by 60% between now and 2020. It also launched the construction of a CCGT plant (1,311 MW) and an offshore windfarm (90 MW).

BREAKDOWN OF EDF 2007 GENERATION (France) in TWh



BREAKDOWN OF EDF GROUP GENERATION (consolidated figures) in TWh



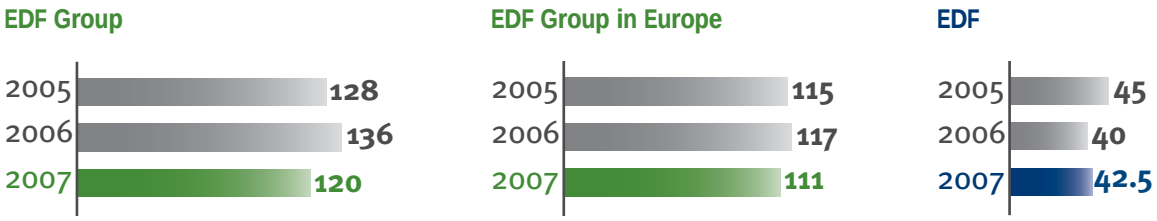
*4 TWh in Corsica and overseas departments.
**1.4 TWh in Corsica and overseas departments.

1. Life Cycle Assessment.
2. Combined-cycle gas turbine.

MÉDIATHÈQUE EDF – WILLIAM BEAUCARDET

Cruas nuclear plant. EDF's generation in France is 95% CO_2-free thanks to nuclear and hydro (excluding life cycle analysis).

CO_2 EMISSIONS FROM HEAT AND ELECTRICITY GENERATION
(g/kWh GENERATED)[1]



1. Group figures for 2007 do not include Edison or Dalkia.

INSTALLED CAPACITY AT 12/31/2007 (MWe)

	Nuclear	Fossil-fired (excluding nuclear)	Hydro	Other renewables	TOTAL
Total EDF parent company	63.1	14.5	20.4	0.0	98.0
Total Europe excluding EDF parent company	2.7	19.6	2.8	1.4	26.5
Total Europe including EDF parent company	65.8	34.1	23.2	1.4	124.5
Total rest of world	0.0	2.2	0.0	0.0	2.2
Total EDF Group	**65.8**	**36.3**	**23.2**	**1.4**	126.7

GENERATION AT 12/31/2007 (TWh)

	Nuclear	Fossil-fired (excluding nuclear)	Hydro	Other renewables	TOTAL
Total EDF parent company	418.0	22.3*	42.6**	0.0	482.9
Total Europe excluding EDF parent company	22.3	85.0	6.1	2.5	115.9
Total Europe including EDF parent company	440.3	107.3	48.7	2.5	598.8
Total rest of world	0.0	11.8	0.0	0.0	11.8
Total EDF Group	**440.3**	**119.1**	**48.7**	**2.5**	610.6

* Of which 4 TWh in Corsica and overseas departments.
** Of which 1.4 TWh in Corsica and overseas departments.

UNDERSTANDING

The nuclear renaissance

Renewable energy sources and energy efficiency alone cannot compensate for the depletion of fossil resources nor suffice to reduce greenhouse gas emissions at a time of soaring demand for electricity. Nuclear produces a readily available, competitive, carbon-free kWh. Several countries are already launching new construction of nuclear reactors or are planning to do so.

Forecast

A two-fold increase in demand for electricity between 2005 and 2030.

In addition, EDF Energy intends to play a role in Britain's nuclear relaunch.

CONTRIBUTING TO NUCLEAR REBUILD WORLDWIDE

France

EDF operates 58 reactors. Safety is its top priority. The experience it has gained managing a nuclear fleet of this size and the results obtained have made the company a global reference. To prepare for renewal of its existing fleet and to bolster its base generation facilities, EDF has committed to building an evolutionary EPR reactor (1,650 MW) in Flamanville. Safety systems have been reinforced in this reactor and its economic and environmental performance has been stepped up to achieve a 17% reduction in fuel consumption per kWh generated, and a 30% reduction in waste and effluents. The first concrete was poured at the end of 2007. EDF is putting to use its operating and integrated engineering experience as it oversees the construction of Flamanville.

United States

EDF and Constellation Energy, which operates five nuclear power plants, signed in 2007 a partnership that sees in the creation of Unistar Nuclear Energy (UNE), a 50/50 joint venture. UNE will develop, build, own and operate, alone or in partnership with other American players in the sector, these US EPR nuclear plants in the United States. First step? A series of four US EPR reactors, the first of which should be brought into service in 2015.

China

China is planning to have a 40 GW nuclear fleet by 2020. EDF, which contributed to building and bringing on stream the plants at Daya Bay and Ling Ao, signed an agreement in 2007 with its longstanding partner China Guandong Nuclear Power Company (CGNPC). In Taishan, the joint venture (about 1/3 EDF and 2/3 CGNPC) will build and operate two EPR type reactors on the model of Flamanville 3.

United Kingdom

After a long public debate begun in 2006, the British government decided to relaunch nuclear beginning early 2008. Through its subsidiary EDF Energy, EDF will participate in this renewal and has already submitted an application for certification of the EPR (Flamanville 3 model) to the British authorities.

South Africa

In light of its historical ties with South Africa's national electricity company ESKOM, EDF has offered to contribute, when the time comes, to developing EPR type nuclear plants in that country.

EPR construction site at Flamanville. Seven hundred people are currently employed for the project and as many 2,000 will be employed in all.

MÉDIATHÈQUE EDF – ALEXIS MORIN

HYDROPOWER: BOLSTERING THE WORLD'S PRIME RENEWABLE ENERGY

In 2007, EDF began construction on two sites to meet peak demand. In Corsica, it is building the Rizzanese dam (54 MW), to come on stream in 2012. On Reunion Island, it is adding 80 MW of capacity (up 25%) to the Rivière de l'Est dam. In Gavet in the Alps, it is planning to replace six older plants by a single, more powerful unit. EDF is also continuing its SuPerHydro project to enhance the safety and performance of its hydro fleet.

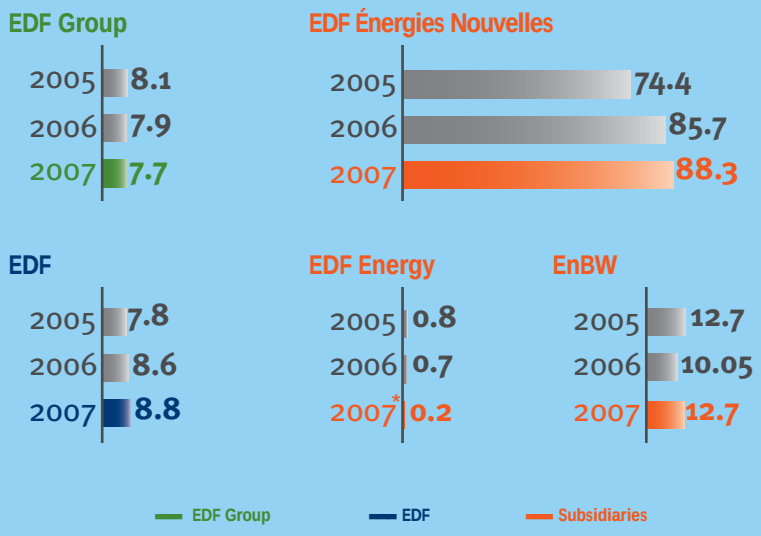
In Germany, EnBW is lifting the capacity of its run-of-river plant at Rheinelden from 26 MW to 100 MW. Carbon free, the plant will be producing enough electricity to power 200,000 households by 2010.

In Laos, EDF is building the Nam Theun 2 dam (1,070 MW) as primary investor, contractor and future operator up to the time of transfer. The plant will be brought into service in 2009.

In Madagascar, EDF is going to build a micro-installation (6 MW). This project is backed by the e8 and financed by the European Union and the German bank KfW [2].

ELECTRICITY AND HEAT GENERATED FROM RENEWABLE ENERGY SOURCES FOR EDF, THE EDF GROUP AND A NUMBER OF AFFILIATES (in %)[1]

(Note: hydro generation includes pumping).



1. 2007 data include electricity and heat.

* This reduction is explained by the change in calculation method in 2007.

DEVELOPING OTHER RENEWABLES

The development of renewable energy is a major strategic priority, carried largely by EDF Énergies Nouvelles (EDF EN, 50% EDF). Renewable energy is contributing an ever larger share of the Group's energy mix, especially wind power, which represents 80% of EDF EN's generation. EDF is investing in boosting the profitability of renewables and is active in technological innovation.

Wind power

In 2007, EDF EN brought new windfarms into service: Luc-sur-Orbieu (16 MW) in France, Sant'Agata (72 MW) in Italy, Red Tile (24 MW) in the UK, Kalyva and Perdikovouni (36 MW) in Greece, and Fenton (205.5 MW) and Pomeroy (198 MW) in the United States. The company started major worksites in France (13 farms: 328 MW) of which Salles-Curan (87 MW), in Portugal with Arada (112 MW) and Altominho (240 MW) and the United States with Goodnoe (94 MW). It also launched, as part of the C-Power consortium (20.8% EDF EN), construction of 30 MW of offshore capacity off the coast of Belgium. In the United States, EDF EN signed three contracts for the operation and maintenance of turbines with an overall capacity of 868 MW, of which 508 MW with MidAmerican Energy.

Edison launched a 2008-2013 program that provides for €1 billion to develop renewables (hydro and wind) in Italy and elsewhere. At the end of the program, Edison will have 2,700 MW in renewable capacity.

2. KfW: development bank.

Investments in France

> Construction of the Rizzanese Dam: €150 million
> Extending capacity at Rivière de l'Est: €25 million
> SuPerHydro: approximately €560 million between 2007 and 2011

20,000 MW

EDF Group, European Union leader in hydropower

FOCUS ON

Wind power at the EDF EN Group

> Net capacity held by EDF EN: 871.4 MW (2007: + 265 MW)
> Target of 3,300 MW installed between 2008 and 2010
> Under construction: 1,095 MW; in planning stages: 10,000 MW

Edison – Industrial Plan 2008-2013

> €1 billion investment in renewables
> 2,700 MW installed capacity in Italy and other countries in 2013

175 GWh
of green energy generated using biomass in Polish power plants in 2007

—

€900 million
for new fossil-fired generation in France by 2010

—

57%
actual output for Edison's Simeri Crichi CCGT plant equipped with last generation gas turbines

—

Biomass

EDF EN is pursuing its biomass projects (notably straw and wood) using combustion and gasification technologies. With Tiru, a specialist in this sector, EDF EN is using biomass to produce electricity, heat and biofuels. In France in 2007, Tiru (51% EDF) signed a five-year partnership with OWS, France's second largest constructor of methanation units. Tiru will act as integrator and operator on behalf of local authorities. In Belgium, EDF EN took a 25% interest in the capital of the Ethanol affiliate Alcofinance. In Poland, after ERSA and Kogeneracja, EC Kraków obtained authorization from public authorities to use biomass in co-combustion with coal (5% of fuel). Another project aimed at sharing experience with biomass, particularly green certificates, was also launched. Direct injection techniques for using more biomass are under study at several universities and EDF R&D.

Solar photovoltaic and other renewables

The EDF Group is working to improve the technologies and reduce the costs involved in solar photovoltaics. EDF R&D is researching thin films and polymer or stained cells. In France, Tenesol (45% EDF) began manufacturing photovoltaic panels in its new factory in Toulouse. EDF EN stepped up development of solar photovoltaic projects and signed module supply contracts with America's First Solar (for 230 MWp) and United Ovonic LLC (30 MWp) as well as with Canadian Photowatt International (67.5 MWp). In addition, through its program Access to Energy, EDF and its partners installed a total of 2 MWp in individual solar power systems in Africa.

The Group is currently assessing the technical and economic advantages to marine current turbines. Preliminary research off the coast of Bréhat (Brittany) and Barfleur (Normandy) and impact studies were continued in 2007 in concertation with government agencies, public officials and fishermen. The Paimpol Fishing Committee lent its expertise to EDF in assessing how the marine environment would react to marine current turbines off the coast of Bréhat.

Électricité de Strasbourg (88.34% EDF), with the contribution of EnBW, completed its experiment in deep geothermal at Soultz-sous-Forêts by bringing into service a 1.5 MWe generation unit in early 2008.

Optimizing fossil-fired plants

Used primarily to meet peak demand or unexpected shutdowns of other generation facilities, EDF's fossil-fired plants covered 4% of generation in France in 2007, emitting 20.5 Mt of CO_2 (42.5 g/kWh generated), making the company the country's second largest emitter. When the fossil-fired plants belonging to EDF Energy, EnBW, Edison and the plants in Poland and Hungary are factored in, total Group carbon emissions in Europe amounted to 77.88 Mt in 2007.

The Group is investing in best available technology in order to boost output of its fossil-fired plants and to reduce their carbon footprint and other pollutants (SOx and NOx).

France

EDF is bolstering its peak capacity. The Vitry combustion turbine [3] (125 MW) was coupled to the grid and the Cordemais 3 fuel oil-fired plant (700 MW) was brought back into service after being shut down for twelve years. Aramon 1 and Porcheville 1 will also be brought back into service in 2008. In 2010, EDF will be renewing 6 of its 7 diesel plants in the overseas departments and Corsica.

New investment was decided in 2007: 555 MW of new combustion turbines in Vaires-sur-Marne and Montereau will be added to the 500 MW already planned for 2008 and 2009 in Vaires-sur-Marne and Arrighi. A 440 MW CCGT plant will be built in Blénod and two other 465 MW plants will replace the fuel-oil units in Martigues. Identical to EDF Energy's three future CCGT plants for West Burton, they will offer the lowest CO_2 and NO_x emissions in the fossil-fired fleet and will avoid sulfur emissions.

Europe

In 2007, Edison brought into service two 800 MW CCGT plants in Simeri Crichi and Turbigo (50% Edipower). Together with Hellenic Petroleum, Edison forged Greece's second largest energy operator which will have an installed capacity of 1,400 MW. Projects already underway should make it possible to up this capacity to 2,000 MW.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

Manufacturing photovoltaic panels at the Tenesol factory in Toulouse, France.

EnBW is going to build a 900 MW supercritical coal plant in Karlsruhe where a gas plant is also being considered. EnBW and the University of Stuttgart started to test a technique for capturing SO_2 using lime that curbs loss of output.
In Hungary, Bert's energy eco-efficiency program succeeded in reducing by an average 10% fuel consumption and the CO_2 specific emissions of its three CCGTs.

Playing the carbon market

The European system of CO_2 quotas applies to EDF as it does to all large industry. The Group is managing its generation fleet emissions and is preparing for the more demanding period 2008-2012.
EDF Trading (100% EDF) is a major player in European CO_2 emission permits trading. EDF Trading is also active on the CDM (clean development mechanism) market.
In November 2006, EDF launched a Corporate Carbon Fund, entrusting its management to EDF Trading and bringing together the EDF Group companies, EDF, EDF Energy, EnBW and Edison. By combining the Group's capacity to buy emission credits, these EDF Group companies are able to consolidate their strategy of CO_2 coverage by diversifying their resources in emission permits. This enables them to uphold their environmental commitments under optimal economic conditions.

3. Turbine à combustion or TAC.

EDF Trading wins Energy Business Award 2007

for Excellence
in Emission Markets.

UNDERSTANDING

CO_2 emission quotas

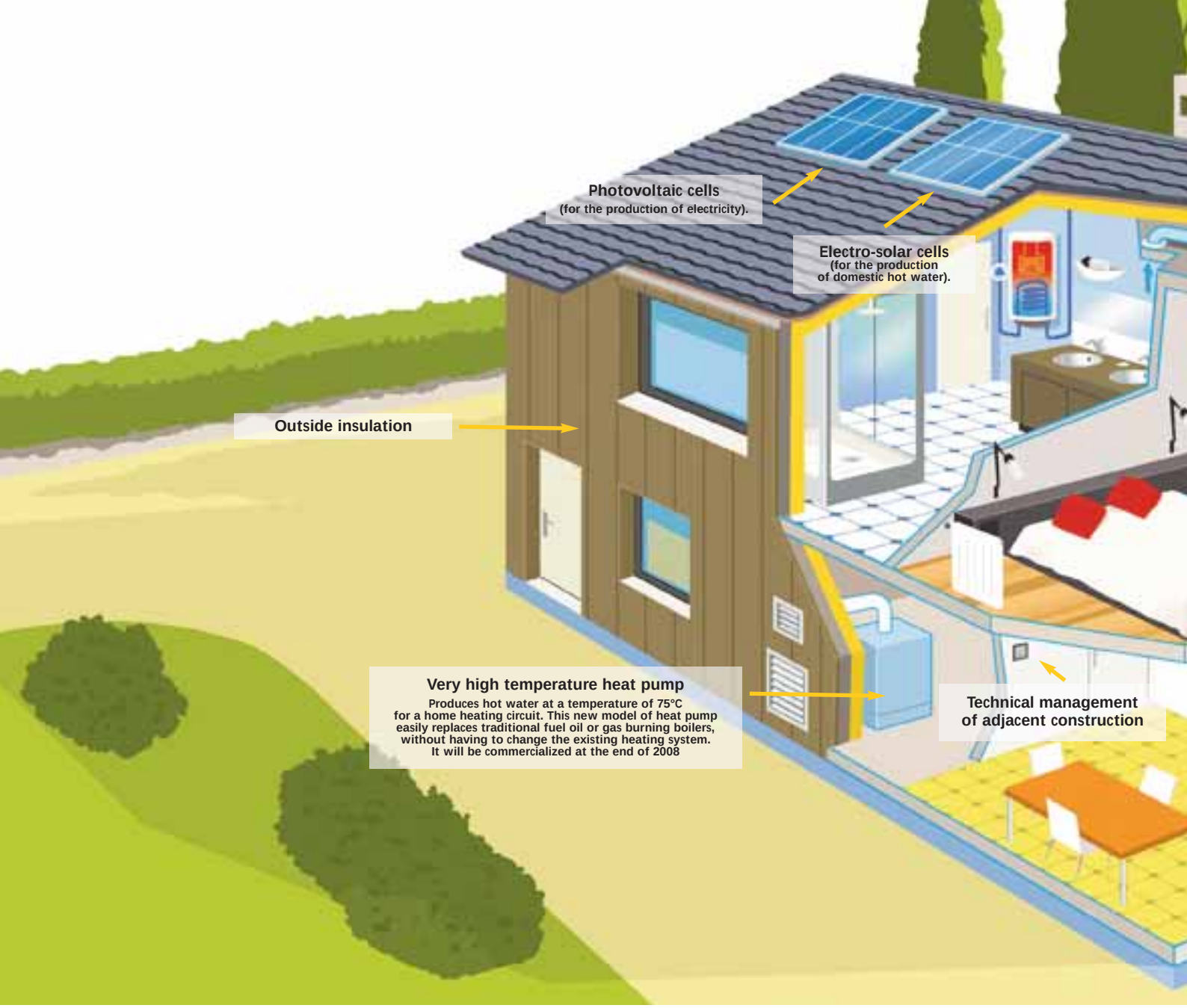
As an incentive to industrial players to reduce their carbon emissions, the European Union ETS Directive sets national emission ceilings which governments break down between the country's economic players. The latter can either purchase the CO_2 emission quotas needed to remain within imposed limits, or sell them. The quota market thereby rewards those with low CO_2 emissions.

Capture and storage of CO_2

The capture of CO_2 in fossil-fired plants and its storage underground (depleted oil or gas reservoirs, deep salt aquifers, unmineable coal seams) constitutes a considerable technological and financial issue. Underground storage capacity is estimated at between 1,000 and 10,000 billion tonnes of CO_2. By comparison, 30 billion tonnes of CO_2 are emitted annually worldwide. Significant R&D investment is being made to render this solution economically attractive and to ensure the reliability of long-term storage. EDF R&D is contributing to this effort. Several experiments are underway in Europe, the United States and Canada.

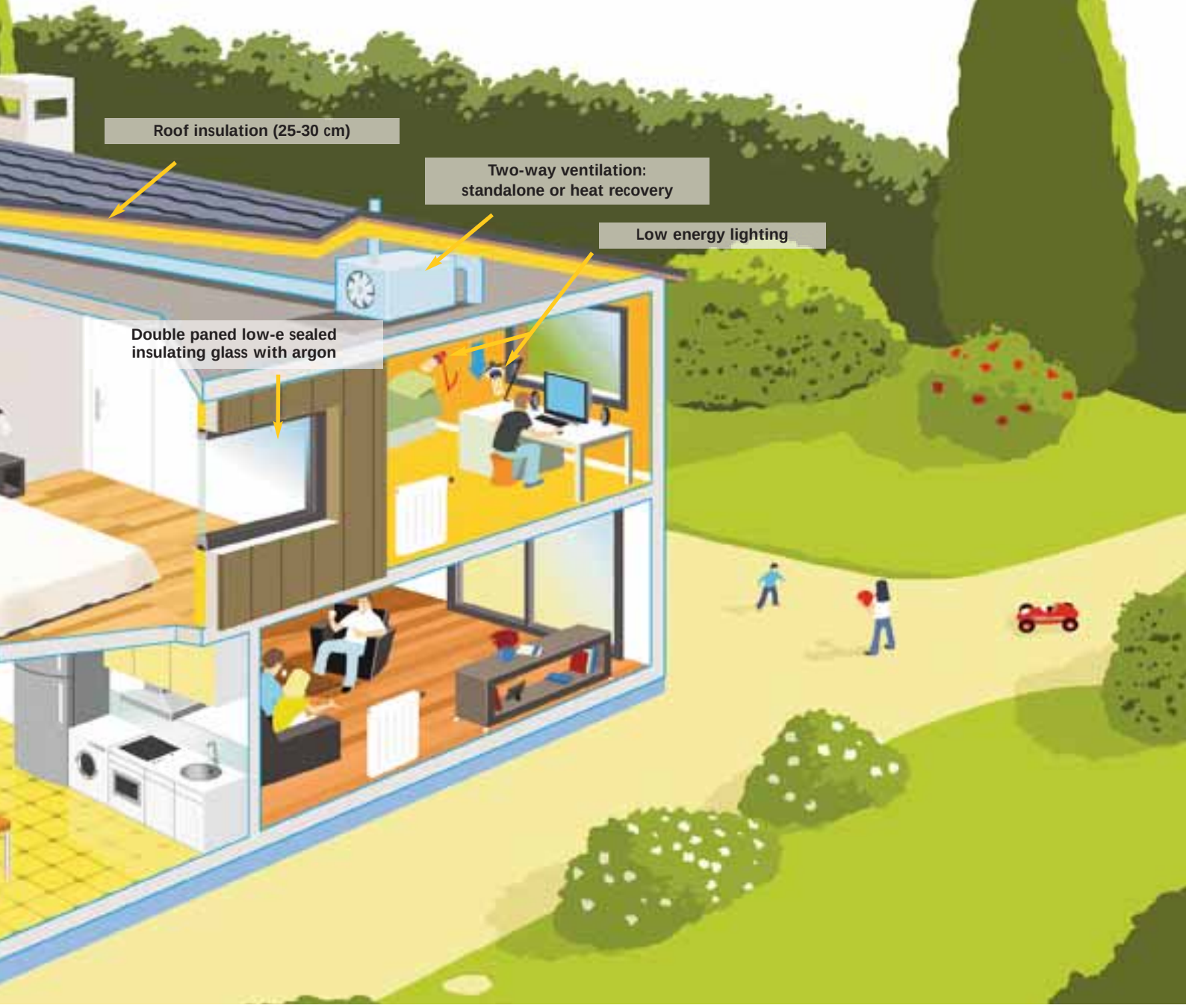
Clean development mechanisms

Created under the Kyoto protocol of 1998, CDM encourage the transfer of low carbon or carbon free technologies to developing countries. By investing in projects that reduce greenhouse gases in these countries, an energy company can receive CO_2 emission quotas in its country of origin.



Low carbon house: eco-efficient solutions for an existing building (installation as part of renovation works).

CONSUMPTION: promoting energy eco-efficiency



Energy eco-efficiency has become a major lever for the reduction of CO_2 emissions. It combines optimization of energy consumption with local, carbon-free generation such as distributed renewables.
The EDF Group has made energy eco-efficiency the key to its customer offer.

UNDERSTANDING

Energy eco-efficiency

Energy eco-efficiency puts the customer at the core of energy choices.
Customers:

- generate their own energy with the development of distributed renewables,
- take responsibility for the quality of their home or workplace and insulation,
- monitor their own energy consumption
- monitor their own reduction of CO_2 emissions.

EDF's selection of energy eco-efficient offers and services ranges from advisory services to the installation of renewable energy based solutions.

UNDERSTANDING

White certificates

White certificates, or energy savings certificates, in France target a reduction in final energy consumption intensity [1] of 2% per year by 2015 [2] and 2.5% by 2030. This mechanism compels EDF to save 30 TWh in its own installations or those of its customers between 2006 and 2009.

1. Ratio of energy consumption to economic growth.
2. Between 1990 and 2004, final energy consumption intensity dropped by 0.9%.

2007
Sustainable Development Awards
EDF GROUP

EnBW's industrial customers in Germany benefit from a number of energy eco-efficiency services: on-line monitoring of consumption; installation audits to avoid excess load; Energy Efficiency Watchers, a local network of 10 to 15 companies working together on potential savings; Energy Days, on site training for colleagues.

RESIDENTIAL CUSTOMERS

EDF's *Bleu Ciel*, a new brand of energy eco-efficiency

In 2007, EDF brought together all of its gas and electricity offers and energy eco-efficiency and distributed renewables services for customers in continental France under the brand *Bleu Ciel*. Énergie Solaire is a free advisory service on the technical and financial feasibility of installations, while the offers *Énergie Solaire Clé en Main, Énergie Solaire Production Garantie* et *Énergie Solaire Financement Adapté* enable customers to produce their own energy.
Two other offers, *Objectif travaux and Estimation* travaux provide advice on building insulation while the service Suivi conso helps customers better manage their consumption.
The Équilibre carbone offer guarantees electricity supply from renewable sources.
EDF has been offering adapted energy eco-efficiency solutions to its customers in Corsica and the overseas departments for several years.

Energy eco-efficiency on-line

EnBW created a virtual house showing sources of potential energy savings at www.enbw.com. Internauts can download brochure with energy saving tips.

R&D expertise

EDF customer offers rely heavily on R&D. For instance, EDF's R&D teams have developed a very high temperature heat pump that replaces traditional furnaces, cutting heating bills by half and reducing carbon emissions five-fold [3].
Insulation is also a subject of research: in the short term, outside insulation; mid term, increasingly efficient insulation; in the long term: active walls capable of stocking and rendering solar heat. EDF R&D is also pursuing the development of less expensive photovoltaic cells through its project Cisel.

Several events have contributed to involving customers in and raising awareness on issues of day-to-day eco-efficiency:
– *Bleu Ciel* tour "Together let's create our own energy": more than 3,000 visitors in eight French cities.
– Sales in French news kiosks of the guide E= less CO_2 with proceeds going to eco-efficiency projects.
– 1 million low energy light bulbs purchased in Corsica and in the overseas departments in one year through special promotions by EDF regional offices and Ademe.
– 3,000 intelligent meters rolled out by EDF Energy to help monitor consumption and save energy. EnBW and Yello do the same.

PROFESSIONALS AND COMPANIES

EDF customer offers are structured around energy savings and the reduction of CO_2 emissions and the environmental impact of its business. EDF offers its customers consumption monitoring and audit services based on which it develops and installs adapted technical solutions.
The Equilibre product range guarantees, through green certificates delivered by Observ'er, the renewable origin of kWh purchased. Other options, kWh Equilibre+ and Certificats Equilibre+ actually contribute to R&D's photovoltaic project Cisel. With Carbone Optimia, EDF offers industrial players a review of their carbon emissions and quota trading solutions. Puissance Excelis is EDF's offer to major industrial players of medium

FOCUS ON

Training

50,000 professionals from the construction industry will be able to learn about energy eco-efficient techniques through a training program created by EDF, the French building federation and energy and environment technical association, Ademe and Capeb. This project is eligible for white certificates.

Olympics

EDF is the "sustainable partner" of the London Olympics. EDF Energy will supply the energy for the 2012 Olympics using renewables and a low carbon fuel for the Olympic torch and flame. The highlight of this partnership will be the EDF Energy 2012 Carbon Challenge which encourages households to use practical measures to reduce their energy footprint by 15% from now to 2012. 25,000 households had signed on by the end of 2007.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

The PSA Sept-Fonds foundry, where EDF conducted an energy recovery project. The energy recovered is used to heat the administrative offices.

voltage generators that conform to standards prohibiting PCB [4] and PCT [5].
EDF Energy and EnBW are also offering customers energy eco-efficient solutions adapted to their own countries. Edison has a similar program for select, direct major customers. Fenice provides its industrial customers with energy services that bear a commitment to improving energy performance.

LOCAL AUTHORITIES

Local authorities and low-income housing agencies also benefit from adapted energy eco-efficient offers and services and from technical solutions based on renewables. For instance, the Diagnostic EnR Equilibre offers an energy audit, monitoring of consumption, a carbon review and assistance with installing distributed renewables.
In Germany, EnBW and its partners are continuing their Energieeffiziente Schulen program to improve energy efficiency in school buildings (insulation and heating).

3. Tests conducted in 2007 on a 160 m² (1,700 sq. ft.) house.
4. PolyChloroBiphényle.
5. PolyChloroTerphényle.

Heat pump

The Ovive swim center in Moulins, France has opted for an EDF heat pump solution to heat pools and showers and to heat or cool the building. This heat pump draws calories from the water table in Allier.

45,622
***Equilibre*® offers subscribed to by professionals and companies in 2007**

FOCUS ON

"Energy on the go" service

Sodetrel (100% EDF) offers local authorities and operators of public transportation in France an "energy on the go" service for buses, trucks, river shuttles and small electric trains. This contract combines supply, maintenance and recycling of batteries. Icade chose this service for the two river shuttles that have served its Paris headquarters since 2007.

Energy saving

EDF and ADEME helped the local authorities hosting the 2007 World Rugby Cup save energy and promote renewables at the same time. After an energy audit, 2,600 m² of photovoltaic panels were installed at the Geoffroy Guichard stadium in Saint-Étienne. These panels can provide up to 205,000 kWh per year thus avoiding 20 tonnes of CO_2 per year.

INVESTING
in research

EDF R&D contributed to Group strategy by improving the environmental performance of the generation fleet, by facilitating the industrial emergence of renewables and by developing eco-efficient energy uses. In France, it contributed to further thinking on these issues at the national conference on the environment *(Grenelle de l'environnement)* in 2007.

€100 million

(approximately)

EDF R&D: nearly a third of spending in 2007 devoted to studies aimed at protecting the environment

—

Creation of a laboratory

with the French engineering school Ponts et Chaussées and the French center for the study of marine and river techniques devoted to fluid mechanics as applied to hydraulics and the environment.

LIMITING CO_2 EMISSIONS AND ENVIRONMENTAL IMPACT OF GENERATION

In response to requests from Group operating entities, EDF R&D teams develop tools to enhance performance and safety of generation facilities. They contribute to developing the Group's renewables, working toward the industrial emergence of the most promising technologies: wind power, marine energy, photovoltaics, biomass…

Because wind power is vulnerable to the whims of the weather, EDF R&D has refined a daily forecast based on analogous days in the past. It is working toward hourly forecasts and wind-generation correlations.

As for photovoltaic energy, work was done on second generation thin film cells and on the market since 2006, aims at reducing production costs. A third generation project aims at boosting conversion output to over 50% (compared with the present 20% at best).

EDF's research on fossil-fired generation focuses on technologies that are able to reduce, and later eliminate carbon emissions (capture and storage).

In the field of hydropower, EDF R&D worked out 3-D modeling of how the marsh of Berre in France functions. Aside from the inflow of freshwater from the St-Chamas plant and of seawater from the canal of Caronte, the effects of wind, evaporation and tides in the gulf of Fos-sur-Mer were factored in. This model helps to assess variations in salinity in the marsh depending on how the plant is working. Goal: optimize operations at the St-Chamas plant while respecting the marsh ecosystem.

PREPARING ECO-EFFICIENT CUSTOMER SOLUTIONS

EDF R&D supports the sales and marketing policy focused on eco-efficient customer offers. At the end of 2007, EDF R&D, with support from Edison, created Ecleer, the European Centre and Laboratories for Energy Efficiency Research. Ecleer's first partners are the engineering school *Ecole des Mines de Paris,* and the Federal Polytechnic of Lausanne. Research focuses on heat pumps and highly energy efficient technologies for use in industry. Together they are completing tests on energy performance in equipment and

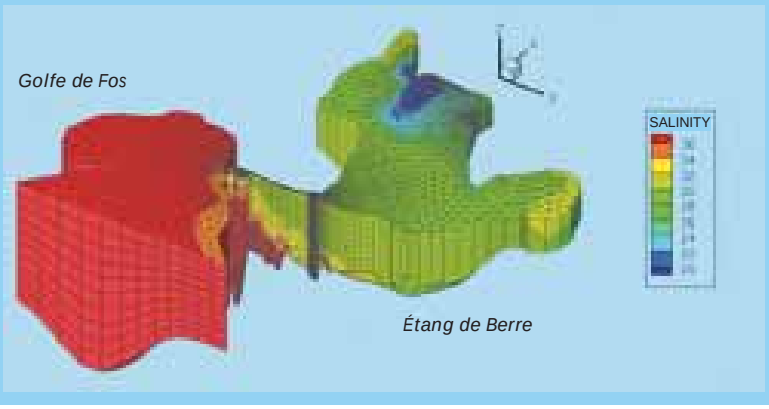
FOCUS ON

The need to adapt generation systems to climate change is mobilizing researchers. After modeling the thermal behaviour of the full length of the Rhone River; EDF R&D and its partners simulated the impact on water levels and temperature of climate change as forecasted in the last IPCC report. Similar research is underway on the Loire and Garonne rivers.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

EDF R&D is improving the performance and safety of the Group's facilities. Here, work being done on the boucle CARERRA to optimize the reactor cooling system during shutdown.

3D MODELING OF THE *ÉTANG DE BERRE* MARSHLAND



buildings, which began in 2003 in Renardières, France.

For industry and retail, efficient refrigeration systems constitute a considerable source of energy savings. EDF R&D is exploring the potential of predictive command, which adjusts refrigeration in light of anticipated loads to be cooled.

EDF R&D is partner to the municipality of Saint-Dizier, for which it did a precise energy review based on property registers and proposed residents adapted solutions for reducing consumption.

EDF and Toyota formed a technological partnership in 2007 that launched Europe's first experiment on a rechargeable hybrid vehicle, for use in the Group's fleet. This vehicle combines a gasoline motor and an electric motor that can be recharged in one of two ways: while running (drawing energy on deceleration) or plugged into the grid. Using primarily electrical energy for short distances, this rechargeable hybrid vehicle cuts down on carbon emissions and limits reliance on fossil fuel. In addition, EDF and Toyota developed a system of recharging from a home plug or public plug that recognizes the vehicle, facilitates remote billing and encourages recharging during periods of low demand, further reducing carbon emissions.

The EDF Group is pursuing its experiments on new generation electric vehicles, and notably the Cleanova, which has a high output electronic engine in an all electric or hybrid rechargeable version developed by Dassault *Systèmes de Véhicules Électriques* (SVE).

12 R&D Challenges

EDF's medium and long-term research is structured around 12 R&D Challenges that mobilize several hundred researchers and many partners both in and outside France. Several themes involve environmental protection, for instance:

> Anticipating climate constraints on water resources,
> Increasing accuracy in describing environmental impact of installations,
> Anticipating the new energy landscape,
> Developing energy efficient technologies and services for the construction industry,
> Improving energy efficiency in industrial processes,
> Innovating in the area of renewables and storage.

MINIMIZING IMPACT

All of the EDF Group's industrial activities interact with our natural environment. The Group is taking responsible action by seeking to better understand and limit its impact on the environment and health. It is developing dialogue and cooperation with local stakeholders and involving all of its teams, operators and researchers.
Group policy in this area is grounded in systematic monitoring, continuing progress on processes and equipment, and consolidating the Group's corporate safety culture.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

Combined-cycle gas turbine plant at Simeri Crichi, Italy.

Christian Schwoerher,

President of Natural Reserves of France

Human activity impacts biodiversity every day. It is rarely mentioned that in France, according to the UICN red list, 640 animal and plant species will be threatened with extinction in the years ahead.
Yet the fact is that biodiversity – the variety of ecosystems and life forms – is the key to our equilibrium, even to our survival. Natural reserves are helping to build citizen concern about nature and its protection.

Preserving our natural heritage without assigning a market value to it is indispensable to our future, but often seen as a luxury concern or even a constraint.
We need to make it clear how important it is to help man and nature live together. This does not mean that we have to seal nature off from the rest of the world, or create sanctuaries that could be compared to quaint zoological gardens. The underlying principle is that we need to preserve the balance that naturally exists.

Working to restore this balance is a fundamental challenge both for individuals and society as a whole.

Nature conservation is closely linked to broader issues relating to the environment, water and air pollution, erosion, large public works, etc. Recognizing and working to prevent these threats is an important step in developing an overall, more realistic approach.
The corporate world has grasped the importance of the issue. The task now is to involve more companies in helping guarantee that spatial planning factors in fundamental ecological concerns.
With companies like EDF contributing their technical expertise, we can achieve what is now recognized as a real need: assuring that our waterways continue to run freely and continuously.

It is my belief that we should make it our steadfast goal to reconcile economic activity with social development and environmental protection."

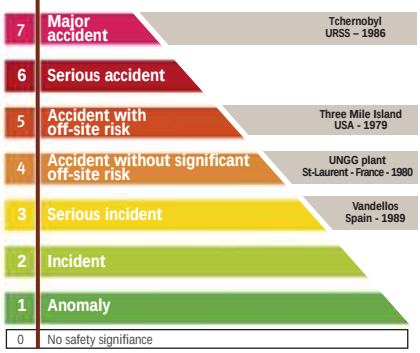
GUARANTEEING safety and security of infrastructure

When operating its plants and networks, EDF makes safety the top priority. Safety is a design feature of electrical works and is continually monitored. EDF safety policy involves mobilizing employee awareness and significant investment. Safety at EDF's nuclear plants is controlled by independent authorities.

UNDERSTANDING

The IAEA's "INES" scale

In use since 1991 by sixty different countries, INES (International Nuclear Event Scale) provides a common scale for assessing the seriousness of an incident or accident and an easy to understand point of reference for the public. It also applies to the transportation of radioactive materials. Events are rated on a scale of zero to seven, from mere anomaly to major accident. A level one event corresponds to a breach of operating rules, for instance exceeding a threshold. (See diagram).



NUCLEAR SAFETY AND RADIOPROTECTION

Constantly progressing on safety

A major priority, safety, is monitored internally through audits and global assessment by the Senior Vice President, Nuclear Safety and Radioprotection, and externally through the French Nuclear Safety Authority (*Autorité de sûreté nucléaire* - ASN) during its 400 inspections. EDF is constantly improving safety as it seeks to improve everyday operational efficiency and equipment. For the second year in a row, only level 1 (INES scale) safety events were recorded, and frequency is dropping.

Sharing best practice internationally

The Osart [1] and IAEA [2] reviews, conducted at the request of the Nuclear Safety Authority, led to operating recommendations for improving safety and radioprotection. The Osart review of the Chinon plant in 2007 distinguished innovative practices: safety working groups, radioprotection training, and radiological inspection of transportation.

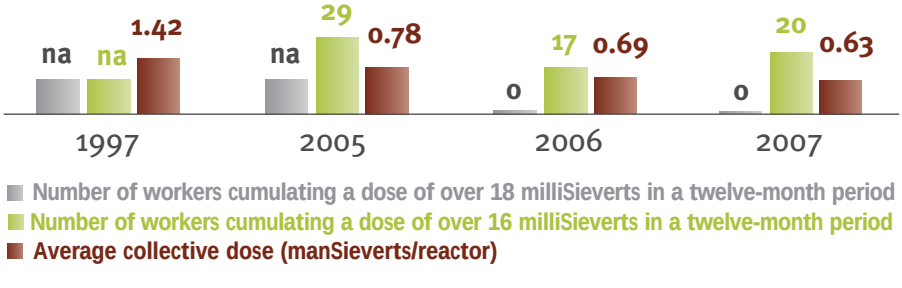
Similarly, WANO [3] Peer Reviews conducted at EDF's request foster sharing of best practice internationally. In 2007, Peer Reviews were conducted at the Blayais, Cruas, Fesseheim and Penly plants.

Reinforcing radioprotection

Employee exposure to radiation is rigorously controlled. Experts, doctors and others are working to reduce doses by integrating radioprotection right into the design of sites, by limiting exposure time and by bolstering means of protection. Prevair software is helpful in this respect. EDF is using new dosimeters equipped with an alarm.
The average collective dose per reactor has dropped by more than half in the last ten years (0.63 manSieverts per reactor in 2007, 1.42 mSv in 1997). Individual exposure is much lower than the regulation 20 milliSieverts per year; in 2007, 20 EDF employees and subcontractors received a cumulative dose of 16 mSv over the course

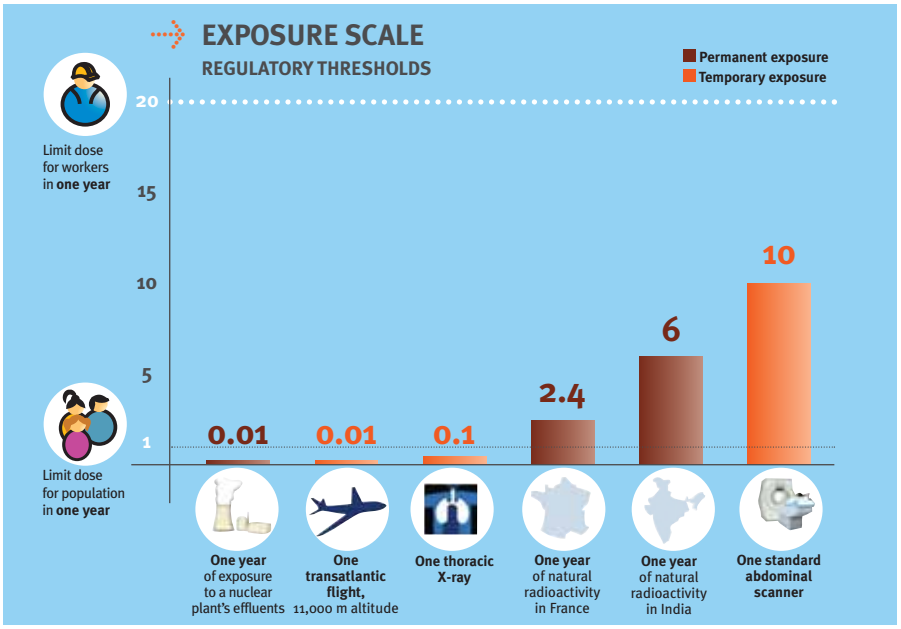
1. Operational Safety Assessment Review Team.
2. International Atomic Energy Agency.
3. World Association of Nuclear Operators.

RADIOPROTECTION



MÉDIATHÈQUE EDF – FRÉDÉRIC SAUTEREAU

Exposure to nuclear radiation among EDF employees and service providers is below regulatory limits. In ten years, the average collective dose per reactor has been more than halved.



NUCLEAR SAFETY

	2005	2006	2007
Automatic shutdowns per reactor for 7,000 operating hours	0.93	0.89	**0.87**
INES level 1 events, per reactor	0.76	1.22	**0.80**

UNDERSTANDING

Ten-year inspections

Every ten years, EDF's nuclear power plants undergo a thorough inspection. These inspections, which take five years to prepare, last about three months. Under the supervision of the French Nuclear Safety Authority (*Autorité de sûreté nucléaire* - ASN), EDF reassesses safety through three major operations using the latest technologies: testing leak resistance in the primary system, testing the strength of the reactor containment building, and automated inspection of the reactor vessel. Depending on results, the Nuclear Safety Authority authorizes or denies continuance of operations for the next ten years. In 2007, a safety examination in follow-up to the first ten-year safety inspection of the 1,500 MW series was begun, as was the ten-year safety inspection of the 1,300 MW series which will last until 2014. Inspection of the 900 MW series will begin in 2009 at the Tricastin and Fessenheim plants.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

Testing for radiation on the food chain, near the Penly nuclear plant.

2,000
environmental samples per year for each nuclear power plant

—

5,000
laboratory analyses

—

€104 million
invested in "housekeeping" in 2007

—

of twelve months. There remains room for improvement in the way gamma radiation is used to check on wear in the metalwork of facilities.

Monitoring the environment around each nuclear plant

EDF constantly monitors water and air quality and plant and animal life using a full surveillance system: radiation monitors, dust control stations, continuous water analysis, collection of rain and spent water, weather stations, laboratories.

Investing significantly to improve the state of facilities

Renovation and quality upkeep of facilities (paint, lighting, signage…) foster good work habits and contribute to safety. EDF is devoting € 600 million to a "housekeeping" program that will last until 2011. This program is aimed at motivating teams to be rigorous on a daily basis and contributes to prolonging the life of power plants.

HYDRO SAFETY

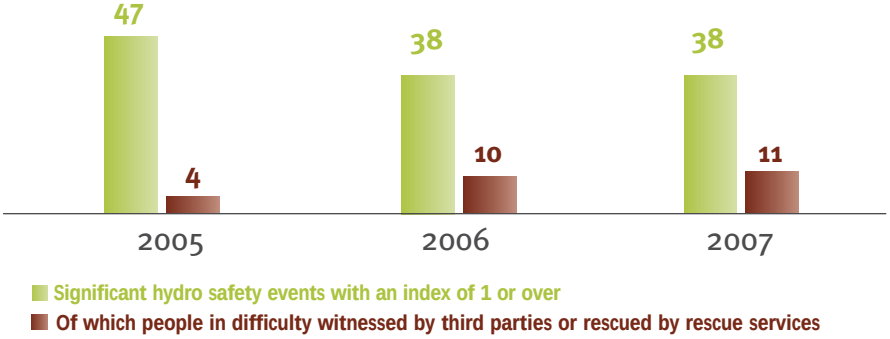
Continuous monitoring, ten-year inspections

From the very beginning, safety is worked into the design of hydroelectric works. But it also stems from constant monitoring and careful maintenance. Sensors that monitor dams on a continuous basis are able to detect shifts to within a few tenths of a millimeter. Collected every fifteen days or transmitted automatically, measurements are analyzed, recorded and consolidated in a "health audit". Hydro works are also inspected visually every 15 days.

The Head of Hydro Safety conducts several on site evaluations each year (30 groups of factories inspected in 2007) to monitor whether safety policies are being accurately implemented. The annual report is available on *www.edf.com*.

The 149 large dams of 20 m (65 ft.) or more, under the control of the Administration are submitted to an annual review of equipment

HYDRO SAFETY



MÉDIATHÈQUE EDF – LAURENT VAUTRIN

Inspection of Plan-d'Aval dam face in Aussois, during the ten-year drain down in 2007.

and safety features and to a ten-year inspection of immerged parts using either underwater robots or by emptying the reservoir. EDF carried out 11 ten-year inspections in 2007 and 16 more are scheduled for 2008.

SuPerHydro for hydro safety and performance

At the end of 2006, to improve safety, performance and availability of the most heavily used hydro works, EDF committed €560 million to the SuPerHydro project through to 2011. This program of modernization focuses in priority on penstocks, which channel dam water to the powerhouse, and on the gates that regulate flow in times of high water. 176 operations were carried out in 2007, notably the continued construction of the Tuilières dam, replacement of a gate at the Cadarache dam, treatment of penstocks at Luz 1 and at Pragnères, and improvements to the Mauzac powerhouse. A generator at the Kembs plant was also rehabilitated.

Downstream security

Like every summer, in 2007, EDF held a campaign to raise public awareness of risks near hydro dams and precautionary measures to take. For its 11th campaign, EDF recruited 200 students as "hydroguides" to inform summer holiday-goers.

EDF's hydrofleet in France

447 hydroelectric plants
239 large dams
(149 over 20 m / 65 ft. high)
972 diversion tunnels
(1,480 km / 920 mi.)
534 channels (579 km /360 mi.)
844 penstocks (267 km /166 mi.)
6,212 gates

€560 million
Investment in the SuPerHydro project

—

FOCUS ON

Regulated Activities

RTE is pursuing its program to bolster HV and VHV network security following the devastating storms of 1999. This program is based on inspection and improvement of weak points revealed by the storms, wider forest clearance around powerlines, anti-cascading measures, improved security of installations near homes and major roads. In keeping with the targets in the Public Service Agreement, the program will be completed in 2017.

In further accordance with the Public Service Agreement, the EDF distributor (ERDF as of 2008) is continuing to bury power lines, with 94.2% of new lines buried in 2007. As part of the €2.2 million/year program undertaken in 2003, and in agreement with property owners, 11,000 trees were cut from around power lines and others planted at a distance.

Security measures at transforming substations were reinforced to prevent trespassing: barbed wire, clearer signage. Moreover, measures were taken to raise awareness in schools and neighborhoods.

Investments

In Martinique and Guadeloupe, exceptional measures were taken after Tropical Cyclone Gamede (February 2007) and Hurricane Dean (August 2007) to get customer power back on within three weeks. €40 million were invested to restore and bolster electricity supply security in the face of hurricane activity in the overseas departments.

Child safety

near transformers: EDF Energy educates 100,000 schoolchildren per year and created the website Internet Power Up.

RADIOACTIVE WASTE management and transparency

Radioactive waste and materials resulting from operations or the decommissioning of nuclear power plants requires particularly attentive management and special processing adapted to the particular nature of the waste at hand. EDF takes full industrial and financial responsibility for this management.

UNDERSTANDING

The law of June 28, 2006 relative to HLLL radioactive waste disposal

In France, the law of June 28, 2006, provided for the creation of a national radioactive waste and materials management plan requiring operators to set aside assets to provide for their long-term commitments to dismantling and waste disposal.
For high level long-lived waste (HLLL), which is not surface-storable, the law endorses three solutions, all associated with R&D programs:
• Reversible deep geological storage as studied by Andra at its underground laboratory in Bure. In 2012 Andra will submit a report in view of a public debate on the choice of a storage site,
• Separation and transmutation in the reactors of the future. The French Atomic Energy Commission will report on the industrial outlook for it in 2012,
• Temporary surface storage. Depending on need, these facilities will be created or adapted by 2015.

Transportation of radioactive materials

Safe transportation of radioactive materials to specialized radioactive waste management centers relies on the quality of containers adapted to each type of waste. Transportation of these materials is subject to national and international regulations aimed at protecting populations and the environment. No transportation can take place without having first submitted a full inspection report and can be interrupted on the road if obligations are breached.

PROCESSING RADIOACTIVE WASTE

Taking responsibility

EDF takes charge of radioactive waste in four ways: limiting it at its source by optimizing design and operations at power plants; sorting it according to level of radioactivity and type; treatment to isolate it from contact with people and places; and giving priority to processing/recycling of spent fuel.
EDF is making provisions (and committing the necessary assets to cover them) so that future generations will not be burdened by waste produced today. The kWh price takes costs linked to waste management and plant decommissioning into account.

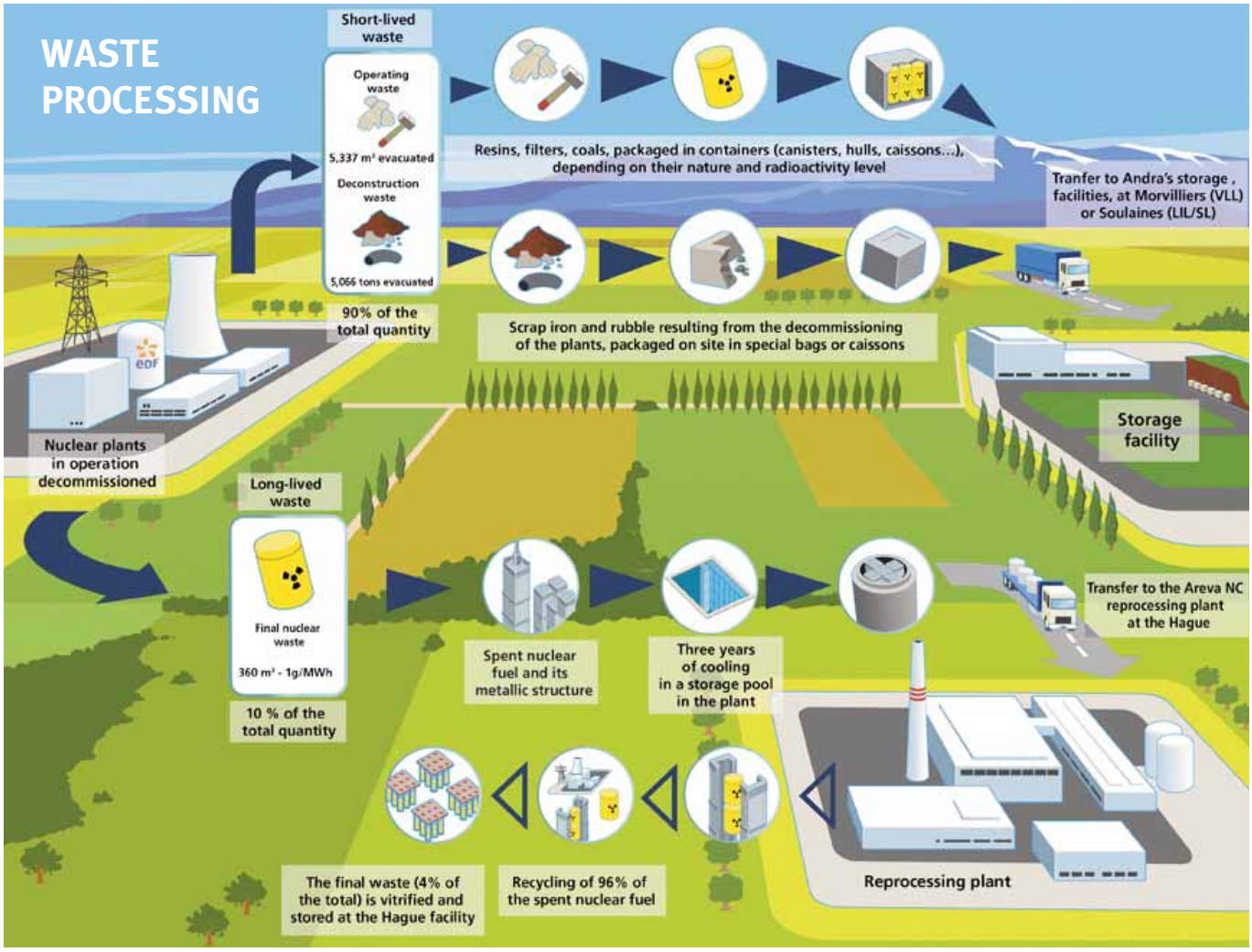
To each type of waste a solution

Very low level waste (VLL) has a level of radioactivity very close to natural radiation (100 Bq/g). This kind of waste results from operations and decommissioning of nuclear power plants and consists primarily of rubble and scrap metal. It represents a gross mass of approximately 17g/person/year. Andra takes charge of this waste at its storage center in Morvilliers, France. In 2007, EDF shipped 5,066 tonnes of VLL waste to this center.
Short-lived low and medium level waste, resulting from operating and maintenance of plants (protective wear, vinyl, fabrics…) are sorted, treated and sent for storage at Andra's center in Soulaines, France.
The radioactivity in this type of waste is lower than 1 million Bq/g. It represents about 70g/person/year. In 2007, EDF shipped 5,337 m^3 of this waste to the center.
Long-lived medium (over 1 million Bq/g) or high (over 1 billion Bq/g) level waste results from processing spent fuel at Areva's factory in La Hague. About 360 m^3 are produced yearly, representing 7 g/person/year.
Depending on the nature of the waste it is compacted or vitrified and stored at the factory.
Every year, EDF makes over 10,000 trips to transport radioactive waste and materials. Of 202 shipments of spent fuel in 2007, three incidents were recorded. These consisted of contaminated spots on the containers, in an area inaccessible to the public, and of a level below that stipulated by regulation (see diagram).

***www.andra.fr*: an inventory of radioactive waste and materials in France, both civil and military, existing and future, is available on Andra's website.**

DECOMMISSIONING PLANTS

As part of its Public Service Agreement with the State, the EDF Group has committed to dismantling, within 25 years, reactors that are permanently shut down. Nine reactors are currently being dismantled in France: Chooz A (pressurized water reactor); Brennilis (heavy water); Creys-Malville (rapid neutron) and; Bugey 1, first of a kind of five UNGG reactors (uranium natural graphite gas) being dismantled which are Chinon A1, A2, A3 and St. Laurent des Eaux A1 and A2.
After the 2007 decree authorizing full dismantling of Chooz A, EDF began the last phase of dismantling for this reactor.
Also worth noting in 2007: surveys showed the public approved the dismantling of St. Laurent A and Chinon and the dedicated experts mandated for the Group by the French Nuclear Safety Authority approved the safety report on Bugey 1.
Dismantling of Brennilis was suspended in June 2007 after the French Council of State annulled the decree for full dismantling due



to lack of sufficient information before the decree was emitted. EDF will apply for a new decree in 2008, to be informed by a public survey in accordance with the Law. EDF has made arrangements to guarantee security during the interruption of works and has created, in conjunction with public authorities, a placement service for the few dozen people left without jobs after the worksite closed.

FOCUS ON

Nuclear waste life span

Short-lived waste (filters, resins, gates, vinyl, fabric...) loses half of its radioactivity every 30 years. According to Andra's national inventory, this type of waste represents 90% of the volume of radioactive waste produced in France and contains 0.1% radioactivity in all.
Loss of radioactivity in long-lived radioactive waste is calculated in terms of centuries, if not millenniums. This type of waste represents 10% of all radioactive waste, concentrating 99.9% of total radioactivity.

UNDERSTANDING

The "TSN" law of June 13, 2006 on nuclear security and transparency

From the earliest days of operating nuclear plants, EDF has systematically informed the public on their workings, technical incidents and overall activity. In 2006, the TSN law reinforced the Local Information Commissions (*Commissions Locales d'Information* - CLI), providing them with a legal framework and the means for counter-expertise. It renders the Nuclear Safety Authority fully independent and places greater responsibility on the operator.
The law also requires the operator to publish an annual report for each of its nuclear facilities on measures to ensure safety and radioprotection, nuclear events, radioactive pollution and waste, and measures to limit impact. In appendix to EDF's first reports in 2007, EDF included the recommendations of the French hygiene, safety and working conditions committees[1].

1. (Comités hygiène, sécurité, conditions de travail - CHSCT).

MANAGING EFFLUENTS
and conventional waste

The EDF Group endeavors to protect the natural environment by limiting the impact of its installations on soil and air at its source and by stepping up recycling of waste.

100%

of ERDF's concrete pylons were re-used by the construction industry

REDUCTION OF CONVENTIONAL WASTE

Nature and quantity of waste produced by EDF

EDF activities generated 137,706 tonnes of conventional waste [1] including 114,497 tonnes of non-hazardous waste of which 71% was recycled.

Monitoring ordinary and hazardous waste

The 2006-2009 strategic action plan on waste aims to inventory waste produced by EDF in France. Objectives: reduce impact, develop eco-design and recycling, raise awareness, and coordinate initiatives. In 2007 the inventory covered the entities within Generation and R&D. In 2006 these structures produced 99,002 tonnes of conventional waste including 78,686 tonnes of non-hazardous waste of which 66% was recycled. The software OGIDE, in use since 2007, will help to conduct exhaustive inventories by 2008.

EDF Energy committed to halving volumes of materials sent to the dump by 2012 and to send none from its offices or depots by 2020.

1. 2006 figure excluding coal ash, national result based on preceding year.

FOCUS ON

Regulated Activities

By 2010, RTE will have eliminated or decontaminated all transformers with a PCB [2] content over 500 ppm and all condenser batteries with a PCB content over 50 ppm.

The distributor ERDF continued to eliminate 60,000 transformers containing PCB, despite the challenges of elimination. As part of its profit-sharing agreement, ERDF also made significant efforts to raise employee awareness on sorting waste.

2. PolyChloroBiphenyl.

INDUSTRIAL ECOLOGY

EDF has formed partnerships with other industrial players to re-use waste: gypsum from desulfurization of flue gas is used to make plaster while ash from coal combustion is used to make concrete and cement, build highways and railroads, fill cavities and trenches, and bury power lines. Some nuclear plants are providing their warm water effluents for agricultural activities (horticulture, fish-farming, wood-drying), tourism (crocodile farm) and heating (housing, swimming pools).

In Poland, ERSA inaugurated a facility in 2007 to produce binding materials for road construction and mining, using 40,000 tonnes of the plant's dust[3]. EC Krakow is selling its ash to the building sector. EC Wybrzeze has raised its recycling of ash and clinkers by 40% over the past ten years. Kogeneracja is consolidating its ties with the European Committee for Standardization and the European association of users of fossil-fired plant by-products.

In the UK, EDF Energy's coal plants are scheduled to be equipped in 2008 with special units for recycling combustion ash for use by cement makers.

In China, the Laibin B coal plant sells 70 to 80% of the ash it produces and in 2007 began commercializing clinkers.

3. Fine particles of coal resulting from mining operations.

2007 Sustainable Development Awards
EDF GROUP

In Nantes, France, ERDF fills its trenches with ash from the nearby Cordemais plant, thereby avoiding quarrying while recycling ash.

REDUCING EFFLUENTS TO AIR

The EDF Group is using a number of methods to reduce the atmospheric effluents of its fossil-fired plants by 30 to 40% from now to 2010 by improving output through choice of fuels, such as low sulfur coal for its Polish plants or very low sulfur fuel oil for Porcheville 2 and Cordemais 3 in France. The Group is also investing in systems to desulfurize and denitrify flue gas.
Desulfurization eliminates 90% of SO_2 in a number of Group plants: Le Havre 4 and Cordemais 4 and 5 in France; West Burton and Cottam in the UK; Shiheng in China; Rybnik and soon ERSA in Poland.
At the end of 2007, catalytic denitrification units were installed at the Le Havre 4, Cordemais 5 and Vazzio plants in France. Installation is continuing at Cordemais 4 and in Bellefontaine, Martinique where studies are underway for the Pointe-des-Carrières plant.

EDF Energy:

94% reduction in SO_2 thanks the desulfurization unit installed at the Cottam plant in 2007

EnBW:

study underway for a supercritical coal furnace in Karlsruhe to improve energy output while reducing CO_2 emissions and other pollutants

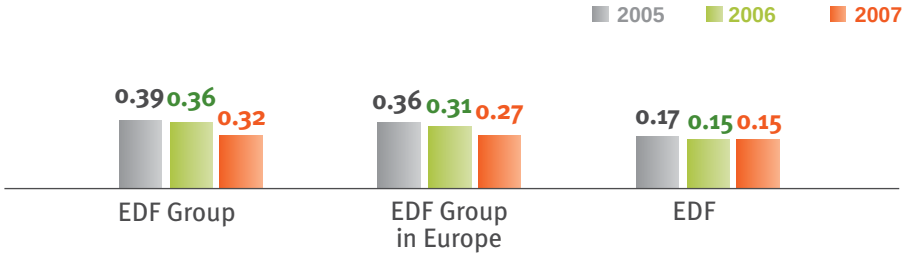
FOCUS ON

Regulated Activities

In 2004, RTE signed an agreement with ADEME and Gimelec[4] to lower its emissions of sulfur hexafluoride (SF6), a particularly potent greenhouse gas used for insulation in certain stations and breakers, to their 1995 levels by 2010. In 2006, levels had already been brought down to 7.3 tonnes compared to 8.3 in 2005.

4. A pool of industries in the area of electrical equipment, control and command and associated services.

TREND IN EDF GROUP SO_2 EMISSIONS (G/KWH)



PRESERVING SOIL QUALITY

Group activities can cause fossil fuel and heavy metal pollution which must be identified before soil remediation for future uses can begin.
In France, EDF put in place a multi-phase action plan for 2007-2009: inventory of potentially polluted industrial or service sites into 2008; land assessment in 2009 to determine types of pollution, remediation and monitoring for each site.
This inventory is also underway in the rest of the Group: thirty sites, particularly old gas powerhouses, are undergoing depollution.

FOCUS ON

Dismantling of Guadeloupe's Jarry Sud diesel plant began in early 2007. In keeping with the charter signed with this French region, EDF is preserving the environment: using protective measures during soil treatment, waste processing and recycling, recuperation and treatment of wash water, monitoring of discharges into the sea.

France :

375 potentially polluted sites, 72 recognized polluted.

Real Estate Division France:

€7 million invested in 2007 to:
> conduct historic studies of 220 sites,
> carry out 26 additional assessments
> finish remediation of eight sites where gas powerhouses once stood
> manage land impact at the Pleyel urban development zone in St. Denis.

LIMITING IMPACT on water and preserving biodiversity

Indispensable for hydro generation and fossil-fired plants alike, water is a fragile resource to be shared by all. EDF is contributing to preserving water quality and to balancing its various uses in respect of limits on the volume, temperature and quality of water drawn and discharged. This goes hand in hand with a strong commitment to biodiversity.

UNDERSTANDING

Shared management

EDF manages three-quarters of French resources in surface water and operates 447 hydro powerhouses, taking into account, under the aegis of the public authorities, the needs of the various users: population and local authorities for drinking water, industry and agriculture for irrigation, sportsmen, fishermen and boaters.

CONTRIBUTING TO WATER MANAGEMENT AND BALANCED USAGE

Dialogue and cooperation

EDF endeavors to limit the environmental footprint of its installations (dams, conveyance and powerhouses) and to deepen its understanding of ecosystems. It works with various local and national organizations, water agencies, local water commissions, etc., to plan water use schemes (*Schémas d'aménagement et de gestion des eaux* - SAGE) and to prepare the water use directives (*Schémas directeurs d'aménagement et de gestion des eaux* - SDAGE) that will come into force at the end of 2009 for five major catchment areas. Within this framework, EDF participated in a study on remaining hydroelectric potential, but the dialogue process involved has led to other studies, for instance, the preparation of the Seine-Normandy SDAGE enabled an inventory of substances to be monitored in order to reduce them in the water.

Foresight

Throughout the year, EDF manages reservoir water stores to anticipate the requirements of various users. Under the responsibility of public authorities, EDF is front line with other actors to face crisis situations, for instance water supply in case of drought and dam management for flood control during high water.

Scientific modeling to anticipate trends in temperature and flow levels

In order to constantly optimize plant operations and water management, EDF relies on expert systems: weather forecasts, water temperature forecasts, hydro-biological monitoring. This data is indispensable when it comes to adhering to river water temperature regulations near plants and to mitigating potential excesses due to climate change while ensuring the security of the electric system. Such forecast models make it possible to foresee potential thermal crises a few days in advance, and hydro crises weeks in advance.

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EDF GROUP

The Ujpest plant in Hungary is planning to reduce its industrial consumption of water by 17% by reusing cooling water. In Martigues, France, processing and rain water are being re-injected into the industrial water circuit rather than being discharged into the Mediterranean.

FOCUS ON

The Petit Saut dam, which covers over 70% of French Guiana's electricity needs, is the object of special monitoring. Studies underway for more than ten years and overseen by a scientific steering committee comprising representatives from the French Center for Scientific Research (*Centre National de la Recherche Scientifique* - CNRS) and the National Natural History Museum (*Muséum National d'Histoire Naturelle* - MNHN) have revealed that biodiversity has improved steadily since the reservoir was initially flooded, though it remains inferior to what it was before. Water quality has also improved over the years, particularly the oxygenated levels which are growing deeper. Moreover, research on greenhouse gas emissions since 1994 have enabled a better understanding of the mechanisms at play in the carbon cycle for this type of tropical reservoir and is now serving as a basis for international research on this subject.

INDICATORS AND KEY FIGURES: COOLING WATER (EDF, 2007)

	2007
Cooling water drawn	41.2 10^9 m^3
Cooling water returned	40.7 10^9 m^3
Cooling water evaporated	0.5 10^9 m^3

Better control of effluents

As with radioactive waste, chemical effluents are monitored in the high discharge cooling systems where biocide treatments enable the proliferation of micro-organisms to be controlled. Similarly, following the significant rise in maximum summer temperature levels, studies have been undertaken with external laboratories to ensure that effluents discharged during such extreme periods involve no risk to the biodiversity of rivers.

PRESERVING BIODIVERSITY

Understanding, protecting, informing

Power plants impact water and aquatic biodiversity. Transmission and distribution impact terrestrial plant and animal life. At the same time, some areas surrounding EDF installations actually provide a safe haven or even restore biodiversity. The Biodiversity Policy formalized in 2006 and being rolled out in the Group focuses on three areas of initiative: progress on understanding environments and accuracy of impact assessment, protecting nature, and raising awareness. These initiatives are coordinated with the European program Natura 2000. In 2007, assessment concerned the impact of dams on water courses and plant and animal life. Protection was concentrated on migratory fish and birds. Thus SSE in Slovakia and EnBW in Germany are installing bird deterrents on their power lines, like ERDF and RTE in France. Fish ladders were installed for migratory fish and during the ten-year emptying of dams fish were removed and returned to the river.

FOCUS ON

REGULATED ACTIVITIES

The distributor, now ERDF as of January 1, 2008, concluded in 2007 a partnership with the French league for the protection of birds to reduce the impact of electric installations on Mediterranean birdlife. In order to protect purple herons, bitterns and Bonelli's eagles, ERDF has committed to burying 12 km of power lines in the Camargue (€1.7 million) by 2009 and to install mechanisms to deter birds.

For each intervention, RTE identifies the environmental requirements of the site and takes measures to protect biodiversity and rare or protected species. The company contributes to preserving biodiversity by equipping its power lines with bird deterents and by concluding partnerships with environmental associations (*Ligue pour la Protection des oiseaux* and *France Nature Environnement*) and Aquitaine regional environmental office (DIREN) in 2007.

Étang de Berre ecosystem

To maintain salinity in the Étang de Berre ecosystem in France, EDF has over the years reduced freshwater and silt discharges from its Salon-Saint-Chamas powerhouse at the end of the Durance hydroelectric chain (2,000 MW, 50% of generation capacity for the Provence-Alpes-Côte d'Azur region). This initiative is now an official part of the operating concession which limits discharges to 1.2 billion m^3 of water and 60,000 tonnes of silt per year. An international scientific committee is monitoring changes under the new operating system. EDF and the lake's fishermen have been cooperating closely to improve its ecosystem since the fall of 2007.

Over 100 bird species

at the Prée reserve near the Nogent-sur-Seine nuclear plant in France.

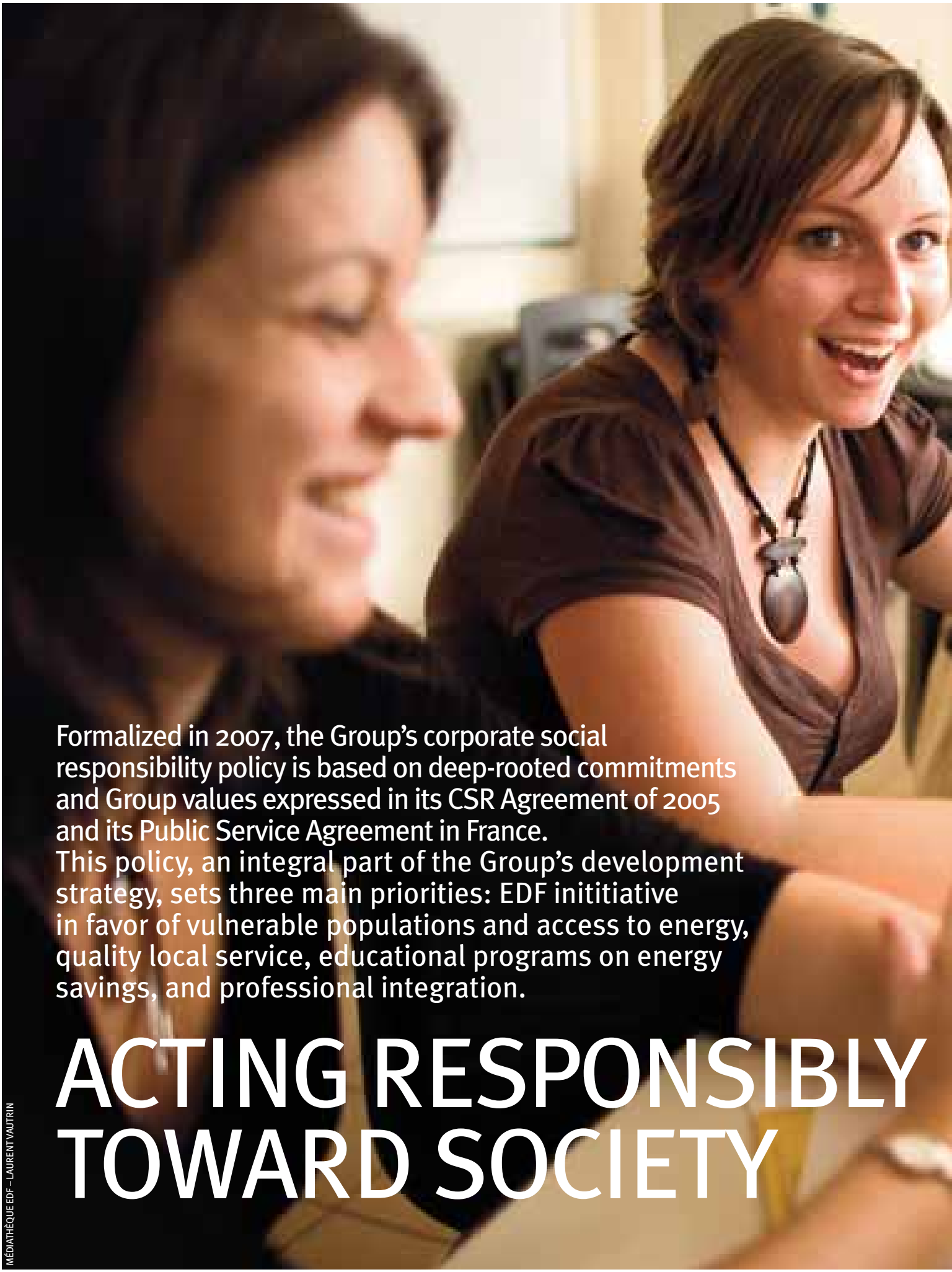
Two new fish ladders

were installed in France in 2007, one at Queige on the Doron de Beaufort and one at Verney-on-the-Eau-d'Olle. A fishway was also installed at Saint-Cricq on the Ossau mountain torrent.

EDF Energy

received £10.6 million from Ofgem[1] to bury power lines located in natural parks by 2010.

1. Office of Gas and Electricity Markets.



Formalized in 2007, the Group's corporate social responsibility policy is based on deep-rooted commitments and Group values expressed in its CSR Agreement of 2005 and its Public Service Agreement in France.
This policy, an integral part of the Group's development strategy, sets three main priorities: EDF inititiative in favor of vulnerable populations and access to energy, quality local service, educational programs on energy savings, and professional integration.

ACTING RESPONSIBLY TOWARD SOCIETY

MÉDIATHÈQUE EDF – LAURENT VAUTRIN

Chalon-sur-Saône. Energy savings training session at the Saint-Jean "Maison de quartier".

Dame Jo Williams DBE,

Chief executive Mencap

We estimate that there are 1.5 million people in the UK with a learning disability. We are frequently asked 'what is a learning disability?' A learning disability is lifelong and usually has a significant impact on a person's life. People with a learning disability may find it harder than others to learn, understand and communicate and it may take them more time to do everyday things. Only 1 in 10 people with a learning disability are in employment and if you have a learning disability you are 58 times more likely to die before you are 50 years old.

Through the last three years, our relationship with EDF Energy has been very rewarding. The EDF Energy employees worked very hard to raise a great deal of money that we are using to improve the lives of people with a learning disability, especially by making sure people access good health care. The other contribution was the numerous ways in which they volunteered and became directly involved in our work.

Partnership is, of course, a two-way process and I believe that we helped EDF Energy by giving advice about how to make its bills more accessible. This benefits not only people with a learning disability, but also many thousands of other people who struggle to understand the complexities of forms and formal documents.

We are still working together to find ways in which people with a learning disability can become employees of EDF Energy. To date we have one person in employment – a small but very important beginning."

Founded in 1946 by parents of 'mentally handicapped' children, Mencap is the UK's leading charity concerned with learning disability. Mencap works by giving high quality advice, by providing high quality housing and education services and by campaigning for the human rights of people with a learning disability.

IMPROVING ACCESS TO ESSENTIAL SERVICES for vulnerable populations

Energy, especially electricity, is an essential commodity. Lack of access can lead to exclusion: social exclusion for vulnerable customers and economic exclusion for developing countries. Through its many initiatives in the field, EDF works toward improving access to essential services and helping the most frail optimize their consumption.

Restos du cœur

In 2007, 87,000 low consumption light bulbs were distributed in France to recipients of hot meals from the Restos du Cœur association. This partnership, renewed in 2008, also provides for basic energy consumption education.

Poland

EC Kraków launches a Help for Vulnerable Customers program in conjunction with Krakow Town Hall and the local heat distributor. First beneficiary: the association Friends of Children toward a new educational center.

WORKING WITH VULNERABLE CUSTOMERS

Vulnerable customers in France

Seizing the opportunity offered by full market opening in France on July 1, 2007, the Customer Branch created a dedicated national consumer service and trained regional teams to work with vulnerable customers. The CSR Agreement Monitoring Committee for France reviewed dealings with vulnerable customers before and after market opening and was able to observe that the new organization works well.

There are three main formulas available: a 3 kW service *(Maintien d'énergie)* while waiting for welfare services to take over; a basic necessity tariff *(Tarif de première nécessité)* for households with monthly incomes of € 460 or less; and a fund which pays electricity in part *(Fonds départementaux de solidarité logements)* to which EDF contributes € 19.98 million.

In addition, EDF provides individualized service through social mediators. A toll-free number, 0 800 65 03 09, is open 24/7. Goal: find solutions before arrears accumulate.

A 1,000 W service *(Service minimum de 1 000 W)* offers those who have not responded to solicitations by EDF and welfare services a final recourse before suspension of supply.

600

in Guadeloupe, Resident services offices (*Points Services aux Particuliers* - PSP) assist 600 families yearly

—

Support for vulnerable customers – EDF France

	2006	2007
Customers benefiting from *Tarif de première nécessité*	460,000	630,000
Customers benefiting from *Fonds solidarité logement*	275,000	300,000

Support for vulnerable customers – EDF Energy

	2006	2007
Priority electricity service customers	150,293	156,776
Priority gas service customers	41,358	47,140

MÉDIATHÈQUE EDF – STÉPHANIE TETU

To help resolve the difficulties faced by vulnerable customers, EDF works with mediators and is creating customer centers directly in their neighborhoods.

EDF is also developing educational programs to help people consume more wisely and avoid arrears from the outset: educational kits, partnerships with social insertion associations and local authorities, public housing landlords, neighborhood meetings, etc.

Vulnerable customers in the UK

EDF Energy is leading determined action to eradicate fuel poverty in households that spend 10% or more of their income on energy. While partnering on a number of initiatives, the company has also taken initiatives on its own. With Energy Assist, the most frail customers benefit from a 15% discount, advice on eco-efficiency, and help in identifying welfare assistance where appropriate. The Energy Trust fund helps over-indebted customers and funds advice on budget management and energy savings. The yearly ad campaign "Safe, Warm and Well" alerts vulnerable customers to the risks of hypothermia and inhalation of carbon monoxide.

Working together locally

EDF works with 53 mediation structures, multi-service mediation and information offices (*Points Information Médiation Multiservices* - PIMMS) and resident services offices (*Points Services aux Particuliers* - PSP) in France. Forty more are under study. These structures contribute to preventing unpaid bills, working very closely with customers. The Lower Normandy multi-service mediation and information office (*Point Information Médiation Multiservices* - PIMMS), for one, is experimenting with social mediation in rural zones.
Its mediation professionals visit vulnerable customers, look for solutions, facilitate access to assistance. They find solutions in about 60% of cases. In Guadeloupe, hard hit by unemployment, several resident services offices (*Points Services aux Particuliers* - PSP) have been opened. They hired and trained young people to receive vulnerable customers and advised them on energy saving. This initiative creates employment and is helping to loosen the tight energy situation in Guadeloupe.

Energy Trust:

> 7,388 individual and family allowances totaling £3.7 million
> 90 allocations to welfare agencies and partners totaling over £1.2 million

Energy Assist:

> 56,000 beneficiaries

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EDF GROUP

EDF Energy is partner to London Warm Zone, a program that fights fuel poverty in 14 of London's 33 districts. Going door-to-door to meet customers, its employees identify the most frail people who, often ignorant of their rights to social benefits or speaking poor English, could reduce their energy bill through eco-efficiency initiatives.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

Bristol, England. Pauline and Ray work at EDF Energy. Their job: meet with the most vulnerable customers and help find ways to assure that they have access to energy.

Access to energy programs in Africa:

at end 2007, 292,373 people served in rural areas and 350,000 under PNES' periurban program

PNES,

a company created in 1994 by EDF and the South African electricity company Eskom, has brought electricity to 350,000 people to a township of Cape Town. In 2007, with PNES' conditions of long-term viability ensured, EDF sold its shares to Eskom.

Access to services for the disabled

All EDF customer service centers in France have been accessible to people with limited mobility since 2004. Soon, EDF boutiques will be adapted for all forms of disability based on Design for All criteria. Energy bills and the new customer booklet are published in large police or in Braille, and on-line services like e-sourd have been developed to enable the hard of hearing to converse with advisors via webcam, either at home or in the customer service centers.

In Hungary, Demasz has adapted the e-sourd service which gets 800 to 900 connections monthly.

In the UK, EDF Energy is pursuing its own initiatives and is adapting documentation for people with learning disabilities in partnership with the association Mencap.

ACCESS TO ENERGY IN DEVELOPING COUNTRIES

Methodical approach and partnerships

Through its program Access to Energy and Services, EDF is contributing to electrification programs in developing countries using clean technologies and energy savings. The programs are run through local decentralized service companies according to a model developed by EDF and Ademe and created in partnership with other industry and local players to provide energy service "packages" locally. Benefiting from aid initially, these

FOCUS ON

***Électriciens sans frontières* (ESF),** was created in 1986 at the initiative of EDF employees and has been an EDF partner since 1990. ESF facilitates access to water and electricity for the poorest populations: electrification, schools, network improvement. The focus is on energy efficiency and local and renewable energy sources. In Nepal, for instance, ESF contributed to improving infrastructure in schools in Laprak and Gumda by equipping them with solar panels and training technicians. ESF also intervenes in partnership with NGOs on missions in the wake of emergencies such as the tsunami and earthquakes. Some 800 employees participate in these operations, with EDF paying for half their time in addition to direct aid to ESF. There are currently about 150 projects underway in 42 countries.

www.electriciens-sans-frontieres.org

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

Meknes, Morocco. Inhabitants of this village located far from the electric grid now enjoy efficient lighting thanks to solar panels.

decentralized service companies are intended to eventually become autonomous through balanced management. The goal is to create replicable projects that will gain momentum and effect change in access to energy for the poorest of countries on a larger scale.

Rural programs in Africa

Four programs of rural electrification are underway in Morocco, Mali and South Africa.
In Morocco, EDF and Total are contributing through Tenesol to the Moroccan electricity bureau's program to supply electricity to 60,000 households (400,000 people) in 29 provinces using photovoltaic kits.
Two programs in Mali, one with Total, the other with the Dutch electricity company Nuon, aim to supply 200,000 people with photovoltaic kits and micro networks supplied run on diesel generators.
In South Africa, the program launched in 2002 by KwaZulu-Natal aims to equip 90,000 people. In 2007, 54,000 people had already been equipped, and the program was extended to Eastern Cape targeting 150,000 people and 400 schools.
In Madagascar, 80,000 people will have access to electricity thanks to a 6 MW hydro plant and networks to supply 26 villages and two towns. This e8 project brings together EDF, the German company RWE, Hydro-Quebec, Electricité de Madagascar and the Ader [1] rural electrification agency.

Dealing with crises and emergency situations

After the devastating storm of 1999, EDF devised emergency action plans to deal with crisis situations and come to the rescue of French populations in distress. The plans provide for fast-acting teams and generators and other emergency equipment as part of the Electricity Rapid Intervention Taskforce (*Force d'intervention rapide électricité* - FIRE). The goal is to be able to restore supply to at least 80% of customers within 24 hours and 95% within five days.
At the end of 2007, over 400 technicians in the French regions intervened under grueling conditions to restore supply to 130,000 households in the Massif Central after snow storms had cut them off. In 2007, Electricity Rapid Intervention Taskforce teams also re-established electricity for 100,000 households on Reunion Island after tropical cyclone Gamède swept through, and assisted EDF Energy after violent storms deprived 450,000 British households of electricity.

1. Agence pour le développement de l'électrification rurale - ADER.

2007 Sustainable Development Awards
EDF GROUP

The distribution companies Demasz in Hungary and SSE in Slovakia came together to form emergency teams capable of deploying in a day to affected areas to repair power lines, rebuild grids and reconnect customers.

1.6 billion
people without electricity in developing countries

QUALITY LOCAL service

Faithful to its commitments to ensure quality service in even the farthest reaches of France, EDF action revolves around improving homes and developing projects that create jobs locally. It shares its expertise in engineering and energy eco-efficient solutions with its partners.

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In a neighborhood of Pantin, France, a 1,500 household renovation project made progress in 2007, obtaining a sustainable development and renewables label from France's national urban renovation agency [1]. Everbat, an EDF subsidiary, is installing solar thermal, photovoltaic and geothermal heat pump solutions. Spending should drop by 17%. This is particularly important since 36% of the neighborhood's residents live under the poverty threshold.

1. (Agence Nationale de Rénovation Urbaine - ANRU).

SUPPORTING LOCAL HOME IMPROVEMENT

Housing is one of the sectors where eco-efficiency has the greatest impact. EDF mobilizes its expertise and its tools to serve local projects by participating in climate plans, energy audits and sustainable building construction and renovation.

In Vineuil in the Loire Valley, EDF is contributing to the design and installation of a wood furnace for a heating network that heats 300 households in a public housing development with a high environmental quality label (*Haute Qualité Environnementale* - HQE). The commune will thus be able to reduce its energy bill and improve its results while supporting local forestry.

In Bétheny, in Champagne Ardennes, EDF is participating in a public housing development that integrates renewables and involves tenants, landlords, local officials and companies in a shared effort to reduce energy spending. Eco-energy solutions are being built into the design: solar water heaters, low consumption lamps, two-way heat pumps. EDF technicians advise tenants new to the housing analyze consumption and monitor costs. Electricity bills are reduced by 35% compared with traditional solutions.

CREATING JOBS AND LOCAL DEVELOPMENT

Near EDF worksites

EDF units are investing alongside local players (local authorities, unemployment agencies, associations and companies) to help create businesses or company projects that generate jobs.

Supporting employment can take many forms (advice, training, assistance in writing résumés and letters of motivation, mock interviews, etc.) in which EDF employees are highly involved.

Initiatives are undertaken in areas where the Group has launched large-scale industrial projects in order to provide momentum to benefit local social and economic levels, like the Flamanville project in France and Nam Theun in Laos (see page 70).

In Creys-Malville, the site of the Superphenix nuclear plant which is being dismantled since its shutdown by government decision in 1998, EDF is involved in a revitalization plan: support for companies working at the plant, individual assistance for employees, a revitalization fund aimed at creating local jobs, fostering of local economic and employment development. To date, 1,121 jobs have been created.

FOCUS ON

A foundation dedicated to "acting for employment" (*Fondation agir pour l'emploi* - FAPE) brings together EDF, Gaz de France and four unions. It contributes to employment by supporting projects proposed by organizations specialized in insertion through economic activity, or by local services and organizations that assist the unemployed in creating their own business. FAPE functions thanks to the donations of corporate employees and retirees and to matching by their companies. In 2007, €1.6 million in grants were awarded to 146 projects toward the creation of 698 jobs over the next three years.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

The Petit-Bétheny garden city in France. These timber-frame houses are equipped with very sophisticated insulation systems. In subsidized housing, energy consumption is reduced by 35%.

FOCUS ON

Regulated Activities

The distributor (ERDF as of 2008) and its local partners, including intercommunal electrification unions, work towards integrating the vulnerable through worksite/schools where people learn to renovate transforming stations, thus gaining skills that can help them find work. In Lower Normandy, 200 people worked on 40 stations in 24 communes.

During the construction of electricity transmission infrastructure, RTE, participated in a project assistance plan (*Plan d'Accompagnement des Projets* - PAP) aimed at reducing impact, improving integration of existing networks and fostering sustainable local development. RTE's contribution to the project assistance plan was about 10% of the cost of 400 kV overhead projects and 8% of others. Close to 70% of this contribution was devoted to sustainable development initiatives.

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EDF's units in France's Rhone Valley created Énergie Emploi to put employment seekers in touch with SME/SMIs contracting with EDF and with EDF customers. In ten years, 500 people have thus found jobs, 80% of which are long- term.

Near EDF industrial activity

In Meuse, France, where Andra has its laboratory on high level long-lived radioactive waste storage, EDF, the French Atomic Energy Commission (*Commission de l'Énergie Atomique* - CEA) and Areva have engaged in programs to boost the local economy. Determined to help these departments pioneer energy eco-efficiency, EDF concluded an agreement with over 290 professionals and SMEs on energy efficient housing works and is working with Energic Sous Traitance 52/55, which brings together 60 local companies, to help them win EDF contracts.

From time to time, EDF contributes to boosting certain areas like Creusot, France, where it is helping to bring up to date the energy infrastructure, and in Burgundy where it is contributing to creating a business cluster around its nuclear facilities. Nuclear subcontractors have moved there, local young people have been hired and a special Nuclear Pro high school diploma was created.

CONTRIBUTION to energy education

The EDF Group's commitment to training and education is twofold. First, to develop work-study programs that reflect real needs in terms of key skill sets within the Group or its subcontractors, paying special attention to diversity. Second, to develop educational programs teaching children to save energy, preparing them to meet tomorrow's challenges.

Number of young people in work-study programs:
2006 - 2,000 / 2007 - 2,600

Number of three-way contracts
(EDF, apprentice, subcontractor)
2006 - 27 / 2007 - 37

Nuclear generation:
> 300 apprentices recruited in 2007, of which 30 by subcontractors.

DEVELOPING WORK-STUDY PROGRAMS TO PROMOTE DIVERSITY

Redoubling efforts in France

In an effort to renew its key competencies, EDF achieved its target of 2005 to increase the number of apprentices by 20%. In 2008, EDF aims to lift the total share of apprentices in the company to 3%. The Generation Branch already counts one thousand apprentices. Relying on highly motivated mentors, the large majority will eventually be hired by the company. Others will find employment with EDF's subcontractors and service providers, to which the company attaches great importance for securing competencies.
In Ile de France, the Customer Branch is fostering the integration and qualification of young people with little or no education for advisory or mediation careers with one year of professional experience and training to bring them up to standard. After validation at the end of this period, the apprentices are directed into the job market or other training programs.

A longstanding German tradition

In Germany, EnBW's apprenticeship policy illustrates the company's strong commitment to its economic and social commitments. EnBW employs 8.3% of apprentices who are monitored by 50 mentors who devote 100% of their time to this program. Another one hundred employees are temporary trainers. In 2007, EnBW offered 262 apprenticeship positions and created 72 positions for students from a university professional institute and from a university technological institute. A total of 29 professions are involved.

Broadening diversity

In keeping with its commitments to diversity, EDF is taking special action in underprivileged urban neighborhoods. In France, the goal is to take on 10% more apprentices from these areas. At the same time, EDF is bolstering its proximity to local customers.
EDF is also using apprenticeship to fulfill its policy on the integration of the disabled. More than 30 disabled youths became EDF apprentices in 2007, some of whom had already taken part in a pre-apprenticeship financed by the company.

ENERGY EDUCATION FOR YOUNG PEOPLE

Primary and secondary schools

In France, EDF uses a number of measures such as officially approved lecture programs, for instance on electricity and safety *(Branche-toi sécurité)* in primary or on energy and sustainable development *(Enjeux énergétiques et développement durable)* in secondary. Teachers and instructors have special educational kits at their disposal. Environmental issues and everyday energy saving are the objects of a joint exhibition with Ademe. These educational materials are available on the website edf.com.
In Alsace, by agreement with the board of education, EDF is training teachers at middle schools on eco-efficiency and renewables.
In Marseille, more than 400 children in underprivileged communities are being taught in school about sustainable development. These children visited Embiez island, exemplary in terms of environmental

MÉDIATHÈQUE EDF – PATRICK GAILLARDIN

Évaux-les-Bains, Limousin, France. EDF is working with local educational authorities, the Regional Council and Permanent Centers for Environmental Initiatives (*Centres permanents d'initiatives pour l'environnement* – CPIE) to build awareness of energy saving techniques in primary schools.

management, where they helped clean up a beach. Thirty-two volunteers from EDF donated their time to this operation.
Since 2005, EnBW in Germany has been the official sponsor for the Bade-Württemberg government initiative Youth Thinks Future which encourages young people to study the issues of tomorrow and to think up action strategies in accordance.
In Italy, Edison and the NGO Legambiente developed the project Kyoto anch'io, la scuola amica del clima to reward classes where energy saving is taught and schools that reduce their CO_2 emissions. A bus of fun design for environmental education weaves its way throughout Italy. In 2007, the bus reached over 15,000 students, 150 schools and 500 classes.

Higher education

In France, EDF is a partner of several educational programs: the Chair of Sustainable Development at France's Polytechnical School, the Chair of Finance and Sustainable Development at Paris Dauphine University and the Chair of Industrial Ecology at the Technology University of Troyes.
EDF Energy, a member of the Power Academy that brings together 17 companies and six universities, provides grants and summer internships to an average of 20 students. EDF Energy, during a seminar organized for students in 2007, presented current issues and activities of the energy sector.

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The project In class with Fenice, operated by an employee with support from the commune of Lancianco, Italy, aims at developing a primary and secondary school course on ecology and energy in which children make small greenhouses powered by alternative forms of energy in which plants from the world's different climate zones will be grown.

FOCUS ON

Regulated Activities

In partnership with local companies in Lower Normandy, ERDF created a work-study program to train overhead/underground network fitters. 13 of 40 candidates were selected and given pre-qualification training through the adult education association (*Association nationale pour la Formation Professionnelle des Adultes* - AFPA) before being hired by ERDF in early 2007, under an 18-month work-study professionalization contract. Having obtained their professional title, five of them will be hired permanently by EDF and eight by partner companies.

Faced with aggressive competition at European level and engaged in a strategy of industrial and sales and marketing development, the EDF Group must consolidate and attract talent. Its human resource policy revolves around three main components: adapting employment and competencies, mobilizing employees and promoting workplace dialogue. This relies on the principle of subsidiarity and on adapting to local contexts as well as to the specific needs of various businesses, with the goal of sharing best practices throughout the Group.

ADAPTING HUMAN RESOURCE POLICY

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

Customer relations center at Noisy-le-Grand, France.

MANAGING EMPLOYMENT and competencies

In a competitive environment with the need to revitalize new investment, EDF is broadening and renewing its scope of competency. The issue is to anticipate the large number of employees that will be retiring in the next few years from professions requiring a high level of technical skill.

14,000
employees to be recruited by EDF in five years

—

When distribution activities
were separated from sales and marketing, 5,800 people were transferred from distribution agencies to customer service centers.

FOCUS ON

In a context of worldwide nuclear relaunch while being faced with the retirement of 40% of its generation and engineering collaborators, EDF is increasing and strengthening its competencies in the area of nuclear generation and plans to hire 500 engineers annually over the next five years. In November 2007, Energy Day attracted 1,000 engineering students to meet experts in the different fields of generation. A total of 350 internships were proposed.

OUTLOOK AND HIRING

In 2006, EDF began establishing prospective programs in order to foresee its need for competencies in each of its businesses.
In France, in a context characterized by a large number of recent retirements, EDF was able to optimize its resources, increasing jobs in certain fields and reducing them in others.
A new policy of recruitment was launched in 2007. It aims to recruit the leaders of tomorrow, acquiring a high level of skill and talent that reflects the diversity of society and EDF customers. To attract this talent, EDF has launched external communication campaigns that put forth EDF employer branding: a press campaign on the theme of less CO_2, the creation of a dedicated website *edfrecrute.com* and specific operations aimed at engineering schools.
EDF is also helping subcontractors and service providers renew their competencies. Many of these subcontractors and service providers signed agreements to recruit interns who complete EDF's internship program.

DYNAMIC MOBILITY

In 2007, in-house mobility involved 23,000 EDF employees, 25% of which actually changed from one line of profession to another. These changes advanced career paths while responding to the needs of the company which is running an "oriented mobility" program with clear objectives according to branches and divisions. When changing lines of profession, employees benefit from substantial professional training and assistance such as finding housing and employment for spouses, etc.
Meet the Businesses sessions are organized in various regions to detect and motivate employees who might evolve toward technical careers. An employment mobility information system (*Système d'Information Emploi Mobilité* - SIEM) was created in 2007 to offer employees information on employment opportunities within the company and to give EDF entities greater visibility in this respect.
A similar tool, Geo for Group Employment Opportunity, exists for international mobility.

TRAINING

Training by business sector

Because training is a major asset to the employment policy, training measures were reorganized around the Group's principal business activities: Generation, Distribution, Sales and Marketing and, in France, Management and the National Expertise Structure. Goal: to respond to each area's specific challenges and to more closely involve managers and employees. Apprenticeship is also a tool used for renewing competencies and EDF is increasing its efforts in this area *(see page 58)*.

A focus on security

Security is central to many of the training programs in France and internationally. In 2007, a day-long conference concerning the issue of security in Bratislava was organized for the leadership of EDF's subsidiaries and affiliates in the Central and Eastern European countries (CEEC). The conference foresaw a new era of dynamic sharing of the issue.
In Germany, the EnBW Academy organized 99 technical training sessions in 2007, in which 1,743 trainees participated, with 92 training sessions focusing on security attended by over 1,300 participants.
In the UK, EDF sponsored engineering students through the Power Academy, an initiative aimed at promoting the talent of the future.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

WORKING conditions

Preserving the health of employees and guaranteeing their safety is an employer's duty and an EDF Group priority worldwide.
Moreover, working conditions are an indispensable basis for employee motivation and adherence to Group culture. This applies not only to EDF employees, but to suppliers and subcontractors as well.

EMPLOYEE HEALTH AND SAFETY

A common priority

Efforts undertaken over the last several years to guarantee employee health and safety are part of what has enabled Group companies to maintain their high level of excellence.
The low frequency of work-related injuries at EDF, under four (3.8 in 2007), testify to company commitment in this area. Indeed, EDF rates among the top companies in France and the best electricity companies in Europe. The degree of seriousness has also remained stable. Injury frequency rate at Edison (including Edipower), also below four, is improving markedly, though the degree of seriousness was slightly affected by a serious employee accident at the hydro plant in Valteline.
In 2007, Group entities drew up basic shared principles aimed at strengthening dialogue, making progress with subcontractors, drawing inspiration from best practices, seeking to conform to the highest standards: OSHAS 18001, SM2S and OHS 2001. Progressing even further, they are continuing to deploy shared indicators and to compare their health and safety management systems.
Management has a key role in this area and is therefore involved in a large number of campaigns to raise awareness and prevent risks. In Slovakia, after its 2006 analysis, SSE organized managerial awareness sessions: role of management in prevention, safety reviews, risk assessment, work preparation, etc.

Sharing best practice

Working groups gathered in 2007 to share best practice Group-wide. The EDF Energy team presented its thinking on protective materials, procedures and equipment employed by each company against electrical risks. The Edison team examined the procedures in use by the companies

SSE:
drafted an electrical risk reference guide for distribution to all employees in early 2008.

Kogeneracja
participated in the EDF Group "Safety Challenge" in October, 2007.

UNDERSTANDING

The Charter on Progress and Sustainable Development signed with nuclear subcontractors.

This charter, signed in 2004, strengthens the partnership between EDF and its subcontractors and provides notably for concrete measures to foster good working conditions, safety, radioprotection and training of outside help. An intercompany safety and working conditions commission (*Commission inter-entreprises sur la sécurité et les conditions de travail* - CIESCT) was created in each plant to improve conditions for subcontractors.

MÉDIATHÈQUE EDF – LAURENT VAUTRIN

EDF works with service providers to jointly develop training programs. Here, the nuclear power plant at Gravelines.

In 2007,

an in-depth review was conducted in the Polish, Hungarian and Slovakian entities and plans of action on improvements were implemented.

600 participants

attended a risk-prevention conference, linked to falling and electricity, at the Belleville nuclear plant in France.

for pre-qualification of subcontractors and drafted operating recommendations. The EDF team's work on individual protection led to the adoption of common uniforms through a purchasing pool.

Preventing health-related risk

In keeping with the CSR agreement, the principles of preparation for a pandemic crisis were approached at Group-level. Thus the individual company's plans of action will be guided by a common ethical framework, consistent sanitary precautions for employees, organizational issues, and employee awareness while taking into account the policies laid out by each country where they operate.

CONDITIONS EXTENDED TO SUPPLIERS AND SUBCONTRACTORS

A charter signed with nuclear subcontractors

In keeping with the Charter on Progress and Sustainable Development signed with nuclear subcontractors in 2004, several initiatives were launched in 2007: definition of indicators, drafting of a specific charter to be signed by each sub-contracting company, integration of social criteria in contracts, standardization of recourse to other companies or foreign employees. An intermediate review in 2007 underscored signatory satisfaction with the initiatives underway and with their progress.

Concrete progress

The three-year agreement of 2006, concerning socially responsible subcontracting, guarantees subcontractors and their employees that they

FOCUS ON

Sanitary expertise

EDF's Medical Advisory Council *(Conseil médical d'EDF)* brings together experts in toxicology, medical biophysics, immunology, public health, workplace health and bioethics. It is consulted regularly.
EDF's Medical Research Department *(Service des études médicales)* also contributes to improving Group understanding of sanitary issues. In 2007, the service notably carried out a study on the effects of formaldehyde, a frequent polluter of indoor air, and identified practical measures for treating high risk patients.

will be able to work under the best of conditions, qualifications, health and safety, with a full understanding of any risks involved. This agreement led to a number of concrete initiatives in 2007. In terms of working conditions, the Fossil-fired Generation and Engineering Division implemented tools for surveying subcontractor perceptions. The distributor deployed a plan of action to verify working conditions.

Work-related injuries and absenteeism

	EDF	Group
Injury frequency rate	3.8	**6.3** (excluding EDF Trading and Synergie)
Degree of seriousness	0.19	**nd**
Number of injuries	516	**1,495**
Number of fatal injuries	8	**15**
Hours missed/hours worked	4%	**nd**

DIVERSITY AND GENDER EQUALITY

Corporate commitment

On June 1, 2006, EDF's Chairman signed *La diversité, un atout pour EDF*, a commitment to promote diversity in all its forms. Thus the EDF Group set several priorities, particularly a more open approach to hiring high level executives, giving greater value to career paths by apprenticeship and integrating seniors, with special efforts in certain areas of business.

Achievements

A series of training and awareness workshops on living with and managing diversity, *Vivre et gérer la diversité*, began in September 2007. The workshops are intended to help strengthen employee and manager understanding of the stereotypes and preconceived notions detrimental to diversity, and to provide points of reference for everyday awareness. The objective is to train 14,000 people by December 2009.
The results of the three-year workplace equality agreement signed in July 2004 showed:
- a reduction in the wage gap, from 4.9% in 2002 to 1.7% in 2006, with women advancing by more than five points on average over three years thanks to specific advancement programs for them;
- women have accounted for more than 30% of new hires every year since 2002, and made up 24% of total staff in 2006 versus 22.5% in 2002.
In December 2007, a second four-year agreement was signed concerning workplace gender equality. It also encourages a better balance between professional life and private life. Cooperation between generations is encouraged and developed through work-study programs where the mentors provide guidance to their interns.

Integrating disabled employees

EDF's seventh three-year agreement (2006-2008) on corporate integration of disabled people strengthens tools for integration at all steps of the career path: periodic job reviews, consideration of adapted targets, particular attention to training and mobility, accommodation of workstations and office space, awareness of coworkers and management and safeguarding employment. Several simulations were organized in 2007, for instance at EDF headquarters in the spring and later at EDF R&D at Chatou.

Integration of people with disabilities:

> In Poland, EC Kraków signed its first social agreement in June 2007
> In Slovakia, SSE deploys a plan of action

€8.9 million in purchases from the protected sector

(up 9.2% from 2006):
> Landscape maintenance (€4.8 million)
> Office supplies and photocopying (€1.1 million)
> Other services (€2.3 million)
> Meter renovation (€0.7 million)

FOCUS ON

Sustainable development risks linked to each purchasing category were mapped.

The supplier charter deployed in 2007 and systematically integrated into general purchasing clauses was completed by a reference document covering 200 socially responsible subcontracting issues *(200 questions pour une sous-traitance socialement responsable)*. The document is based on the international SA 8000 standard. It was tested at the end of 2007 with three suppliers in China, Madagascar and Belgium. Deployment will begin in 2008, at the same time as supplier audits.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

The EDF Group has committed to assure that the disabled account for at least 4% of new hires.

200 seniors
recruited on special contracts in 2007 as part of a hiring program that gives priority to those who have been unemployed for a long time

—

Accessibility assessments were also made at the 180 EDF sites with the most occupants and improvements were undertaken. Job insertion in this area remains a priority at EDF, which has committed to recruiting at least 4% employees with a disability and to adapting apprenticeship correspondingly.

QUALITY HIRING

Since 2006, with help from the discrimination watch organization (*Observatoire des Discriminations*), certain human resource processes have been revised in order to prevent discrimination. EDF is focusing on recruitment related issues. In addition to revising its own modalities, the company asked recruiting agencies to pay special attention to preventing discrimination in their selection processes. Studies and tests will by conducted to monitor the implementation of these recommendations.

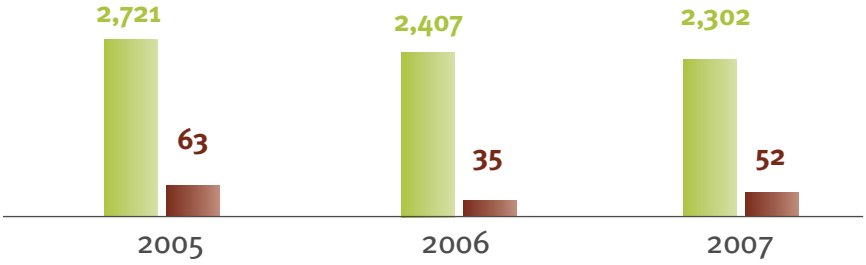
Social benefits in France

There are a number of important reforms underway to enhance employee benefit packages in the gas and electricity sectors similar to other major groups in France. In 2007, negotiations were undertaken at professional Branch level, to institute a supplementary cover improving health care coverage.

Recognition and compensation

In order to better reward both individual and team efforts, compensation increasingly integrates performance-related variables. Moreover, according to the terms of the 2007 social agreement, 2.8 million free shares were distributed in 2009 to 150,000 employees in 22 countries, conditioned by their continued presence during a period of 3% annual increase in Group EBITDA (constant figures) from 2006 to 2008.

INTEGRATION OF PEOPLE WITH DISABILITIES:



Number of workers with acknowledged disabilities (EDF)
Number of workers with disabilities recruited (EDF)

The drop in number of disabled workers partially corresponds to the lower number of company staff overall.

FOCUS ON

In France, 75% of EDF employees are also EDF shareholders. In subsidiaries and affiliates outside France (UK, Poland, Hungary) subscription reaches 50%. Group employees hold 34.6 million shares: 1.9% Group capital stock, 15% floating stock.

As part of EDF's 2.5% stock sale on December 3, 2007, employees and former employees will be invited to participate in a new employee offering in 2008 representing 15% of the total operation.

WORKPLACE dialogue

EDF is developing workplace dialogue both in France and at European and global levels. In a context of market opening and structural change, important negotiations are underway to find a new equilibrium for the "social contract" that binds EDF and its employees.

FRANCE

Eight labor agreements

The workplace dialogue agenda adopted in 2006 provides for 15 negotiations over the period from 2006 to 2008. Its implementation has been a source of intense dialogue, particularly regarding employment, employee recognition, health and safety and working conditions. Eight agreements were reached in 2007.

Reform of the special pension schemes

In France, the electricity and gas workers branch [1] has undertaken negotiations with social partners to align the sector's traditional special pension schemes with those of the public sector, based on a decision by the public authorities. For its own employees, EDF has deployed a full information program that includes individual simulation, documentation on the changes planned for the sector's special scheme, meetings, etc.

New institutions for employee representation

In accordance with corporate law, EDF replaced former structures with new committees (*Comité central d'entreprise* - CCE and *Comités d'établissement* - CE). As part of agreements with social partners, professional elections were held at the end of 2007. Following negotiations with unions, a Group Committee for France will be created once the new institutions are in place.

EUROPE AND THE REST OF THE WORLD

A central role for the European Works Council

The EDF Group European Works Council (EWC), composed of 33 regular members and a German auditor, meet semi-annually to discuss strategic Group economic, financial and social issues.

These working groups have brought the insight they gained to the drafting of the human resource policy at international level: health and security in Europe, EDF Group CSR agreement worldwide.

GLOBAL CORPORATE SOCIAL RESPONSIBILITY AGREEMENT

Monitoring the agreement

The CSR agreement is monitored by the EDF Group world committee for social responsibility dialogue which met April 24 – 26, 2007. The committee's board also met two other times. Among the 2007 main topics, dialogue and managerial initiatives were both reinforced and conducive. The agreement's signatories extended it for one year. Social dialogue began in all Group companies to identify the priority in which local initiatives should be taken.

Applying the agreement

In Mexico, the Group disposed of its gas plants, in full adherence to the principles of anticipation and measures to accompany restructuring as provided for in article 6. In the same spirit, the Group holds to the highest safety standards everywhere in the world. In Nam Theun and Laos, an ambitious action plan in this area underlies all activities linked to the worksite and extended to all subcontractors. CSR is a part of all Group company performance reviews.

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

1. (*Industries Electriques et Gazières* - IEG).

SUSTAINABLE DEVELOPMENT WORKSITES

As part of its own program of major projects, EDF contributes to the programs for major works launched by government agencies. The issue is to coordinate the actions among various stakeholders (industrial, national and public authorities) to build major works while limiting the social and economic impact on surrounding communities.
This approach aims to maximize the positive results for the communities where the construction has been undertaken.
The approach is being applied at the construction site of the Flamanville 3 nuclear EPR reactor. It has also inspired the measures taken at the Nam Theun dam site in Laos.

MÉDIATHÈQUE EDF – PHILIPPE ERANIAN

EPR construction site at Flamanville.

CONSTRUCTION of the flamanville EPR

MÉDIATHÈQUE EDF – PHILIPPE ÉRANIAN

PROTECTING THE ENVIRONMENT

In December 2007, the first concrete was poured. The total volume of concrete used will reach 500,000 m³. As far as possible, the materials (sand, cement, gravel) will come from rock extracted from the worksite itself or from nearby quarries. This helps to develop the local economy and the region's employment, while greatly reducing truck traffic.

BOOSTING BUSINESS AND JOBS IN THE REGION

As part of its contracts with major subcontractors, EDF included a clause asking them to contribute to a plan for local job creation and placement and to identify which of their activities could be carried out locally with as much local manpower as possible.
The Cherbourg Chamber of Commerce and professional federations, working with EDF, mobilized local companies, informing them of the principal contractors to enable them to place themselves for subcontracting contracts.
A website was created with the Cherbourg Chamber of Commerce where the region's companies can find the list, schedule and description of calls to bid, as well as the names of the market holders. The latter are provided with a list of local companies interested in subcontracting. A total of 238 companies are currently listed.
A "job bus" circulated among the sixteen communes of the Manche department in 2006. It collected close to 1,800 applications. Job interviews were held in early 2007 and 111 people were hired. Another one hundred were recruited to participate in a training program.
In January 2008, an ANPE employment agency was inaugurated next to the EPR worksite in the presence of local officials and businessmen. The agency, co-financed by EDF, is part of a human resources employment and training program implemented at the EPR worksite in the summer of 2007.

ATTENTIVE TO WORKER CONDITIONS

During the summer of 2007, a former campground was renovated and refitted to receive part of the personnel working at the Flamanville 3 construction site.
A grouping of companies, Quille/DTP/Bouygues, took charge of the renovation, installation and management of cabins for single employees. These lightweight structures will be dismantled in 2012, once the construction of Flamanville 3 is complete.

FOSTERING QUALITY RELATIONSHIPS WITH LOCAL AUTHORITIES

Every quarter, EDF communicates to all worksite stakeholders, national and local authorities, an operating report on the work's progress, what remains to be done, economic impact and the number of employees.

700
outside workers, of which 41% were locals

—

€17 million
attributed in worksite contracts, of which 76% went to local companies

—

FOCUS ON

"With the environment ever present in our minds, we re-used a major part of the 700,000 m³ of rock extracted from the ground. After grinding it on site and transforming it into gravel, we were able to mix it with sand and cement in concrete plants located at the site. This enabled us to avoid circulating 660 trucks at 25 tonnes each."

Philippe Texiera, responsible for the preparation of the concrete for EDF at Flamanville.

CONSTRUCTION
of the Nam Theun 2 dam, Laos

MÉDIATHÈQUE EDF – THIERRY RENAVAND

73%
Overall construction progress achieved in 2007 (as planned)

—

A COMMITMENT IN TERMS OF MEANS DEPLOYED AND RESULTS ACHIEVED

The Nam Theun 2 hydroelectric dam (1,070 MW) provides Laos with a powerful means to support its development and will contribute to providing energy to Thailand, the principal beneficiary of the electricity produced. The powerhouse will also supply 300 GWh/year to Électricité du Laos.
EDF is the dam's builder and the main shareholder (35%) of Nam Theun 2 Power Company (NTPC), the owner and future operator of the plant. Since the worksite began in 2005, EDF has made environmental and social commitments involving significant obligations in terms of means deployed and results achieved. These primarily concern the protection of the environment of the catchment area, the enhancement of the quality of life of relocated populations and the economic and social development of 200 villages downstream from the project.

IMPROVING QUALITY OF LIFE FOR RELOCATED POPULATIONS

In the area comprising the future reservoir, 1,250 families (6,200 people) from 17 villages are being relocated to villages that, according to their wishes, are being built as close as possible to their former villages. Their living conditions have been improved as they have gained access to electricity, water, roads that remain open in all seasons and nearby health services. The infrastructures of public hospitals in the provinces of Kammouane and Bolikamsai have also been improved.
The health of the population involved is being monitored through programs integrating epidemiological studies, prevention of malnutrition and STDs (notably AIDS), and bolstering public health services. The primary results are convincing and acknowledged.

FOCUS ON

Assessments of health of relocated villagers and vectors of disease (insects and gastropods) are taking place before filling the reservoir in accordance with the cooperation agreement signed by EDF and its foundation with the Laos government and the Pasteur Institute in Paris. At the end of 2007, these assessments concerned over 2,000 villagers and 15 villages. After the reservoir has been flooded, the population will be monitored as part of a study on the reservoir's impact on health. The study will also monitor the vectors.

RURAL DEVELOPMENT PROGRAMS

NTPC is committed to doubling the quality of life of the relocated populations in just five years and is deploying rural development programs to boost and diversify income with new practices in growing crops, animal husbandry and fishing. NTPC is supporting the forest village association VFA, created to replant and protect the forest and to promote diverse activities such as: crafts, saw mills, manufacturing of furniture, production of charcoal, and nurseries for orchids, bamboo and medicinal plants.

DEVELOPMENT PROGRAM FOR DOWNSTREAM AREAS

The hydro works and their operation will have an environmental impact (fish populations, riverside crops) downstream from the power house in an area divided by a 27 km (17 mi.) channel leading to Xe Ban Fai, a tributary of the Mekong. EDF is building a control dam to limit changes to flow due to variation in electricity generation. An eight-year program has also been undertaken to assist populations in more than 200 villages to adapt to their new environment and enhance their quality of life.

FOREST AND BIODIVERSITY CONSERVATION IN THE CATCHMENT AREA

The 4,000 km^2 catchment area (1,500 sq. mi.) contains a natural reserve of international interest because of its unique wealth of plant and animal life. NTPC has contributed to the foundation and operations of the WMPA[1], a provincial authority entrusted with protecting biodiversity in the park, in association with local villagers. NTPC has devoted $1 million per year for 30 years and is providing technical assistance. This commitment was a major motivation for financial backers such as the World Bank, the Asian Development Bank, and the French Development Agency.

AN OPPORTUNITY FOR DEVELOPMENT

The construction site is a major driver for employment with 5,000 to 8,000 workers, of which more than 80% are Laotian, working under safety conditions and benefiting from training that will be an asset on future worksites. More broadly, the project is a source of development for the entire country. As a shareholder (25%), the Laos government will benefit from dividends and royalties for 25 years, as the concession grantor. The Laos government has committed to using this revenue of $2 billion during the period of operations, for social and economic development programs. After 25 years of operations, the project will be transferred in full to the Laos government, thus generating export income for several decades to come.

A HIGHLY CONTROLLED CONSTRUCTION PROJECT

In addition to internal controls by NTPC and the Laos government, the project is being closely monitored by outside organizations: a panel of internationally renowned, independent experts, the World Bank, and NGOs that conduct detailed, on the spot verifications of effective implementation of the ethical, environmental and social commitments of the contracting parties.

1. Watershed Management and Protection Authority.

13%
of the total cost of the project is dedicated to assisting the region

—

10
villages out of 17 relocated at end 2007

—

770 families

settled in their new villages in 2007 and 480 in early 2008

350 people,

of which 16 NGOs, were received in June 2007 in Thakek for the project's annual two-day stakeholder forum which included visits of the sites

Waste management

Built on the site in 2005 according to European standards, Laos' first waste treatment facility is processing non-hazardous construction waste. Awareness was raised among construction workers on waste management.

FOCUS ON

Unexploded ordnances, the remains of massive bombarding between 1964 and 1973, represent a very real hazard. A systematic program of detection and removal is being carried out at all construction sites and in agricultural and village areas, covering a total of 6,500 hectares (25 sq. mi.). NTPC is contributing $16 million. NTPC is also organizing sessions to raise awareness in populations and schoolchildren of the dangers of these explosive war remains.

SUMMARY OF 2007 ACHIEVEMENTS

COMMITMENTS/OBJECTIVES	2007 ACTIONS UNDERTAKEN	OUTLOOK AND ACTIONS
Sustainable development commitment and approach to ethics		
Sustainable development commitments and implementation of SD policies	• EDF implemented plan to relaunch ethics: - New ethical reference framework and ethical commitments drafted and, - Distributed at all EDF entities, - Network of local ethics correspondents set up, - Ethics measures bolstered, toll-free number "Life in the workplace" for 30,000 people tested for six months • Sustainable development promoted in-house: - Renewal of Sustainable Development Awards: over 600 projects submitted, - Action Planète energy savings program launched • Corporate social responsibility policy drawn up	• Continue circulation and assimilation of the Ethics Charter • Group-wide deployment of approach to ethics • Develop an employee program to promote energy eco-efficiency
Risk Control		
Implement Group risk management and control procedure	• Joint Electricity Rapid Intervention Taskforce created by Hungarian and Slovakian subsidiaries and affiliates (Demasz and SSE) • Efficiency of pandemic plan approved • Customer electricity supply re-established in three weeks following Hurricane Dean in Martinique. Crisis resolution team formed to work in collaboration with the Electricity Rapid Intervention Taskforce (*Force d'intervention Rapide d'Électricité* - FIRE)	• Integrate climate and carbon risks into risk prevention and reduction processes
Anticipation of future challenges		
Schedule R&D programs according to sustainable development energy challenges **Assess implementation of scheduling**	• 12 R&D Challenges launched, notably on anticipating climate constraints on water, on the changing energy landscape (medium and long-term) and innovations in renewable energy and electricity storage • R&D renewables program continued (solar photovoltaïc, high output heat pumps, windfarms, marine turbines, re-use of biomass, deep hot rock geothermal) • Active technology watch for carbon capture and storage • Participated in "HOMES" project financed by the French agency for industrial innovation whose goal is to develop intelligent design architecture and components for tomorrow's buildings for up to 20% energy savings • Participated in "Energy Efficiency in Buildings" (EEB) sustainable construction project • European Center and Laboratories for Energy Efficiency Research (Ecleer) created jointly by EDF, the Paris *École des Mines* and Lausanne's *École Polytechnique Fédérale*	• Continue research on 12 Challenges • Launch a prototype tidal farm • Launch a prototype ocean wave pump
Stakeholder dialogue		
Assure all stakeholders are informed of changes made to meet expectations expressed	• Joint meeting of Sustainable Development Panel, the Scientific Advisory Board and the Environment Board held in follow-up to France's national conference on the environment • Contributed to establishing public energy policy: Pierre Gadonneix named Chairman of the World Energy Council, drafting with the WBCSD of the report "Caring for Climate" • Development of workplace dialogue in France (8 agreements) • Actions by local consultative bodies (CLIs, observatories)	• Creation of a corporate social responsibility Advisory Board with stakeholders on topics of concern to society. • Creation of a Group Committee for France

SUMMARY TABLE OF 2007 ACHIEVEMENTS

COMMITMENTS/OBJECTIVES	2007 ACTIONS UNDERTAKEN	OUTLOOK AND ACTIONS
Management system		
Incorporate the Group's environmental policy within the environmental management system (EMS) **Implement screening based on sustainable development criteria within projects and sales and marketing offers**	• Deployment of Group EMS continued • Environmental screening of projects examined by a Project Commitment Committee (*Comité Engagements Projet* - CEP)	• EMS assessment integrating Group Environmental Policy targets • Extend environmental screening grid to ethical and societal criteria
Customer dialogue		
Develop sales and marketing initiatives based on the promotion of energy efficiency solutions at customer premices **Continue to assist the most frail customers after the transfer of this responsibility from distribution to sales and marketing** **Improve accessibility to EDF services for people with disabilities**	• National Consumer Service created • Group CSR Agreement Monitoring Committee reviewed treatment of vulnerable customers before and after market opening. Result: efficient specialization of teams and smooth running of measures now steered by the SNC • Energy and/or service offers promoting energy efficiency on the customer end developed: - In France, *EDF Bleu Ciel* offer launched. In Germany, EnBW advises customers in energy efficiency and distributed renewables - New services offered for controlling energy consumption and renovation offers (audits, recommendations, assistance with project management) - Development with industrial partners of distributed renewables on the scale of entire buildings (heat pumps, photovoltaic, solar thermal, wood, thermal storage and consumption control) and of new insulation techniques (thin insulation and external thermal insulation systems,…), - "Together let's create our own energy" Tour organized in eight major French cities	• Sales and marketing development of EDF EnR Réparties
Supplier dialogue		
Incorporation of the ethical, environmental, social and societal criteria of sustainable development into dialogue with suppliers	• In France, supplier charter inserted in contract clauses. Supplier assessment criteria (supplier questionnaire / posting on-line on the purchasing portal) shored up. Awareness campaign in purchasing agencies in conjunction with *Mission Solidarité* • EDF and Demasz conducted first supplier audits • Partnerships formed with associations representing the protected sector to foster more open supply-demand interface with buyers • In the UK, EDF Energy assessed suppliers in line with the UN Compact Global	• Continue program for social and societal auditing of suppliers
Climate change		
Commit to tackling climate change **Adopt action plans aimed at reducing CO_2 emissions** **Draw up a carbon policy**	• EDF's low CO_2 emissions energy mix strengthened • Contributed to nuclear relaunch in the United States, the United Kingdom, and in China. In France, development of the Flamanville 3 EPR • In China, joint venture signed between EDF and China Guangdong Nuclear Power Company (CGNPC) for the construction of two EPR reactors in the Guangdong province • In the UK, "Our Climate Commitments" published and partnership with London 2012 signed • Commitment to renewable energy bolstered: - EDF Énergies Nouvelles and the renewables business among subsidiaries and affiliates, - EDF Énergies Nouvelles launched C-Power, one of Europe's largest offshore wind projects, - Positioning on the biofuel market: agreement signed with Alcofinance SA, European leader in ethanol distribution • First experiment on plug-in hybrid vehicles with Toyota launched. "E = less CO_2" booklet published to provide a better understanding of global warming, the issues involved in choosing energy, and everyday good energy habits	• Give concrete expression to nuclear relaunch objectives in the US, the UK, China and South Africa • Invest €3 billion in wind power from now to 2010 • Be a part of the early drive to make energy efficiency a lasting business • Support the emergence of solar business • Improve CO_2 performance of the Group's generation fleet • Propose a plan of action for reducing emissions resulting from the company's everyday functioning • Aim for 2010 installation of a post-combustion capture system at EnBW's fossil-fired plant in Karlsruhe, designed to extract 90% of CO_2 from flue gas • Finish C-Power installation projects by 2011-2012

SUMMARY TABLE OF 2007 ACHIEVEMENTS

COMMITMENTS/OBJECTIVES	2007 ACTIONS UNDERTAKEN	OUTLOOK AND ACTIONS
Protection of biodiversity		
Approve, deploy and implement biodiversity policy **Draft a guide to biodiversity**	• Environmental impact study of Petit-Saut dam in French Guiana published at the end of 2007: presents results of over ten years of scientific research on the plant and animal life and the natural environment of this site • Partnerships signed between the EDF Foundation *Diversiterre* and the Natural Reserves of France, the Coastal Conservancy, the Nicolas Hulot Foundation and the French birding association (*Ligue de Protection des Oiseaux* - LPO) • EDF – IUCN partnership agreement drawn up • Partnership charter signed with the LPO to protect the Mediterranean environment • Nogent nuclear power plant implements biodiversity protection program	• Publish a biodiversity guide in partnership with the IUCN • Sign partnership between EDF and IUCN early 2008
Limiting environmental impact		
Draw up a waste management action plan **Implement a plan to eliminate PCB transformers** **Draw up an action plan for contaminated soil** **Begin and continue work to reduce pollutant emissions**	• GAGD waste action plan implemented. 2006 results on conventional waste management • Industrial ecology continued: in China, Laibin coal-fired plant sells ash and recovers clinkers • 2007-2009 contaminated ground strategic action plans finalized at each entity • The Le Havre denitrification unit brought on stream. The Cordemais units will be functional in 2008 • Vazzio's denitrification system equipped with 7th and last motor in May NOx emissions divided by 4 • In China, desulfurization of the Shiheng coal-fired plant • In the UK, Cottam plant finished desulfurization unit • Agreement signed with Medad, Ademe and Gimelec to voluntarily reduce SF6 emissions from low and high voltage installations • Tiru signed exclusive 5-year partnership with OWS (Organic waste systems) to develop the latter's methanation offer in France	• Finish inventory of EDF industrial and service locations in 2008 • Bring into service 2 SCR system motors for denitrification at the Pointe-des-Carrières plant in Martinique by 2010
Industrial safety and security		
Continue managerial initiatives and associated working methods to support longlasting results in nuclear and hydroelectric safety **Improve safety in fossil-fired plants**	• STEP 2010 five-year program and the 'housekeeping' of the nuclear plants continued • First operations of five-year SuPerHydro program for 2007-2011 as defined in 2006 (450 operations and €500 million for the period) launched • Program to improve the state of the fossil-fired facilities (safety) launched • 11th campaign to raise public awareness of security issues near hydro infrastructures • In the UK, EDF Energy launched Zero Harm Campaign	• Continue STEP 2010 five-year program and the 'housekeeping' of the nuclear plants • Continue five-year SuPerHydro program between 2007-2011 • Continue program to improve the state of fossil-fired facilities
Nuclear waste management		
Responsible, transparent management of radioactive waste treatment, transportation and storage	• Three incidents recorded out of 202 shipments; all three below regulation level • Authorization granted for full dismantling of Chooz A and public surveys point to acceptance for the decommissioning of Saint-Laurent A and Chinon (nine reactors are currently being decommissioned in France)	• Study potential for operating reversible underground storage by about 2025 (under the condition that authorization is granted in 2015) • Continuation of Generation IV program which provides for an operational prototype of a 4th generation nuclear reactor which limits waste by about 2010 • Submit new application to decommission Brennilis plant that provides for a public survey

SUMMARY TABLE OF 2007 ACHIEVEMENTS

COMMITMENTS/OBJECTIVES	2007 ACTIONS UNDERTAKEN	OUTLOOK AND ACTIONS
Socially responsible human resource policy		
EDF: formalize several-year agreement on the recruitment and re-integration of the disabled in the workplace **Promote professional gender equality** **Promote corporate diversity and address discrimination** **Establish health and safety policy at Group level**	• EDF: tracking committee formed to monitor application of commitments set down in the various agreements on the integration of disabled workers • Accessibility of EDF premises audited • EC Kraków (Poland) signed first agreement on job insertion for the disabled • Diversity achievements reviewed in early 2007 and implementation of programs and action plans continued: - Second agreement on gender equality signed - SSE (Slovakia) signed "AA" Antidiscrimination Agreement • In France, new hiring policy implemented and Energy Day held on November 26 • Security audit of EDF subsidiaries and affiliates in Poland, Hungary and Slovakia	• Work closely with young employees from underprivileged urban areas through personalized program • Review diversity • Evaluate and possibly extend experimental toll-free number "life in the workplace" • Renegotiate Group CSR Agreement
Corporate social responsibility policy		
Establish corporate social responsibility policy at Group level	• Corporate social responsibility policy signed to cover three main areas: - Improve access to essential energy services for vulnerable populations, - Work closely with partners and regions to support local projects in line with Group strategy - Contribute to developing education, especially on energy savings, and support work-study programs • Partnership initiatives aimed at local development and grounded on energy service offers continued • EDF Energy and London Climate Change Agency formed partnership to create London ESCo • Access to energy projects in Mali, Morocco and South Africa continued. New projects in Madagascar, South Africa and Senegal launched • Nam Theum 2 project: health of populations relocated by NTPC tracked by the Pasteur Institute, then the IP in Laos will be associated with the NTPC • London Warm Zone program extended (EDF Energy) • Energy Assist program continued (EDF Energy)	• Deploy and implement Group-wide the corporate social responsibility policy • Provide assistance with local renovation and home improvement projects for run down public housing and individual homes • Provide housing for populations relocated to make way for Nam Theun 2