

The environment in Île-de-France in 2011

Synthesis

Information available at 31st December 2009

In response to the lack of data on the environment and to the weak dissemination of such data beyond the specialist circles, the Regional Council decided to develop and make available a collection of data on the environment in Île-de-France. Production of the document was entrusted to IAU Île-de-France, the Region's Institute for Urban Planning and Development, one of whose missions is to be a centre of regional knowledge. For this third edition, a steering committee was set up (with representatives from the Regional Council, and from environment agencies and observatories). The document has been enriched with new topics such as: landscape, geological heritage, forestry, climate change, territory schemes, and environment-related economy. The document is downloadable from the IAU website, which also contains additional texts and maps.

Nature :

- For Natura 2000, the inventories of natural areas give about 40,300 hectares for 25 sites under the "Habitats" Directive, and about 100,500 hectares for 10 sites under the "Birds" Directive.

The natural areas of faunal and floral ecological interest (Znieff in French)

of type I (sectors of major biological or ecological interest) account for 47,202 hectares and 708 sites, and the Znieff of type II (large natural areas that are rich and relatively unchanged) account for 220,783 hectares and 90 sites. Overall, the Natura 2000 and Znieff areas account for 25% of the territory of the Region.

- One quarter of French flora is present in Île-de-France. Common bird community monitoring, available since 2001 in Île-de-France, shows a decline for forest birds, stability for farmland birds, and growth for birds that are not habitat-specific.
- As regards the fragmentation of the natural and farming space by railways, roads, and urban development, a fragmentation index has been developed, making it possible to compare regions. Fragmentation is ever-increasing and there now remains only one non-fragmented natural and farming entity of over 5,000 hectares.
- A regional chart of the ecological continuities has been plotted by combining 5 networks: water grid, wetland grid, woodland grid, grassland grid, and large-animal grid.

- There are over 200 signatories to the Regional Biodiversity Charter in 2009, which was the year in which the Regional Agency for Nature and Biodiversity “Natureparif” was founded.

Water :

- The volumes of water drawn off in 2007 break down as follows: 1,556,745,687 cubic metres (m³) for domestic use (75.6%), 485,772,687 m³ for industry (23.6%), and 15,486,216 m³ for farming (0.75%).
- 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 2009: 3 were approved, 5 were being drawn up, and 2 had areas that were yet to be defined.
- Wastewater and sewage was treated by 483 public sewage works and nearly 83 private works in 2007. 96.5% of homes and 10,296 million residents had their wastewater and sewage treated in this way.
- Perception of water quality: according to the 2007 health and environment barometric survey, 80% of Île-de-France residents are satisfied with the quality of the water distributed in their locality (“*commune*”, i.e. municipality or local district).

Farming :

- Île-de-France is one of France’s leading agricultural regions thanks, in particular, to the fertility of its soil. Its total cultivated area is 570,922 hectares spread over 5,310 farms.
- The 3 main sectors are cereal crops (67% of the farmland area), stock-farming (mainly dairy-oriented), and fruit and vegetables. As regards short distribution channels, the Associations for the Preservation of Peasant Farming (Amap in French) had 122 groups of members and 60 groups in the pipeline at the end of 2009.
- Environment-friendly practices are developing: 136 “Prairie” (integrated farming) contracts had been signed by the end of 2009. 102 structures were certified as organic farming establishments, representing 1% of the total cultivated area and 2% of farms.
- Consumption of phytosanitary products for the main field crops is measured by the mean treatment frequency indicator which was calculated for the first time in 2006: 4.49 in 2006.

Forestry :

- In 2008, the Region’s wooded area was 278,723 hectares, representing 23% of its total area (national average: 29%). 88,272 hectares of forest are open to the public (31.5% of the region’s forest area). Private forest accounts for 70% of the region’s forest areas and 69% of the total volume of wood. Deciduous trees constitute 93% of the standing volume.
- 75 forestry and sawmill firms employ 300 employees. 86,824 hectares, i.e. 35% of the Île-de-France Region’s forests, are PEFC certified, as are 145 firms.

Geological heritage and materials :

- The region is rich in various stratotypes (Marinesian, Auversian, Stampian, and Lutetian), sites, rocks, fossils, and minerals. A regional inventory and protection are necessary. In 2009, in addition to a national reserve, two regional geological nature reserves existed, and two were in the course of being classified.
- 104 materials extraction sites totalling 7,081 hectares were authorised in 2009 (including 3,985 hectares and 68 sites for aggregates).
- Through its production of recycled aggregates, Île-de-France contributes 21% of the national output of recycled materials.

Remarkable Spaces :

- The total protected area represented by historical monuments and by their surrounding protected areas (with a radius of 500 m), safeguarded sectors and sites, and urban and landscape architectural heritage areas (ZPPAUP in French) is 327,114 hectares (27% of the region's territory).

Urban planning and housing :

- Urban areas account for about 21% of the Region's area: 16% being built-on land, 5% being open spaces (not built-on and not rendered impermeable). The conurbation of Paris comprises 396 *communes* (23% of the Region's territory) and accounts for 88% of the population of Île-de-France.
- The surface area of urban green spaces open to the public in 2009 was 7.9 m² per resident for Paris and its inner suburbs, and 27.9 m² in its outer suburbs.
- Schemes for setting up sustainable neighbourhoods are being put in place: 8 "eco-neighbourhood" framework contracts were signed with the French State in 2009, and 18 "new urban neighbourhood" projects selected in 2010 (by the Regional Council).
- As regards housing, in 2006, with 5,337,000 dwellings, the Île-de-France housing capacity accounts for 17.1% of the national capacity. The capacity in the private sector that is potentially unfit for habitation was estimated at 225,000 dwellings in 2003. The main pathologies related to degraded housing are carbon monoxide poisoning and lead poisoning.

Mobility :

- The share of road haulage in goods transport was 90% in 2006. River and canal transport accounted for 5.6%.
- With a total of 4,233 km in 2008, the distance covered by cycle paths has tripled since 1999.
- Among the new modes of mobility, car-sharing schemes were run by 5 operators in Île-de-France, with 200 vehicles and 5,000 members in 2009. Over one hundred corporate travel plans are listed in Île-de-France.

Sound environment :

- According to a study by the Regional Health Observatory, 71% of Île-de-France residents declare they are disturbed by noise in their homes, and 26% often or all the time (13% in the provinces).
- In the Paris conurbation, road traffic is responsible for 75% of the potentially excessive exposure to noise. Then comes air traffic (20%) and rail traffic (5%).
- In 2008, the Observatory of Noise in Île-de-France, "Bruitparif", set up an urban network of regional utility for measuring the sound environment ("Rumeur" in French).
- The effects of noise on health: high sound levels have definite effects on hearing, numerous other physiological effects (on sleep, tiredness, and the cardiovascular system) and more subjective psychological effects.

Air quality :

- The 5 major pollutants in Île-de-France are nitrogen dioxide, "PM10" (particulate matter < 10 µm) particles, fine particles ("PM2.5"), ozone, and benzene.
- Road traffic accounts for one half of the emissions of nitrogen oxides, for 30% of particle emissions, for 20% of hydrocarbon emissions (non-methane volatile organic compounds (NMVOCs), and for one quarter of greenhouse gas emissions.
- In 2009, the ATMO index was very good to good for 77% of the year, fair for 13.7% of the year, and mediocre to very poor for 9.3%.
- The effects of atmospheric pollution on health are being studied under the programme called "Erpurs" in French, for evaluating the health risks of urban pollution: the excess risk is assessed at 1% for mortality and at 4% for hospitalisation or for medical visits at home.

Waste :

- The production of household and similar waste (HSW) per capita was 481 kg in 2008. Treatment of the HSW collected breaks down as follows: incineration (58%), landfill in storage centres (14%), materials recycling (14%) composting (8%), anaerobic digestion or "methanisation" (1%), specific treatment for building waste (5%). The regional plan for the disposal of household and similar waste ("Predma" in French) was voted in 2009.
- Production of hazardous waste was 652,500 metric tons (t) in 2005. The regional plan for the disposal of hazardous waste ("Predd" in French) was voted in 2009.
- The waste from healthcare activities with risks of infection is estimated to lie in the range

28,000 to 32,500 t per year. The regional plan for the disposal of waste from healthcare activities ("Predas" in French) was voted in 2009.

Risks :

- Natural risks: 579 *communes* were covered in 2010 by approved Risk Prevention Plans (PPR in French), 75% of which were flood PPR. 88 natural disaster decrees were promulgated from 2007 to 2010. 3.8% of the Region's surface area is exposed to major flood risks, that percentage of the area representing 8% of the population and 8.5% of housing.
- Technological risks: 30 Technical Risk Prevention Plans (PPRT in French) were prescribed in 2010, and 3 were approved. 90 industrial sites are classified as Seveso 2 sites, 36 of which are upper-threshold ones. 412 polluted sites and areas of soil pollution were identified by the national "Basol" database in 2009, and nearly 30,500 sites were identified by the national "Basias" database (identifying former industrial sites and service activity sites).

Energy :

- Energy Production: 11% of the Region's energy needs were covered by regional production in 2005: oil, electricity, heat networks, household refuse, renewable energies (geothermal, biomass boiler houses, thermal and photovoltaic solar).
- Energy Consumption: final energy consumption adjusted for climate was 24.6 Mtep (millions of tonnes equivalent petroleum) in 2005, i.e. 2.14 tep per capita (national average: 2.56 tep). The sectors that consume the most energy are transport (44%), housing, and the tertiary sector. Consumption of motor car fuel in 2006 (571 litres per capita) accounted for 12.2% of the national consumption. The average consumption of main homes for heating is 171 kWh per m² per year. 15% of the energy saving certificates issued at the end of September 2009 concerned Île-de-France.

Climate change :

- The Region emitted 51.4 Mt eq. CO₂ of greenhouse gases in 2005 (8.9% of national emissions)
- The overall carbon budget for the territory totals nearly 122,700 kt eq. CO₂, i.e. 11.2 eq. CO₂ per capita.
- 21 territorial energy climate plans (mandatory for local authorities with populations of over 50,000, i.e. 94 local authorities in Île-de-France) were identified in July 2010.

Summary environment indicators :

- An "average" Île-de-France resident has an ecological footprint (productive surface area necessary for a population to sustain its mode of life in a given territory) of 5.17 global hectares or "gha" in 2010. Expressed by type of consumption, the food sector accounts for 37%, the goods sector for 22%, and the housing sector for 15%.

An Île-de-France resident has a biocapacity (biologically productive surface area) of 0.47 gha, which is 11 times less than his ecological footprint.

- The Environment Quality Indicator (EQI, or "IQE" in French), based on the themes of air and noise, climate, water, use of space, fauna and flora, and use of resources, is 57 for the Île-de-France Region (56 for France).

Territory schemes :

- The 2009 panorama of the local agenda 21 in Île-de-France identifies 76 schemes undertaken by Île-de-France local authorities (Region, 3 *départements*, 13 inter-communal authorities, and 59 municipalities).
- Set up in 2001, the territory forest charter is a planning and sustainable development tool for the territory, without any regulatory value. It aims to include the forests to a greater extent in their economic, ecological, social, and cultural environments. Four charters have been signed in Île-de-France: Regional Nature Park of Le Gâtinais, Regional Nature Park of Oise-Pays de France, forêt de Sénart (Sénart Forest), Arc boisé du Val-de-Marne (Wooded Arc of the Val-de-Marne district).
- The agri-urban programmes are voluntary development schemes undertaken by *communes* or by farmers for preserving farmland and farming. Various small independent programmes have been launched in Île-de-France.
- The Regional Nature Parks were set up in 1967 to protect and enhance major inhabited rural spaces. Île-de-France now has four such parks (Haute vallée de Chevreuse, Vexin français, Gâtinais français, Oise-Pays de France), covering 14% of the Region's surface, and 2 more are in the pipeline.

Economy :

- Eco-activities. In 2006, the Île-de-France had 1,332 sites employing 28,500 employees (0.5% of regional employment), 40% of whom worked in collecting and treating household waste.
- Environmental jobs. The waste sector employed 16,130 people in 2004, and the water sector 18,600 people in 2007. Protecting biodiversity and landscapes accounted for 10,900 jobs in 2008 (3% of environmental jobs). In 2009, the number of firms in the renewable energies sector was estimated at 300.
- Inclusion and the environment. In 2004, 83 structures for social inclusion through economic activity developed environmental activities.

Environment heightening awareness and environment education :

- In 2009, Île-de-France had 926 associations for protecting and defending the environment, 310 of which are "environment protection" approved.
- As regards environmental education, over 350 resource centres are identified by the Region's Agency for the Environment and for New Energies ("Arene" in French) in the directory of resource centres for environmental education and awareness-heightening. A collective for environmental education in Île-de-France ("CEEF") has been set up.

Users of the environment :

- The annual survey on the sporting activities of Île-de-France residents (EPSF in French) set up by the Regional Institute for the Development of Sport (IRDS in French), indicates regular activity in 2008 that breaks down as follows: walking: 22%; cycling: 12%; running: 9%; horse-riding: 1%. 1.3 million people would apparently do water sports, according to a survey by the Seine and Normandy Water Agency (Aesn) in 2004.

Regional environment agencies and observatories :

- The Regional Health Observatory (ORS)
- The Regional Agency for the Environment and for New Energies (Arene)
- The Green Spaces Agency (AEV) of the Île-de-France Region
- The Association for Monitoring the Quality of Air in Île-de-France (Airparif)
- The Observatory of Noise in Île-de-France (Bruitparif)
- The Regional Observatory of Waste in Île-de-France (Ordif)
- The Regional Agency for Nature and Biodiversity in Île-de-France (Natureparif).