

# The environment in Île-de-France in 2006

## Synthesis

Information available at 31st December 2006

There is large amount of data on the environment of the Île-de-France Region, and most of it is produced by bodies that are specialists, each in its own theme. In order to produce this 2006 summary of the state of the environment in Île-de-France, IAU has thus used several data-producing bodies and its own in-house data management skills, in particular thanks to the regional geographic information system (RGIS).

This document presents the regional environment players (local authorities, the State (central government), major public bodies, observatories, associations, and environment education resource centres), and broaches new themes like transporting goods by inland waterway, greenhouse gases, and the ecological footprint.

### Natural spaces :

- Natural environment, excluding farmland, account for about 348,000 hectares (ha), i.e. 28.8% of the Region's surface area. The Region's wooded area, inclusive of poplar plantations, is 286,107 ha, i.e. 23.7% of the Region's surface area.
- For Natura 2000, the inventories of natural areas give about 40,000 ha for 24 sites under the "Habitats" Directive, and about 96,500 ha for 10 sites under the "Birds" Directive.

The natural areas of faunal and floral ecological interest (Znieff in French) are of 2 types:

Type-I Znieff (sectors of major biological or ecological interest): 47,234 ha and 645 sites; and type-II Znieff (large natural areas that are rich and relatively unchanged): 220,919 ha and 90 sites.

- Among the protected natural areas, 15 regional nature reserves were set up by the end of June 2006 and 22 were in the pipeline.
- Flora: nearly 1,500 species of superior plants are present in Île-de-France.
- Fauna: 17 species of amphibians, 11 of reptiles, 38 of fish, 59 of mammals, and 150 of nesting birds have been identified in Île-de-France.
- There were 250 signatories to the Regional Biodiversity Charter in June 2006. The regional biodiversity strategy makes provision, among other actions, to set up a Regional Agency for Nature and Biodiversity.

## **Water :**

- Surface water (lakes, ponds, and rivers) represent a surface area of 15,016 ha (1.2% of the Region's surface area). Île-de-France has 7,677 km of rivers and canals.
- The uses of the water drawn off in 2005 break down as follows: 1,420,535,387 m<sup>3</sup> for domestic use (66%), 722,996,859 m<sup>3</sup> for industry (33%) and 22,568,921 m<sup>3</sup> for farming (1%).
- The Master Plan for Water Management and Planning (Sdage in French) of the Seine Basin is being translated into 22 more local water management and planning plans (Sage in French), of which, in 2006, 1 was approved, 4 were under way, and 3 had areas that were yet to be defined.

## **Farming spaces :**

- Île-de-France is one of France's leading agricultural regions, in terms of yields, gross margins per hectare, and value of crop outputs. Its total cultivated area is 576,977 ha and includes 5,930 farms.
- Environment-friendly practices are developing. Among the institutional measures, 118 sustainable farming contracts were signed in 2004 and 2005.

Voluntary schemes have been initiated by professional organisations, local authorities, or other authorities. For instance the *Phyt'eaux propres Île-de-France* Group is in charge of implementing measures for preventing water contamination by plant health products.

*Aqui'Brie* is an association in charge of monitoring and protecting the underground water of the Brie Champigny calcareous area from nitrates and plant-health substances, those water resources making it possible to supply one million Île-de-France residents with drinking water.

70 farms are certified as organic (0.68% of the total cultivated area).

107 "Prairie" (integrated farming) contracts had been signed by the end of 2006 (0.25% of the total cultivated area).

## **Quarries :**

- 107 quarries totalling a surface area of 6,664 ha were authorised in January 2006 (including 69 quarries and 3,477 ha for aggregates).
- Annual aggregate needs are estimated at 30 megatonnes (Mt). 45% of aggregates are imported from other regions.

## **Wastes (2004) :**

- The production of household and similar waste (HSW) per capita and per year is 513 kg.
- Recycling of HSW breaks down as follows: 46% for energy use, 26% for materials use, 5% for organic use, 19% to landfill, 3.5% to class-3 final-waste storage centres; and 0.5% for methanisation (anaerobic digestion).

- Inter-municipality management of HSW is developing: 65 structures have competence for collection (39.5% of the population), and 30 structures have competence for treatment (99% of the population). A regional plan for the disposal of household and similar waste (Predma in French) is scheduled for 2009.
- Disposal of hazardous industrial waste (HIW) was assessed at 532,000 tonnes (metric tons) in 2005, 60% of which was produced in Île-de-France. A regional plan for the disposal of hazardous waste (Predd in French) is to be adopted in 2009.
- Production of non-hazardous industrial waste (NHIW) in 2004 was estimated at 3 Mt.

### **Cultural heritage and leisure :**

- There are 3,959 historical monuments, including 1,911 in Paris.
- The 514 protected sites account for a surface area of 237,207 ha.
- 88,271 ha of forests are open to the public (31.5% of the total forest area)
- The regional network of footpaths totals a length of 5,947 km.

### **Environment heightening awareness and environment education:**

- In January 2006, Île-de-France boasts 900 associations (including 270 approved ones), 6 regional federations and 17 *département* federations.
- 350 resource centres for environment awareness-heightening and environment education and 118 teaching tools have been listed in the Region's directory of resource centres and teaching tools for environment education, consultable on the Website of Arene Ile-de-France (the Region's Agency for the Environment and Renewable Energies).

### **Noise pollution:**

- Noise perceived by households: road traffic is the main source of noise perceived, with 26% of households being disturbed during the day and 14% at night in 2002.
- Noise related to land transport: nearly 360,000 residents of the inner suburbs of Paris are exposed to road noise in excess of 70 dB (A) at the fronts of their homes, as are 150,000 residents inside Paris itself. As for rail noise, nearly 55,600 Île-de-France residents live in "noise black spots".
- Noise related to air transport: populations living within the areas covered by the Noise Pollution Plans (PGS in French) of the Airports of Roissy Charles-de-Gaulle and Orly respectively total 171,000 and 109,000. In 2005, the noise from aircraft flying over them at lower than 3000 m concerned 2.34 million of the Region's residents, 334,000 of whom have aircraft flying over them lower than that height regardless of wind configuration.
- The Observatory of Noise in Île-de-France "Bruitparif" is, in 2006 and 2007, conducting a measurement campaign throughout the Region.

## **Air quality:**

- Emissions: road transport is the largest source of emissions for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), fine particles (particulate matter < 10 µm or "PM10"), and the second largest for non-methane volatile organic compounds (NMVOCs), carbon dioxide (CO<sub>2</sub>), and nitrogen protoxide (N<sub>2</sub>O).
- ATMO 2005 index: computed daily on the basis of NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub> and PM10 content, it is good to very good for 85% of the year, fair for 9%, and mediocre to very poor for 6%.
- Urban pollution: in background pollution, NO<sub>2</sub> and O<sub>3</sub> remain problematic pollutants. Over 3 million Île-de-France residents are exposed daily to levels of NO<sub>2</sub> that are in excess of the quality objectives.

## **Environment and Health:**

- Atmospheric pollution: according to the "Erpurs" programme, there are significant links between atmospheric pollution (fine particles, nitrogen dioxide, and ozone) and various health indicators: mortality, hospitalisation, doctors' visits to patients at home.
- Pollution of interior air: exposure to certain pollutants (tobacco smoke, VOCs, CO) can have effects on health (respiratory system).
- Lead poisoning, related to old and degraded housing, has been a regional public health priority since 1996. The screening performed from 1992 to 2001 revealed that 1 in 4 children had suffered lead poisoning. Île-de-France heads the screened regions with 80% of the national cases.
- Noise and health: the results of an epidemiological survey on the effects of noise pollution due to transport will be available by the end of 2007.
- Water and health: the microbiological quality of the bathing water as measured at 15 points is good in 4 cases and fair for 8 cases.

## **Risks:**

- Natural risks: 497 *communes* (municipalities) were covered in 2005 by approved Risk Prevention Plans (PPR in French). 125 natural disaster decrees were promulgated from 2003 to 2006. As regards major flooding, the exposed surface area represents 4.8% of the Region's surface area, the exposed population accounts for 8% of the Region's population, and the exposed housing represents 8.5% of the Region's housing.
- Technological risks: the first 8 Technological Risk Prevention Plans (PPRT in French) in Île-de-France will be put in place in 2007. 81 industrial sites are classified as Seveso 2 sites, 37 of which are upper-threshold ones. 378 polluted sites and areas of soil pollution have been identified by the national "Basol" database, and nearly 28,000 sites have been identified by the national "Basias" database (identifying former industrial sites and service activity sites).

## **Energy and Greenhouse Gases:**

- Energy production: 7% of energy needs are covered by regional production: oil, electricity, household refuse, renewable energies (geothermal, wood, and solar).
- Energy consumption: final energy consumption corrected for climate was 22.3 Mtep (millions of tonnes equivalent petroleum) in 2002, i.e. 2 tep per capita (national average: 2.6 tep). The sectors that consume the most energy are transport, housing, and the tertiary sector.
- Greenhouse gases: the Île-de-France Region emits 55,291 kt (kilotonnes) per year (9.1% of national emissions) and 90% of these emissions is accounted for by CO<sub>2</sub> discharge. The main sectors concerned are the residential, commercial, and institutional sectors (43%), and road transport (27%).

## **The Ecological Fingerprint:**

The ecological footprint is the productive surface area necessary for a population to sustain its mode of life in a given territory. An Île-de-France resident has an average ecological footprint of 5.58 global hectares or “gha” (the French average is 5.20 gha). Expressed per type of consumption, the goods sector represents 44% of the ecological footprint and food accounts for 30%.

An Île-de-France resident has a biocapacity (biologically productive surface area) of 0.48 gha, due to the concentration of the population in a territory that is small, even though it is very fertile.

## **Investment from the industrial sector for the environment:**

The amount invested in 2004 by 403 industrial sites in Île-de-France was 174.7 million euros (16.2 % of national investment).