

Directorate General for Energy and Climate



Resources, land, habitats and housing
Energy and climate Sustainable development
Risk prevention Infrastructure, transport and the sea

**Present
for
the future**



Ministry of Ecology, Energy, Sustainable Development and the Sea
in charge of Green Technologies and Climate Negotiations

www.developpement-durable.gouv.fr

WE SHOULD ALL FEEL CONCERNED



Last December, heads of state and government reached an agreement in Copenhagen to limit the rise in temperatures to 2°C, as recommended by the scientists of the IPCC. To this end, the European Union has made a commitment, at the instigation of the French President, to achieve a 20% reduction in CO₂ emissions by 2020. One of the only countries in the world to abide by the Kyoto protocol, France now intends to lead the way and, following its Environment Round Table, plans to cut its CO₂ emissions to a quarter of their present level by 2050.

For more than two years now, a concerted effort has been underway in our country to invest massively in a new model for growth, known as green growth, which is built on low-carbon technology and energy efficiency. Within this context, the Directorate General for Energy and Climate (DGEC) has been directly involved in implementing some of the principal measures decided upon at the Environment Round Table. These include the Grenelle 1 Act, which was passed almost unanimously and which provides for: the creation of an interest-free eco-loan, which has already led to heating renovation work in more than 65,000 private homes; the request for proposals to build at least one solar energy plant in every region by 2011; the decision to halve the time required to connect solar energy systems to the grid; the creation of a green bonus for motor vehicles; and the new clean vehicle plan. The first effects can already be felt! According to generally accepted forecasts, the French Environment Round Table should lead to a 22.8% reduction in the country's greenhouse gas emissions between 1990 and 2020.

“For more than two years now, a concerted effort has been underway in our country to invest massively in a new model for growth.”

Over the months, the DGEC has emerged as the leading prime contractor for energy transition in France. No other country in the world has set up a single body to address all the different issues relating to energy, climate change and air quality. The DGEC, with its public organisations and decentralised departments, provides the country with a highly expert, cross-cutting team, capable of addressing all the issues in a key sector where tomorrow's economic battles will be fought. For the past two years or more, its activities have undergone considerable change and now extend beyond the scope of energy production alone. It thus comes as no surprise that a recent decision was taken to make it directly responsible for the new carbon market office. The DGEC now has all the levers it needs to become the first energy directorate of the 21st century, in other words, one intent on guaranteeing a safe, local and low-carbon energy supply.

Jean-Louis Borloo
Minister of State,
Minister of Ecology, Energy, Sustainable Development
and the Sea, in charge of Green Technologies and Climate
Negotiations



A genuine responsibility for the future



We live in a world of limited resources. Energy resources are dwindling, as testified by repeated and growing tension on the world markets. Although this context justifies the need for us to secure our energy supply at the best possible price, energy policy can no longer be based on that strategy alone. Fighting climate change is now a priority and means that greenhouse gas emissions must be reduced on a global scale and without delay.

The new Directorate General for Energy and Climate, which is also responsible for issues relating to air quality, must meet both these requirements. To rise to this ambitious task, it brings together a wide range of technical, economic, financial and legal skills to take effective action to:

- address energy production issues, not only with a focus on renewable energy sources, but also on the various uses of energy in industry, homes and vehicles;
- develop the extensive range of public policy instruments required to address such complex and vital issues and put forward appropriate solutions in areas such as standardisation, regulation, financial incentives, buyback rates, taxes, quotas or green bonus/penalty systems;
- propose a forward-looking vision for different types of energy technology.

Fighting climate change is now a priority.”

Carbon finance, energy prices, renewables, security of energy supply, adaptation, nuclear energy, the impacts of global warming and biofuels. These topics are all part of the Directorate's routine activities and the everyday lives of our fellow citizens. And our responsibility for the future. Sooner or later, we will have no choice but to step up efforts to reduce our greenhouse gas emissions, address the issue of dwindling resources and prepare the population and regions to make the necessary adaptation to climate change.

Pierre-Franck Chevet
Director-General
for Energy and Climate



The DGEC management team

- 1- Dominique Blanc 2- Pierre-Marie Abadie 3- Adeline Fabre
4- Pierre-Franck Chevet 5- Pascal Dupuis 6- Florence Tordjman
7- Daniel Kopaczewski 8- Emmanuel Boissac 9- Richard Lavergne
10- Philippe Guillard 11- Thomas Branche 12- Mario Pain
13- Romain Cailleton 14- Philippe Geiger 15- Philippe Lorec
16- Max-André Delannoy 17- Bertrand Martin 18- Pierre Fontaine
19- Daniel Delalande. **Not present:** Hélène Le Du, Joffrey Célestin-Urbain, Jean-Luc Delpeuch, Jean-Louis Legrand, Jean-Philippe Schweitzer, Béatrice Julien De Lavergne

COMBATING GLOBAL WARMING

How do energy policy and the fight against global warming interact? What are the concrete effects of having a single structure to address both these topics? Energy Director, Pierre-Marie Abadie, and Pascal Dupuis, Head of the Department for the Climate and Energy Efficiency, provide some answers.



Pierre-Marie Abadie
DGE Energy Director

+ What action do you take in your respective fields of activity to help combat global warming?

Pascal Dupuis (PD): The fight against global warming is central to our department's activity and our efforts in this area build on synergies with other actions within the Directorate, such as developing sources of low-carbon energy and ways to save energy, for example. It is also important to take antagonistic effects into account. For example, using wood as an energy source generates particles; the energy used by a tyre can be limited by improving its road grip and, therefore, its performance in terms of safety; insulating buildings necessarily involves sacrificing archi-

tectural heritage or the quality of air indoors, etc. Lastly, we now know that climate change is unavoidable and we must anticipate its effects.

Pierre-Marie Abadie (PMA): The fight against climate change calls for an energy transition in production methods and the organisation of markets and system infrastructures. Diversifying the energy mix is the central issue, supplementing nuclear energy by making use of biomass, increasing wind turbine capacity and producing biofuels. The authorities therefore need to provide the necessary support (obligatory purchase rates, tax exemptions) to foster the emergence of new solutions, regulatory instruments to ensure that these solutions meet environmental requirements and, lastly, an ambitious research programme.

energyclimate did you know?

Key figures, unusual facts and points of reference for a better grasp of the issues involved in energy and climate policies.

50%

is the extent to which France is dependent on fossil fuels (European average 80%): this good figure is explained by nuclear energy, renewables (hydropower, wood, solar energy) and relatively energy-efficient cars.

> Diversifying the energy mix is central to French energy policy and is also instrumental in meeting concerns such as security of supply, competitiveness and combating climate change. With this in mind,



the Environment Round Table has set an ambitious target: renewables must account for at least 23% of the country's energy consumption by 2020.

9 months

less life expectancy and 30,000 premature deaths per year in France is the cost of atmospheric pollution (particles, ozone, nitrogen oxides, sulphur oxides) in France today.

> The particle pollution plan will provide the necessary tools to fight this scourge, targeting all sectors responsible for emissions (households, industry, transport and agriculture) with one goal: a 30% drop in the concentration of fine particles in the air by 2015.

+ How do you address the need for a secure energy supply?

PMA: Energy security is one of the three pillars of our energy policy, the other two being competitiveness and the fight against climate change. Security relies to a great extent on market efficiency and investments in production and transmission and distribution infrastructures, as well as medium- and long-term visibility. The multi-year investment programmes (PPI) for electricity, gas and renewable heat production, published in June 2009 and covering the next ten years, include forecasts concerning these points.

PD: Energy efficiency makes a vital contribution to security of energy supply. According to the PPI investment programmes, final energy consumption will be 140 MTOE per year in 2020 if the French Environment Round Table measures are implemented, compared with 200 MTOE if they are not. The 60 MTOE energy savings represent the leading energy source for that period. The energy mix should also be gradually steered towards renewable energy sources, which will still be available.

+ How important do you think economic instruments are in your field of activity?

PMA : In a market economy, any energy policy must strike the best balance between competition and state intervention, in both regulatory and economic terms. At a time when markets are gradually opening up, the authorities need to exploit the market's capacity for innovation to the full and seek a trade-off between the interests of a) the consumer, who

wants the lowest price, b) security of supply, which implies making investments, and c) the need to control demand, which means sending the right signals in terms of price.

PD: Our policy should make use of every available tool. In this respect, we are all for regulation (in terms of energy performance, emissions, etc.) but we also make use of economic instruments. France has set up a system of energy savings certificates that can be exchanged on the French market. These instruments are extremely effective in many situations, but the fact remains that they serve a policy which must put out the right signals (planned rates or quotas, market regulation, etc.) if their full potential is to be realised.

+ Whether we consider security of supply or the development of renewables, we come up against the problem of social acceptability.

PD: Acceptability issues are often to do with a real or perceived lack of information. PPI exercises can be seen as a model in this respect as they clearly set out our objectives over the next 15 to 20 years, and the ways in which we hope to achieve them, and involve the five panels of the Environment Round Table process.

PMA: The PPI investment programmes are, indeed, a good example of what can be achieved through clear explanations, openness and consultation concerning collective acceptability. Further progress can only be made if projects are placed within a local/regional context. This

is true when it comes to resolving conflicts of use in the field of biomass or wind energy or building regional projects, as we are trying to do for nuclear waste repositories. Regional climate, air quality and energy plans are an ideal opportunity for local stakeholders to define priorities and reconcile conflicting interests.

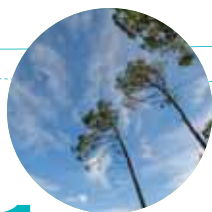


Pascal Dupuis
Head of the DGEC Department for the Climate and Energy Efficiency

230,000

km of pipeline, mostly buried, bring us the oil and gas we need everyday.

> Effective management of energy transmission systems and networks is essential for securing energy supplies.



31 million

tonnes less CO₂ in the atmosphere

thanks to the use of nuclear power. > 80% of France's electricity comes from nuclear power plants. Nuclear energy contributes to the nation's self-sufficiency in energy, at a competitive cost, and helps combat climate change.

+27%

is the market share planned for low-carbon vehicles by 2025, an improvement on today's situation where most vehicles run on internal combustion engines.

> The 2009 plan for the development of low-carbon vehicles supports this transition by confirming the €5,000 bonus on electric vehicle purchases until 2012, backing the development of new battery technology, supporting demonstration and experimental projects and inciting government departments and public-sector companies to buy electric vehicles.

-23%

greenhouse gas emissions in France by 2020 (compared with 1990). France is among the leading industrialised nations in this respect.

> Such a reduction will be achieved through the Environment Round Table operational programmes, the national plan for the development of renewable energy sources based on a high environmental quality approach, ambitious targets defined in the building and public works sector, measures in favour of enhanced energy efficiency, support for multimodal transport systems, the bonus and penalty scheme for motor vehicles, as well as participation in the EU greenhouse gas emission allowance trading scheme in certain energy and industry sectors.

THE ENERGY DIRECTORATE

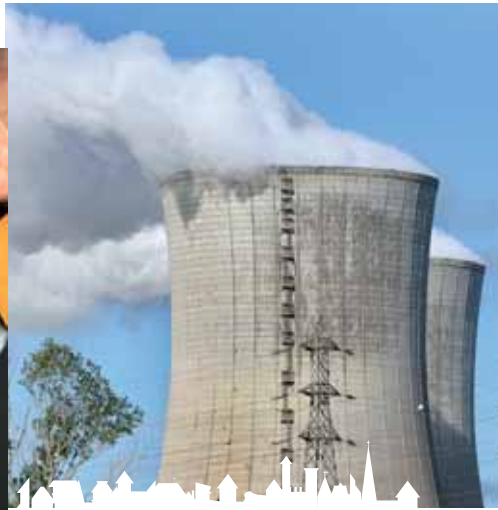
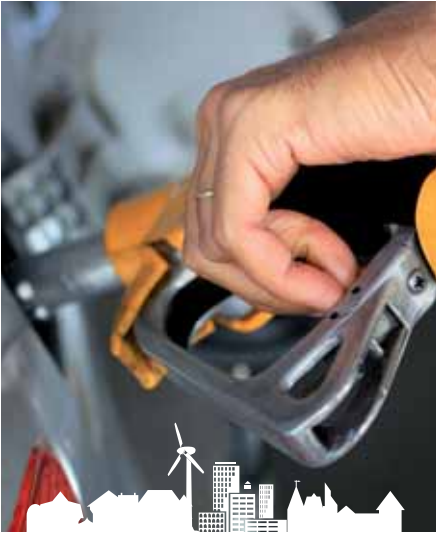


Division for **Energy** Markets and **Social** Affairs

The division is mainly concerned with the back end of energy markets. Its tasks include:

- + monitoring the organisation and operation of energy markets (electricity, gas, petroleum products);
- + drafting and implementing regulations relating to energy supply, tariffs (regulated, social, etc.) and taxation;
- + representing the Ministry in the various corporate bodies of EDF and GDF-SUEZ;
- + lastly, addressing matters relating to the particular status of employees in the electricity and gas sectors, redevelopment policy in mining regions and social and economic issues induced by mine closures.

→ **The Energy Directorate defines and implements policies aimed at providing the country with a secure and competitive energy supply.** It ensures that energy markets (electricity, gas and petroleum) operate smoothly and in a way that is both economically competitive and environmentally friendly. It also oversees the country's nuclear energy policy. Issues relating to climate change and the development of clean energy technology are an integral part of its activities. The Directorate acts on the French Government's decisions concerning renewable energy sources. It prepares the multi-year investment programme (PPI) for electricity, as well as the multi-year indicative plan for gas.



Division for Security of Supply and New Energy Products

Although France is less energy dependent than its neighbours (energy consumption in 2008: oil: 32.5%; gas: 14.9% and coal: 4.4 %), it is among the world's leading oil importers (with nearly 2 million barrels entering the country everyday). It is within this context that the division ensures that the country has access to a secure supply of oil and gas by:

- + supervising prospecting activities for new oilfields and developing existing underground and offshore oil deposits to guarantee the rational and professional use of the nation's hydrocarbon resources;
- + setting up long-term partnerships with producer countries and keeping a watch on international markets;

- + building up strategic oil stocks and gas reserves, either above ground or in suitable geological formations;
- + defining a well-balanced policy of investment in hydrocarbon transport infrastructure and user tariffs that are both competitive for consumers and attractive for investors;
- + initiating sustainable energy transition by promoting biofuels, checking the quality of distributed fuels or developing technology for CO₂ capture and geological storage and use.

Division for Electrical Systems and Renewable Energy Sources

The world of electrical systems is seeing considerable changes, not only in terms of production, with the development of renewables, but also in terms of new applications, with the expected arrival of electric vehicles and their impact on system use and dimensions.

- + The division addresses the various objectives of energy policy regarding electricity production, through the multi-year investment programme, and defines France's renewable energy strategy, including wind energy (both on- and offshore), solar (photovoltaic) energy, hydropower, geothermal power and biomass.
- + It also helps to adapt transmission and distribution systems by integrating new means of production, making systems safer, developing smart systems and integrating European markets.

Nuclear Industry Division

Nuclear energy forms the backbone of the French electrical power system. French policy in this area is aimed at ensuring the development of nuclear energy, both in France and abroad, with an eye to energy security, climate change and competitive energy sources.

- + The division prepares and implements the Government's decisions concerning the civil nuclear sector, under the supervision of the players in the country's nuclear industry, as well as nuclear research policy (future reactors) and radioactive materials and waste management policy (which includes securing funding for dismantling operations and waste management).
- + International operations represent the division's other main activity, which involves backing the authorities in their ambition to support all countries wishing to develop nuclear energy for civil purposes. This means responsible development in terms of security, safety, safeguards and sustainability - the 4S's - and paying particular attention to the environment and radioactive materials and waste management.

DEPARTMENT FOR THE CLIMATE AND ENERGY EFFICIENCY

→ **The Department for the Climate and Energy Efficiency defines and implements policy on climate change and atmospheric pollution.** It suggests ways to control demand more closely and promotes rational use of energy for all types of application. It also prepares the multi-year investment programme for heat production. It defines technical regulations applicable to vehicles for matters concerning atmospheric pollution and mitigation of the greenhouse effect, as well as road safety (where it works hand in hand with the Commission for Road Safety and Road Traffic).



Division for the Climate and Air Quality

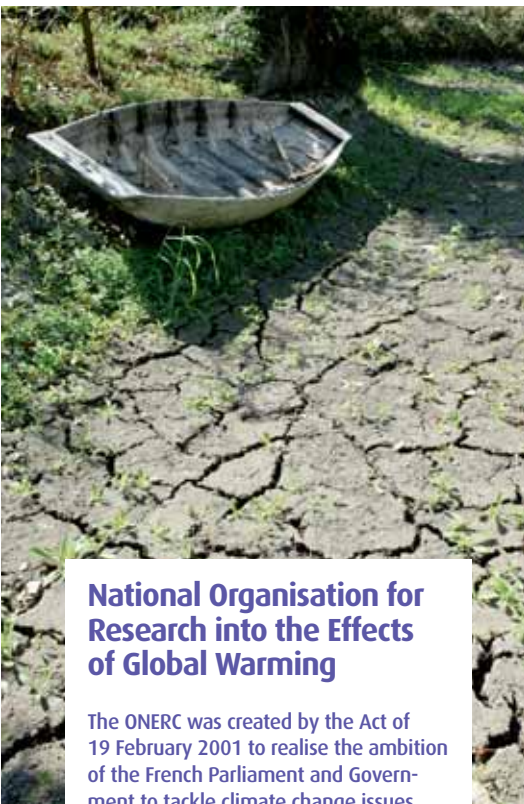
Climate policy can be divided into two main areas:

✦ **attenuation**, which means controlling and reducing greenhouse gas emissions to mitigate climate change. The DGEC is responsible for preparing and updating France's climate plan with this in mind. The plan has the following main goals:

promoting low-energy housing, reducing energy consumption and decarbonising production, opting for a multimodal transport strategy and reducing agricultural emissions. A number of concrete measures are implemented to achieve these goals: sustainable development tax credits, interest-free eco-loans, ecological bonus-penalty systems, renewable heat fund, product eco-design, energy labels, energy savings certificates, etc.

✦ **adaptation**, which means preparing for the consequences of climate change, a process which is already underway. Inside the DGEC, the activities of the ONERC (National Organisation for Research into the Effects of Global Warming) cover every aspect of

adaptation (measurements, costs, local action, etc.). The division is also responsible for matters relating to air quality to ensure consistency with climate policy. The DGEC defines regulations in this area pertaining to atmospheric pollution and is responsible for air monitoring activities. It is also preparing measurements concerning the greenhouse gas emission allowance trading scheme for companies. In addition, the DGEC has developed skills in the booming carbon market sector to support climate policy.



National Organisation for Research into the Effects of Global Warming

The ONERC was created by the Act of 19 February 2001 to realise the ambition of the French Parliament and Government to tackle climate change issues.

Its tasks include:

- gathering and distributing information and data from surveys and research on risks relating to global warming;
- issuing recommendations on preventive and adaptive measures to be considered for mitigating climate change risks.

A national adaptation plan is being prepared for 2011, in accordance with Environment Round Table recommendations.



Division for Motor Vehicle Safety and Emission Control

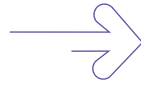


This division's activities focus on two main goals, namely to ensure that road vehicles are made a) increasingly safe and b) cleaner and more energy efficient. The division acts on several levels to achieve these goals:

- + at the European and international levels, by supporting directives and regulations that work towards the above goals, with a constant eye to sustainable development;
- + in France: by playing an active part in all initiatives in this area, particularly those taken within the Environment Round Table context; by ensuring that legal and regulatory provisions within the scope of its activities are correctly implemented; and by fully assuming its role in coordinating the DREAL network (Regional Directorates for the Environment, Town and Country Planning and Housing).

It also supervises the activities of those in charge of periodic vehicle safety and roadworthiness inspections. It conducts research into future vehicles with leading French car manufacturers and, in addition to its traditional governmental activities, prepares and implements public incentive instruments (ecological bonus-penalty scheme, energy-CO₂ labels for vehicles, etc.).

GENERAL SECRETARIAT



The General Secretariat manages the human, logistic and financial resources of the Directorate General in collaboration with the Ministry's General Secretariat teams.

✦ It fulfils a central function by coordinating monitoring action in various areas that cut across the Directorate General - standardisation activities in particular - and responds to questions from Members of Parliament, inspection bodies and to various surveys.

✦ It also coordinates the decentralised network of Regional Directorates for the Environment, Town and Country Planning and Housing (DREAL), working, in particular, with DGEC sector offices to coordinate management discussions.

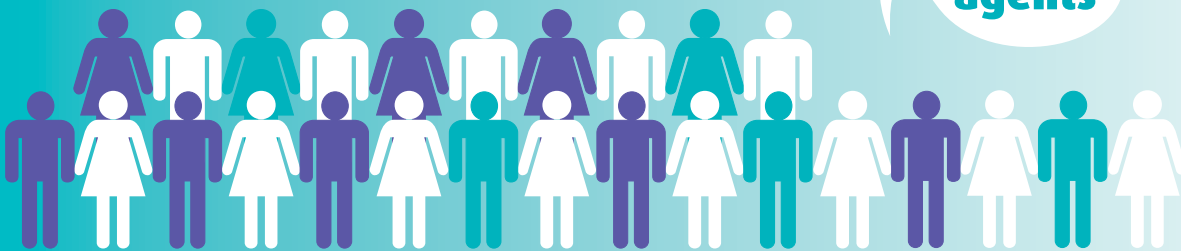
For further information:
www.developpement-durable.gouv.fr
espace Énergie/Climat
The General Directorate's communication unit works with the Ministry Communication Directorate to define and implement external and internal communication activities.

✦ Lastly, it coordinates EU energy negotiations, the Directorate General's bilateral relations and French representation in international organisations.

HR Keyfigures

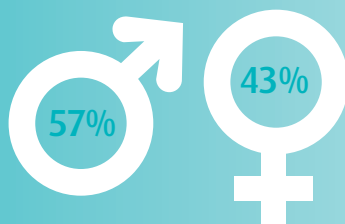
Total staff (excl. temporary contracts) - December 2009

**204
agents**

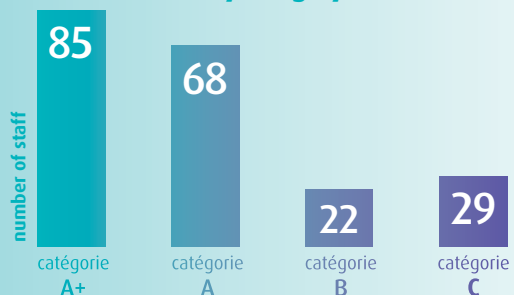


Average
age
41
years

Breakdown
by gender



Staff breakdown by category



DECENTRALISED DEPARTMENTS

→ **The DGEC relies on the support of the Regional Directorates for the Environment, Town and Country Planning and Housing (DREAL) to implement national policy concerning climate, air quality, energy and raw materials for energy in the various regions and to coordinate action at the local level with the partners concerned.**

The Regional Directorates have a wide range of activities, such as preparing regional climate, air quality and energy plans, renewing hydroelectric concessions, monitoring underground repositories, preparing plans for wind energy development zones, geothermal energy projects, setting out guidelines for air monitoring associations, preparing procurement plans for projects set up in response to invitations to tender or for calls for biomass projects and supervising operators in charge of

safety and roadworthiness inspections on light motor vehicles and heavy goods vehicles.

As part of these activities, they are regularly in touch with DGEC departments and divisions, which provide them with any regulatory advice and information required.



OPERATORS

→ **Public organisations**

The DGEC supervises several public organisations on behalf of the Ministry. It does this through multi-year contracts of objectives which are assessed every year.

- + The French Environment and Energy Management Agency (ADEME), for matters relating to energy, climate and air quality policies,
- + The French Petroleum Institute (IFP),
- + The French National Radioactive Waste Management Agency (Andra),
- + The French Atomic Energy Commission (CEA),
- + The Interprofessional Technical Centre for the Study of Atmospheric Pollution (CITEPA),
- + The French National Agency for the Defence of Miners' Rights (ANGDM),
- + The health insurance and social security centre for the electric, gas and mining industries (CANSSM),
- + The Institute for Radiological Protection and Nuclear Safety (IRSN).



→ **Companies**

- + AREVA,
- + Électricité de France (EDF) and its regulated subsidiaries ERDF and RTE,
- + GDF-SUEZ and its regulated subsidiaries GRT gaz and GRDF.

MEDIUM- AND LONG-TERM PROJECTS

Renewable Energy Sources

The national plan for the development of renewable energy sources based on a high environmental quality approach sets out to meet Environment Round Table objectives. According to the plan, renewables should account for at least 23% of total energy consumption by 2020. This increase in renewable energy production would represent 20 million tonnes oil equivalent (MTOE) per year. Presented at the end of 2008, the plan includes 50 measures covering all forms of energy: bioenergy, wind, geothermal, hydroelectric, solar, energy from the sea, etc.

Energy investments and forecasts



The Multi-year Investment Programmes (PPI) for electricity and heat production and the Multi-year Indicative Plan (PIP) for gas sector investment were updated during the first half of 2009. Their aim is to guide economic players in their decision-making activities and ensure that they are in line with French energy policy concerns, namely security of supply, economic competitiveness, environmental protection and the effort to reduce greenhouse gas emissions. The PPI and PIP can be regarded as the nation's roadmap for the development of energy infrastructures between now and 2020.

Energy efficiency

More efficient use of energy allows us to obtain the same level of service from a product while consuming less energy and, as a result, reduce CO₂ emissions. The energy labels on electrical household



appliances, for example, show consumers the energy performance of the different products available, thus allowing them to choose the product that will save the most on their energy bill. The Environment Round Table objective is to generalise the use of product energy labels. In the housing sector, a requirement to provide an energy performance diagnosis for the sale of any property has been in force since 1 November 2006. The same requirement was introduced on 1 July 2007 for all new rental agreements on properties and all new buildings for which the building permit application was made after this date.



Nuclear waste

The National Radioactive Materials and Waste Management Plan (PNGMDR) makes an inventory of methods already employed for managing radioactive materials and waste, estimates future requirements regarding storage and disposal facilities and calculates their required capacity. It organises research and surveys on radioactive materials and waste management and sets deadlines for the implementation of new management methods.

Bonus and penalty scheme for vehicles

Regarding motor vehicles, the aim is to encourage consumers to choose cars with the lowest emission levels, which are expressed in grammes of CO₂ per kilometre. The French Government has set up a system where a bonus is given for purchases of vehicles with the lowest emission levels, while a penalty is imposed on those with the highest levels.



Air quality monitoring

The quality of outdoor air is monitored throughout the country by 33 air quality monitoring associations (AASQA) approved by the Minister for the Environment. These associations take measurements and make forecasts as part of their monitoring activities and provide the public with air quality data. The AASQAs fulfil several roles, acting as observatories, consulting and information



bodies and improving knowledge of local air pollution mechanisms. The fact that they are joint organisations contributes to the variety and objectivity of the information they publish.

Energy savings certificates

The purpose of energy savings certificates is to encourage investment in projects that save energy. They will be reinforced by the Environment Round Table measures. Through this mechanism, the authorities oblige energy suppliers to encourage their end-consumer customers to save energy and help reach national targets. Energy suppliers fulfil their obligation by obtaining energy savings certificates (or ESCs) indicating the energy savings made by their customers. The certificates are issued by the authorities. Nearly 65 billion kilowatt-hours of energy – the equivalent of two and a half months of household energy consumption in France – will be saved through this scheme between 2007 and 2009.

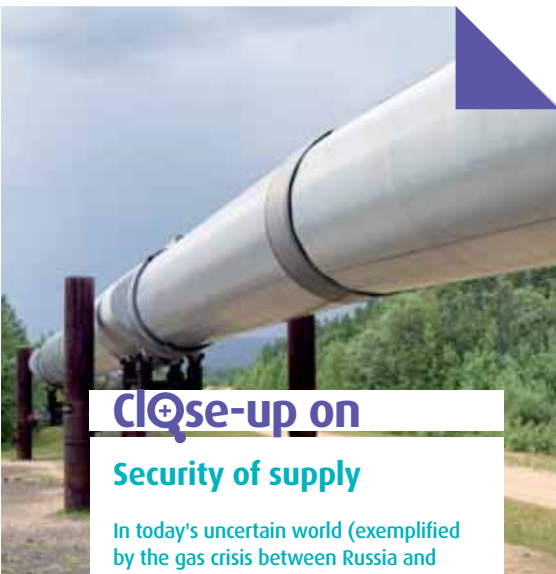
Close-up on

EU energy and climate change package

In December 2008, while the 14th United Nations Climate Change Conference was being held in Poznań, the European Council unanimously approved the energy and climate change package, under the impetus of the French Presidency of the European Union. The energy and climate change package is an operational plan of action aimed at converting EU commitments into tangible and verifiable actions. These include: reducing greenhouse gas emissions by at least 20% by 2020 (compared with 1990), largely through the gradual introduction of an emissions allowance auction mechanism, designed to cut greenhouse gas emissions in industry by 21% (between 2005 and 2020); improving energy efficiency by 20% and working towards a situation where 20% of our energy will come from renewable sources by 2020. The package covers all sectors including building, industry, transport, energy and consumer products. In addition, it authorises the development of CO₂ capture and storage technology. In spite of widely differing energy, industrial, economic and social situations, the 27 Member States of the European Union agreed to a joint plan of action, taking into account each country's particular characteristics.

The local and regional authorities at the heart of energy and climate policy

The Grenelle 2 Act provides for regional climate, air quality and energy plans (SRCAE) which will introduce an integrated global approach at the local and regional levels. The plans will provide a framework for the efforts made by local and regional authorities to reduce greenhouse gas emissions, adapt and develop local, renewable energy sources and improve air quality.



Close-up on

Security of supply

In today's uncertain world (exemplified by the gas crisis between Russia and Ukraine in January 2009), where fossil fuels remain the predominant source of energy, a secure energy supply is more important than ever.

This is reflected in the gas sector, where a particular effort is being made to negotiate with producer and transit countries to build a genuine spirit of solidarity among European nations regarding gas supplies. Another major concern is the diversification of sources of supply and supply routes (Norway apart, no country represents more than 20% of our supply). Steps are also being taken to secure and reinforce the main transmission network via gas pipelines, especially at cross-border interconnections, and develop LNG terminals.

Carbon markets

Two economic measures have been introduced to cut CO₂ emissions:

- the EU emission allowance trading scheme, which came into force on 1 January 2005, is aimed at limiting CO₂ emissions in industrial sectors with the highest pollution levels (paper, glass, cement, electrical sector, refineries). Each Member State entitles each installation concerned within its borders to emit a certain amount of carbon dioxide or other



greenhouse gas over a given period. This amount is called the "allowance". As part of its Environment Round Table measures, the French Government favours putting an end to free allocations and introducing allowance auctions, as provided for in the climate and energy package;

- also in force for sectors outside the European Trading Scheme, the domestic Joint Implementation mechanism triggers investments in reducing greenhouse gas emissions by rewarding project developers with Kyoto credits (Emission Reduction Units) based on observed reductions. France is as well encouraging the European Commission to improve the energy taxation directive by establishing European contribution for carbon emissions. For implementing these innovative subjects the General Directorate for Energy and Climate Change acquired new management tools enabling it to play a leading role, both as the organizing authority of the carbon markets and as the designated trustee of national carbon units, guaranteeing their right administration.

Electricity markets: on the road to reorganisation

The reorganisation of electricity markets should bring the French electricity market fully in line with European objectives. It should also allow French consumers the continued benefit of nuclear power and encourage new investments in production capacity. The French Government's planned reform should focus on three objectives:

- maintaining regulated sales tariffs for households and small businesses;
- guaranteeing funding for existing electric power facilities and promoting fresh investments in accordance with the PPI;



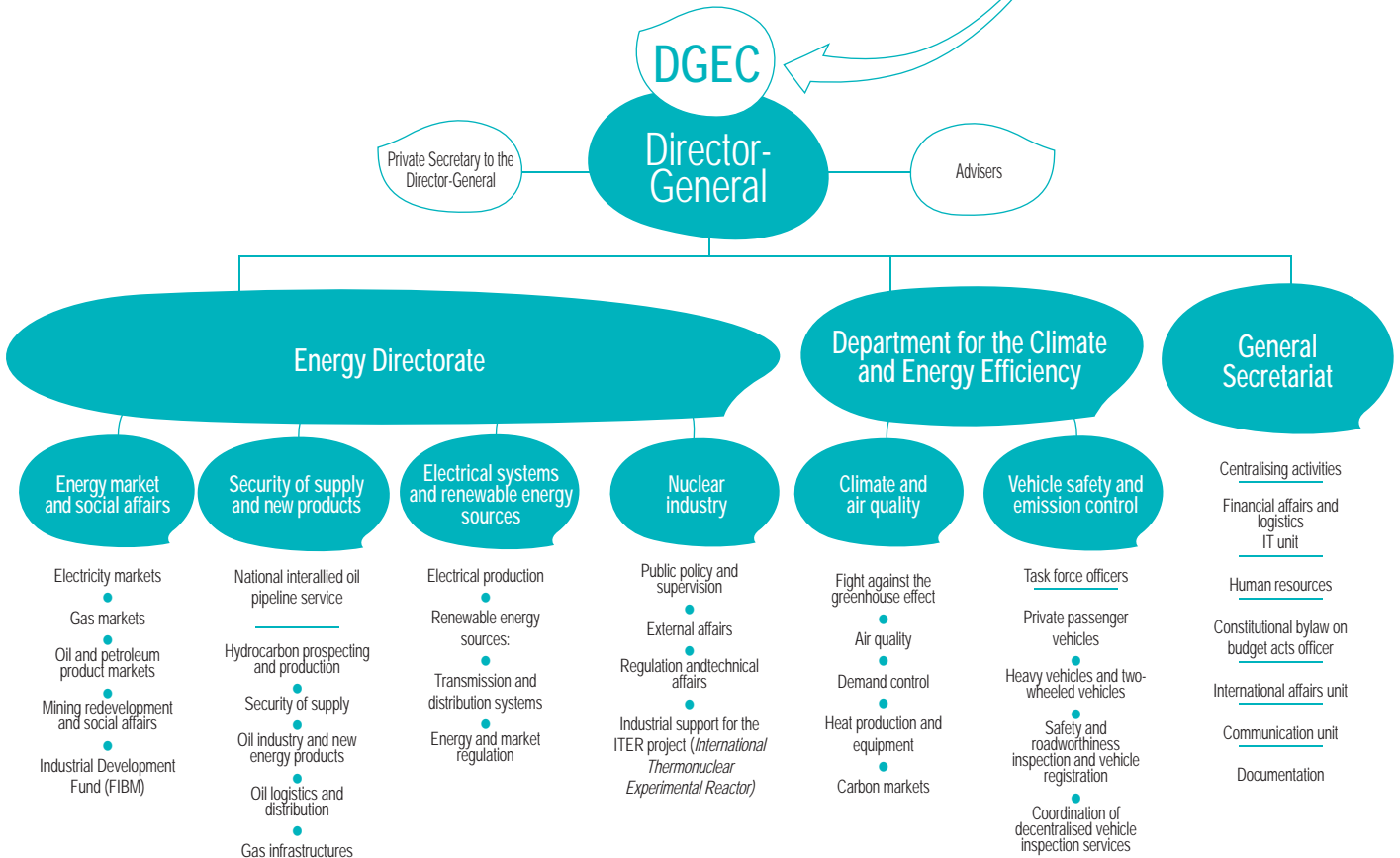
- stimulating competition by introducing a regulation mechanism that will allow all French electricity suppliers to acquire energy from EDF under the same economic conditions as those available with the existing nuclear fleet. Market competition will lead to the emergence of innovative offers, helping to control the demand for electricity in particular, and put an end to regulated sales tariffs for major customers by 2015.

ORGANISATION CHART

Minister of State



Central Administration



Ministère de l'Écologie, de l'Énergie,
du Développement durable et de la Mer
en charge des Technologies vertes
et des Négociations sur le climat

Direction générale de l'énergie et du climat
Arche Nord
92055 La Défense Cedex
Tél. : 01 40 81 21 22

Resources, land, habitats and housing
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**Present
for
the future**