



## France

### Highlights in 2008

The innovative “Grenelle” stakeholder consultation process, which brought together over 300 participants from local authorities, non-governmental organisations, businesses, trade-unions and central government, was launched in the summer of 2007. The

process led to concrete recommendations and recognition of the cross-sectoral nature of environmental issues. It was translated into a ministerial and administrative structural reform, and triggered the beginning of the systematic integration of environmental issues into policy-making. The first step in the legislative process to implement the recommendations is the

“Grenelle I” bill, which was passed by the Senate in February 2009 and is now awaiting second reading approval by the National Assembly. It will be followed by at least two other bills to cover all the commitments made during the consultation process. In addition, the bill institutionalises the stakeholder consultation process as a permanent tool for monitoring implementation of the commitments made and providing input for future policy developments. France is thus on the way to putting in place an ambitious framework to address growing environmental concerns. However it is too early to know whether financial resources will match the priorities and objectives identified, and whether the incentives and legislative frameworks put in place will lead to effective implementation.

As part of the French Presidency of the Council of the European Union during the second half of 2008, France facilitated adoption of the climate and energy package, one of the Presidency’s priorities. This agreement will allow the European Union to retain its leading role in seeking a global agreement at the UNFCCC Climate Conference in Copenhagen in December 2009.

## Climate change and energy

|  | France |       |       |                       | EU-27 total | rank in EU-27 |
|--|--------|-------|-------|-----------------------|-------------|---------------|
|  | 2000   | 2005  | 2006  | target                |             |               |
| Total Kyoto GHG emissions  |        |       |       |                       |             |               |
| – million tonnes (Mt) CO <sub>2</sub> eq.                                  | 555.6  | 555.1 | 541.3 | 563.9<br>(by 2008-12) | 5142.8      |               |
| – from energy supply and use, including transport (Mt CO <sub>2</sub> eq.) | 392.5  | 402.1 | 391.3 |                       | 4098.7      |               |
| – from transport (Mt CO <sub>2</sub> eq.)                                  | 137.0  | 139.5 | 138.6 |                       | 992.3       |               |

|  | France |              |              | target                   | EU-27 average | rank in EU-27 |
|--|--------|--------------|--------------|--------------------------|---------------|---------------|
|  | 2000   | 2005         | 2006         |                          |               |               |
| – per capita (tonnes CO <sub>2</sub> eq.)  | 9.2    | 8.9          | 8.6          |                          | 10.4          | 8             |
| – per GDP (tonnes CO <sub>2</sub> eq. per 1000€ GDP)                                       | 385.4  | 354.6        | 338.4        |                          | 495.7         | 2             |
| – trend (% change compared to base year*)  | -1.5%  | -1.6%        | -4%          | 0%<br>(by 2008-12)       | -10.8%        | 14            |
| – Projected 2010 emissions trend compared to base year *                                   |        |              |              |                          |               |               |
| – with existing measures, Kyoto mechanisms and carbon sinks                                |        | +0.1%        |              | 0%                       | -13.4%        |               |
| – with existing and additional measures, Kyoto mechanisms and carbon sinks                 |        | -4.2%        |              | (by 2008-12)             | -16.3%        |               |
| Average CO <sub>2</sub> emissions from new passenger cars sold (grams CO <sub>2</sub> /km) | 162.5  | 148.9 (2006) | 148.4 (2007) | 130 by 2012-15 for EU-27 | 157.5         | 4             |
| Electricity produced from renewable energy sources (% gross electricity consumption)       | 15.1%  | (2006) 11.3% | (2007) 13.3% | 21.0% (by 2010)          | (2007) 15.6%  | 13            |
| – from hydropower  | 14.4%  | 11.1%        | 11.4%        |                          | 9.2%          |               |
| – from wind  | 0%     | 0.4%         | 0.8%         |                          | 3.1%          |               |
| – from biomass   | 0.8%   | 1.0%         | 1.1%         |                          | 3.0%          |               |
| Combined heat and power generation (% gross electricity generation)                        | 3%     | 4%           | 3.2%         | 18% by 2010 for EU-15    | 10.9%         | 24            |
| Energy consumption per capita (kg oil eq.)   | 4 275  | 4 401        | 4 321        |                          | 3 694         | 21            |
| Energy intensity - Energy consumption per 1000€ GDP (kg oil eq.)                           | 188    | 185          | 179          |                          | 202           | 6             |

\* Base year is 1990.

In 2006, France's greenhouse gas emissions were 4% lower than the base-year level, and so below its Kyoto target of stabilising emissions by the period 2008-2012. France projects to achieve its target only once additional measures have also been applied.

The "*Grenelle I*" bill confirms France's commitment to reducing its greenhouse gas emissions by 75% by 2050, compared to 1990 levels. It implies a yearly reduction of 3% on average. France's aim is to become the most efficient economy of the EU in terms of carbon equivalent by 2020. To this end France is committed to achieving the European targets in terms of greenhouse gas emission reduction and energy efficiency improvements by 2020. In December 2008, France agreed to reduce greenhouse gas emissions in non-ETS sectors (e.g. buildings, road transport, and farming) by 14% in 2020 compared to 2005 levels. It also aims to achieve a 23% share of renewable energy in final energy consumption by 2020 (up from 10% in 2005).

National measures concerning climate change will focus primarily on reducing the energy consumption of buildings and reducing emissions from the transport and energy sector. The "*Grenelle I*" bill requires new buildings to have a primary energy consumption below 50kWh/m<sup>2</sup>/year on average: from 2011 for public and tertiary constructions, and from 2013 for others (compared to the average consumption of 240kWh/m<sup>2</sup>/year of the existing building stock). Rules will set a threshold on the energy used for heating buildings. The bill also sets a target of a 38% reduction of energy consumption in existing buildings by 2020. To this end, the government has set a target of 400 000 dwellings to be renovated per year, from 2013. It plans to introduce various measures and incentives concerning public authorities, property owners and tenants, as well as the banking and insurance sector, to achieve this target.

A mass retailing chain, Casino, supported by the government and the Agency for Environment and Energy Management, introduced carbon labelling for everyday products, called the Casino Carbon Index. This index shows the quantity of greenhouse gases emitted, in CO<sub>2</sub> equivalent and per 100g, throughout the lifecycle of a product. The Carbon Index was first introduced in June 2008 for a dozen products. By the end of 2009, plans are to have labelled over 2 900 products. In addition, two supermarkets were testing another tool to make customers aware of the carbon content of products. Receipts given to clients include the carbon footprint of their total purchase.

The government also promotes multimodal and integrated transport, in particular the development of rail and river freight, as well as sea transport and ports. The non-road transport of merchandise should increase from 14% to 25% by 2022. The budget allocated for the renovation of railways will be increased to reach €400 million per year by 2015. This is 2.5 times what is currently allocated under the Plan for the renewal of railways for 2006-2010.

Good work is also being done at local level. For example, the city of Perpignan in Southern France decided in 2008 to cover all its electricity needs from renewable energy sources by 2015. The city plans to develop 40 wind turbines and solar farms, install solar panels on public and commercial buildings, use the heat from a waste incinerator for local greenhouses, and put in place electricity savings measures for households. This programme represents an investment of € 500 million. 440 000 MWh/year will be produced and 25 000MWh/year saved. The government, local authorities and private partners will support this programme.

## Nature and biodiversity

|  | 2000  | 2006  | France<br>2007 | 2008  | target           | EU-27<br>average   | rank in<br>EU-27 |
|--|-------|-------|----------------|-------|------------------|--------------------|------------------|
| Natura 2000 area (sites designated under Habitats and Birds Directives) as % of terrestrial area * |       | 11.8% | 12.4%          | 12.5% |                  | 17.0%              |                  |
| Sufficiency of site designation under the Habitats Directive                                       | 74.2% |       | 90.7%          | 90.7% | 100%             |                    |                  |
| Area occupied by organic farming<br>(% of Utilised Agricultural Area)                              | 1.3%  | 2%    | 1.9%           |       | 6% **<br>by 2012 | 4.2%               | 21               |
| Freight transport (billion tkm)  | 268.5 | 261.4 | 269.4          |       |                  | EU total<br>2505.0 |                  |
| – % road***  | 76%   | 80.9% | 81.4%          |       |                  | 76.9%              | 17 of 26         |
| – % rail***  | 20.6% | 15.7% | 15.2%          |       |                  | 17.4%              | 15 of 26         |

\* France has also an important Natura 2000 marine area, consisting of around 15 thousands km<sup>2</sup> in 2008.

\*\* Indicative target according to the Action plan "Organic agriculture until 2012: new measures to triple the organic farming area" (Plan d'action "Agriculture biologique: Horizon 2012. De nouvelles mesures pour tripler les surfaces", 2007).

\*\*\* 2007 data are estimates.

The "Grenelle I" bill also includes the strengthening of the national strategy for biodiversity. It plans to designate protected land areas to ensure that a minimum of 2% of metropolitan land area is protected within 10 years. In addition, there will be protected sea areas, representing 10% of national waters, by 2012 for metropolitan France and 2020 for overseas territories, inclusive of the Natura 2000 network. Furthermore, in order to protect the 131 fauna and flora species identified as endangered in 2007, conservation plans will be set up within five years, and special corridors for fauna and flora will be put in place. The government's financial efforts are scheduled to increase from € 190 million currently to € 300 million per year in 2013.

The government has set an objective of 6% of useable agricultural area for organic farming by 2012 and 20% by 2020, compared to 1.9% in 2007. Tax

credits in favour of organic farming will be doubled in 2009 to encourage conversion from conventional to organic farming.

In June 2008, France was considered to have achieved 91% of its target for Natura 2000 sites, which cover 12.5% of the terrestrial area. A status report on the conservation of habitats and species of common interest, which covered 132 habitats, and 91 flora and 200 fauna species, showed that the majority of habitats and species located in the Alps or Mediterranean areas are in a satisfactory or good state of conservation. By contrast, the majority of species and habitats located in the Atlantic and Continental areas are in an unfavourable state of conservation. This applies to Aquatic and humid habitats too.

## Environment and health

|  | France      |                              |       |           | EU-27 average | rank in EU-27 |
|--|-------------|------------------------------|-------|-----------|---------------|---------------|
|  | 2000        | 2005                         | 2006  | Ceiling   |               |               |
| Urban population exposure to air pollution by particles (annual mean concentration, $\mu\text{g}/\text{m}^3$ ) | 22.3 (2001) | 20.4                         | 21.1  | 30.0      | 30.0          | 5 out of 23   |
| Urban population exposure to air pollution by ozone (SOMO35 level, $\mu\text{g}/\text{m}^3 \cdot \text{day}$ ) | 2 966       | 4 264                        | 4 685 | 2 565     | 4 417         | 15 out of 23  |
| Air pollutant emissions (thousand tonnes)  |             |                              |       | (by 2010) | EU27 total    |               |
| – sulphur dioxides ( $\text{SO}_2$ )   | 1198        | 486                          | 452   | 375       | 7946          |               |
| – nitrogen oxides ( $\text{NO}_x$ )  | 1559        | 1413                         | 1351  | 810       | 11198         |               |
| – non-methane volatile organic compounds (NMVOCs)  | 1935        | 1425                         | 1336  | 1050      | 9391          |               |
| – ammonia ( $\text{NH}_3$ )  | 797         | 745                          | 740   | 780       | 4006          |               |
|  | 1991        | Latest available year (2002) |       |           |               |               |
| Water exploitation index   | 20.8%       |                              |       | 17.8%     | n.a.          | 18            |

The first measure introduced as part of the Particles Plan ( $\text{PM}_{10}$ ) recommended by the “Grenelle” was the reinforcement of the system informing and alerting the public on particle pollution peaks. To improve outdoor air quality, the government plans to transpose the Air Quality Directive through the adoption of a Particles Reduction Plan. As for indoor air quality, construction and decoration products will have to be labelled to comply with European regulations, and some substances banned.

The government aims to maintain or achieve good water quality for all waters (sea and continental) by 2015. The use of phosphates in washing products will be banned from 2012. In addition, 98% of wastewater treatment plants will have to meet certain standards by 2010 and 100% by 2011. Moreover, the monitoring of aquatic environments will be strengthened to comply with the Water Framework Directive. This includes the preparation of measurement programmes for the period 2016-2021.

## Natural resources and waste

|   | France |       |       | Target               | EU-27 average | rank in EU-27 |
|---|--------|-------|-------|----------------------|---------------|---------------|
|   | 2000   | 2006  | 2007  |                      |               |               |
| Municipal waste generated (kg per capita)                 | 516    | 538   | 541   |                      | 522           | 16            |
| – % landfilled  | 42.6%  | 36.8% | 34.2% |                      | 41.0%         | 8             |
| – % incinerated   | 32.8%  | 34.2% | 35.9% |                      | 19.9%         |               |
|   | 2000   | 2005  | 2006  |                      |               |               |
| Recycling of packaging waste (as % total packaging waste) | 42%    | 53.3% | 54.8% | 55%-80%<br>(by 2008) | 56.5 %        | 11            |

“Grenelle” stakeholders agreed on a waste policy and targets in December 2007. Two of them, reducing household waste by 5 kg per year and per capita over 5 years and increasing the quantity of household recycled waste from 24% in 2004, to 35% in 2012 and 45% in 2015, are part of the “Grenelle I” bill.

The government is preparing a Plan for Sustainable and Responsible Fishing. The plan seeks to optimize fisheries management, to make the fishing industry more attractive, to make its economic development sustainable, and make fishing safer. The total budget for the Plan is expected to reach € 310 million over 3 years. In addition, the “Grenelle I” bill introduces eco-labelling for fish products in 2009 to help sustainable management of fisheries.

In 2008, the government also paid attention to green public resources management and procurement. The “Grenelle” bill aims to integrate sustainable development into the government’s decision-making processes regarding procurement, waste management and public funding. Moreover, public administrations will audit energy consumption and greenhouse gas emissions starting from 2009. Consequent renovation work is expected to deliver a reduction of 40% in energy consumption and 50% in greenhouse gas emissions within 8 years, compared to the initial consumption and emission levels.

## Better regulation and implementation

|   | France     |            |            | EU-27 total |
|---|------------|------------|------------|-------------|
|   | 31/12/2006 | 31/12/2007 | 31/12/2008 |             |
| Infringements of EU environmental legislation | 29         | 32         | 34         | 481         |

Further efforts should be made to achieve timely and correct transposition of EC environmental legislation into French law. At the end of December 2008, France had the 4th highest number of ongoing infringements of EU environmental legislation in the EU.

## Use of market-based instruments

|   | France |      |      | EU-27 average |
|---|--------|------|------|---------------|
|   | 2000   | 2005 | 2006 |               |
| Share of environmental taxes in total tax revenue | 5.7%   | 5.4% | 5.2% | 6.4%          |

## Environmental technologies

The government plans to invest an additional € 1 000 million in R&D on sustainable development, including future energies and new engines, and waste treatment and recycling technologies. State spending on clean technologies and environment impact prevention will be raised to the level of civil nuclear R&D spending (*"Grenelle I"* bill of 21/10/08).

## Outlook for 2009

The next bill resulting from the *"Grenelle"* stakeholder process, *"Grenelle II"*, will concern specifically the building and transport sectors. It will give details on how the government plans to achieve the overall objectives and commitments made in the *"Grenelle I"* bill. The bill is expected to be passed at the end of 2009.

The upcoming National Sustainable Development Strategy 2009-2013 is expected to put in place a sustainable development strategy at ministry level, initially as a pilot project in the Ministry of Agriculture and Fisheries and the Ministry of Interior, and around 20 public establishments. The pilot phase will lead to the formal integration of sustainable development into tenders and agreements approved by the state.

The government intends to strengthen the role of local authorities in the sustainable development of land use. Before 2012 local authorities at all levels will produce a Territory Climate Energy Plan including measures on urban development (*"Grenelle I"* bill of 21/10/08). The main objectives of the plan are to tackle the reductions in areas of agricultural and natural land and to encourage the revival of city centres.

The National Health and Environment Action Plan for 2009-2013 will focus on environmental inequalities in three areas: geographical, social and individual. Including local governments in the process has been identified as particularly important to facilitate implementation of the Plan's objectives. Regional action plans will be defined by January 2009 and implemented throughout the year.

