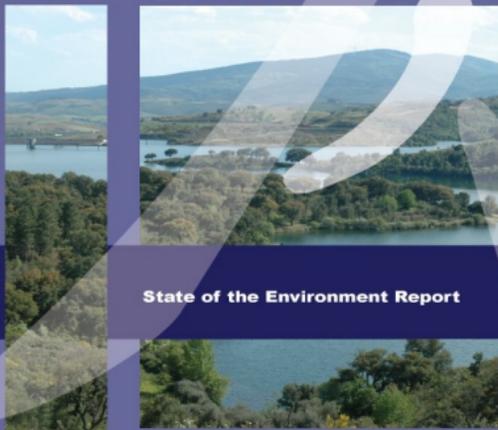




AGÊNCIA PORTUGUESA DO AMBIENTE

Ministério da Agricultura, do Mar,  
do Ambiente e do Ordenamento do Território



SoER 2011 Portugal

## 10 INDICATORS

### Legend:



Positive trend, indicating satisfactory progress towards objectives and targets



Progress, but not enough to reach objectives and targets

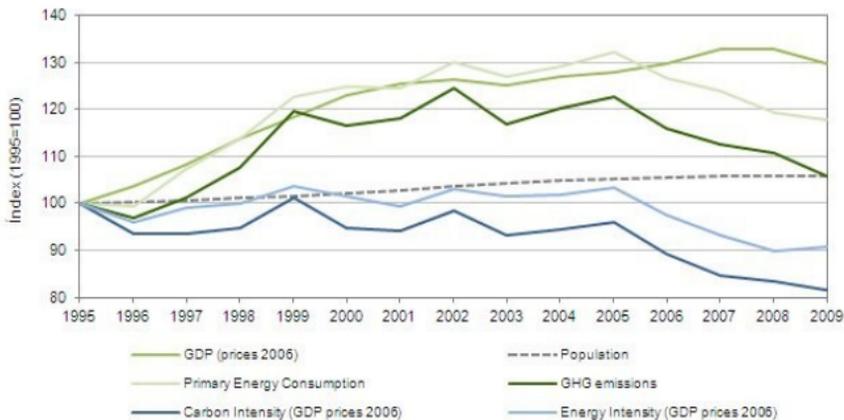


No progress or negative trend

# GENERAL CONTEXT



## Relative evolution of GDP and associated impacts



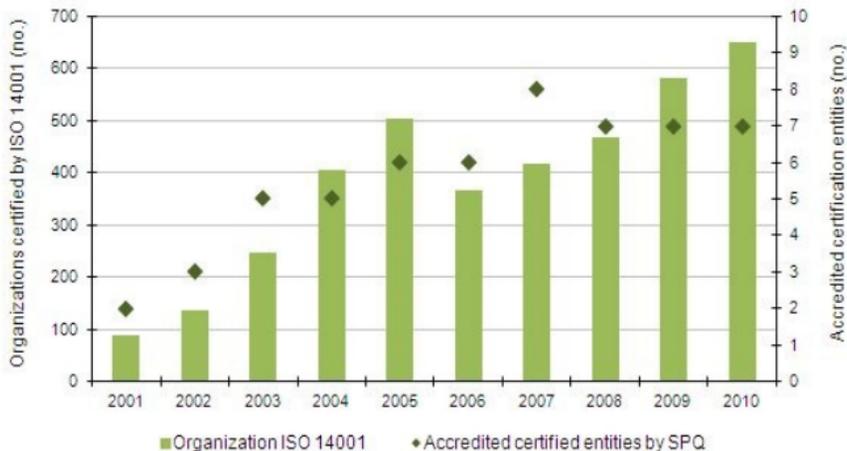
Source: INE, 2010; APA, 2011; DGEG, 2011

For the first time since 1998, national emissions of greenhouse gases (GHG) were below the annual average target of the Kyoto Protocol. Portugal continues to position itself above the average EU-27 with respect to energy intensity. The primary energy consumption decreased from 2008 to 2009, making the increase in energy intensity a consequence of the slowdown in the generation of wealth in the same period.

# ENVIRONMENTAL MANAGEMENT



## Organizations certified by ISO 14001 and accredited certification entities by SPQ in Portugal



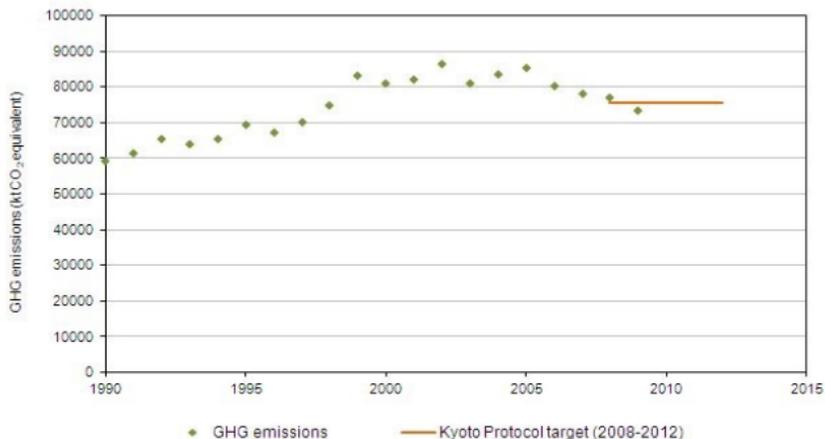
Source: IPAC, 2011

In Portugal, by the end of 2010, 649 organizations were awarded certifications in accordance with ISO 14001 by the seven accredited certification entities by the Portuguese Quality System (SPQ). In 2009 ISO 14001 was implemented in 155 countries and economies, corresponding to 223 149 organizations.

# CLIMATE CHANGE



## Main GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) and commitments for the period 2008-2012



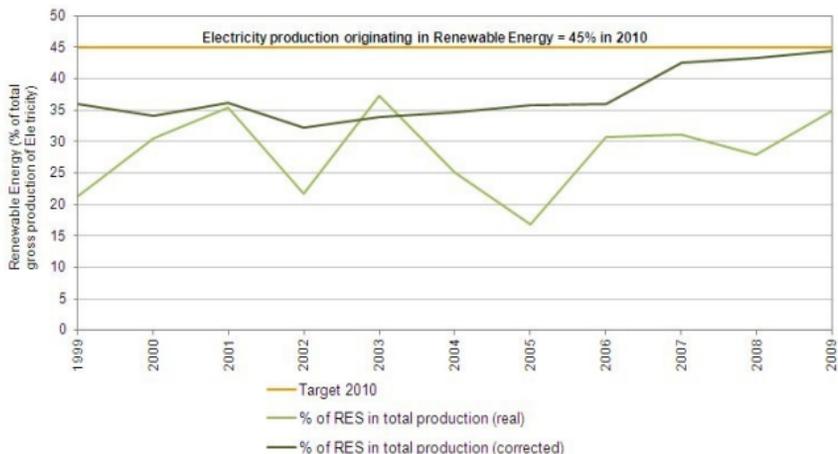
Source: APA, 2011

After a significant increase in emissions seen in the 90's, national greenhouse gas (GHG) emissions showed a continued downward trend since 2005. Indeed, emissions for 2009 represent a decrease of 4.3% over the previous year. In 2009 GHG emissions were found to be about 1% below the national target of compliance under the Kyoto Protocol.

# RENEWABLE ENERGY



Contribution of renewable energy sources to the percentage of gross production of electricity, in mainland Portugal, and comparison with the goal of Directive 2001/77/EC



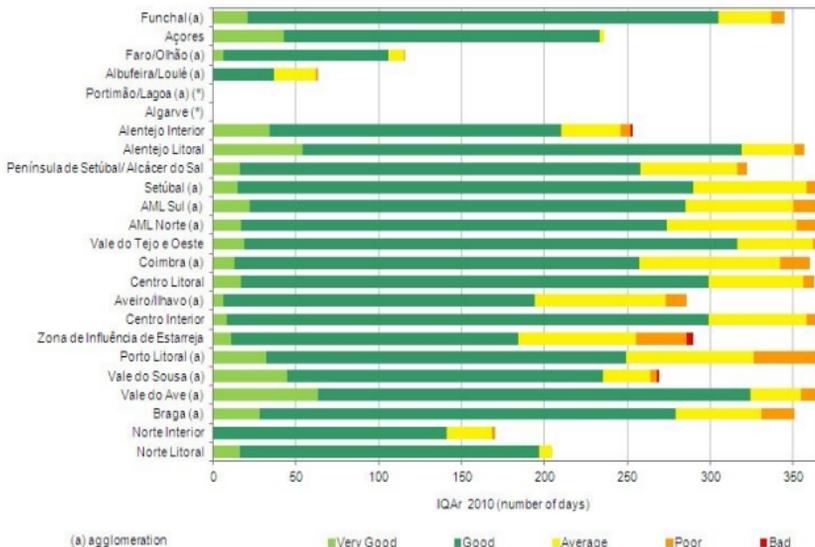
\* the total electricity produced was corrected with the Hydroelectric Productivity Index (HPI) for comparison with target set by Directive 2001/77/EC

Source: DGEG, 2010

The renewable energy sources (RES) in the gross consumption of electricity for the purposes of Directive 2001/77/EC was 44.4% in 2009 and 50.1% in 2010, allowing Portugal to exceed the target set for this year. In 2009 Portugal was the 3rd EU-15 country with greater incorporation of renewables in the final energy consumption.



## Air Quality Index in 2010

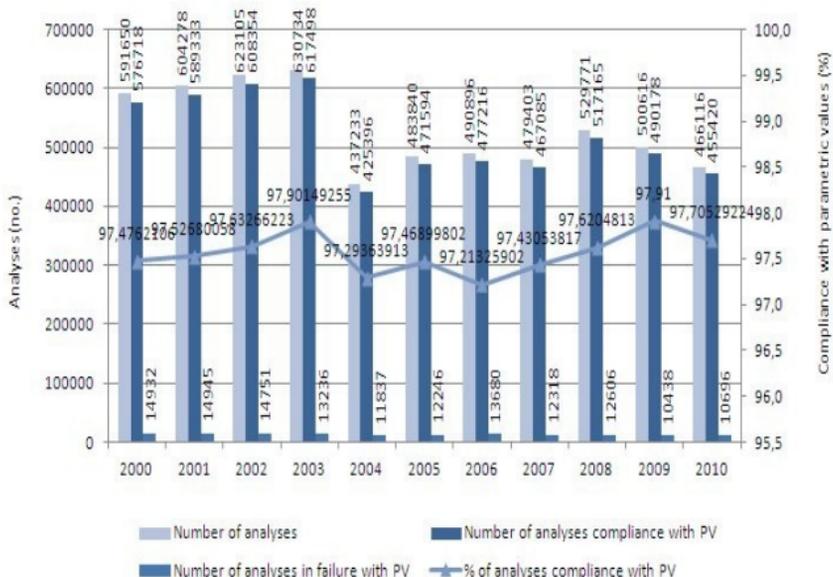


Source: CCDR-Norte, CCDR-Centro, CCDR-Lisboa e Vale do Tejo, CCDR-Alentejo, CCDR-Algarve, DRA Açores, DRA Madeira, 2011

In 2010 the predominant class of the Air Quality Index (IQAr) was "Good", as in previous years. In this year the number of days with air quality "Good" increased, when compared with the previous year. The number of days on which the classification was "Bad" also increased.



## Analyses in compliance with Parametric Values (PV)

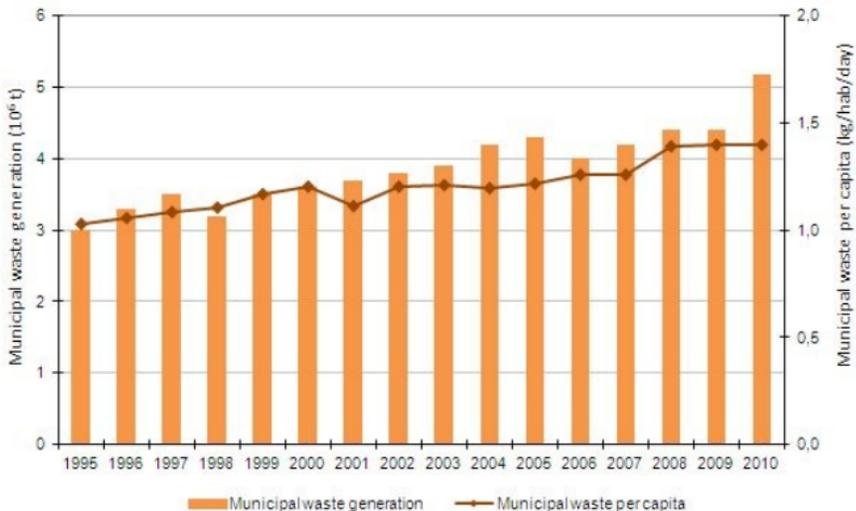


Source: ERSAR, 2010

In 2010, 99.67% of the mandatory analyses relative to water quality intended for human consumption were performed (very close to attaining a sampling frequency of 100%), with a percentage of compliance with the parametric values (PV) of 97.71%.



## Municipal waste generation per capita in mainland Portugal

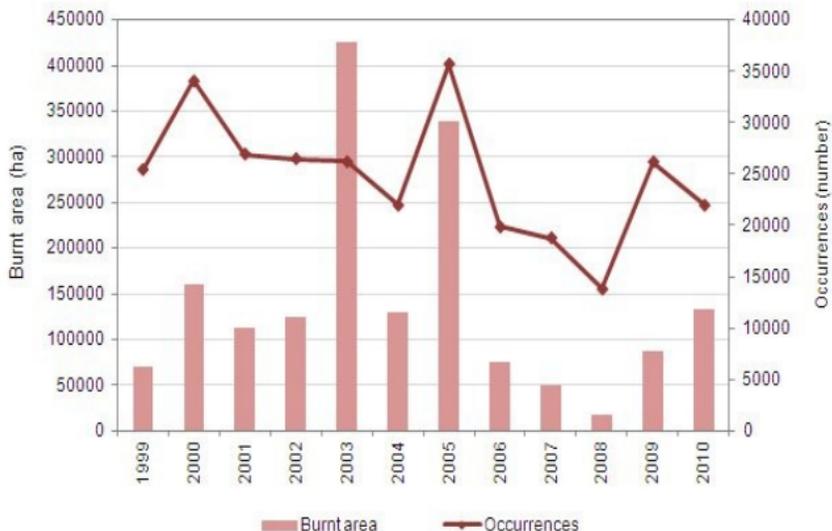


Source: APA, 2010

In 2010 5.184 million tons of municipal waste were produced in the mainland, approximately 511 kg per capita per year, equivalent to a daily production of about 1.40 kilograms per capita. The production of municipal waste was higher than the target set in PERSU II by about 111 000 tons, for this year.



## Forest fires in mainland Portugal



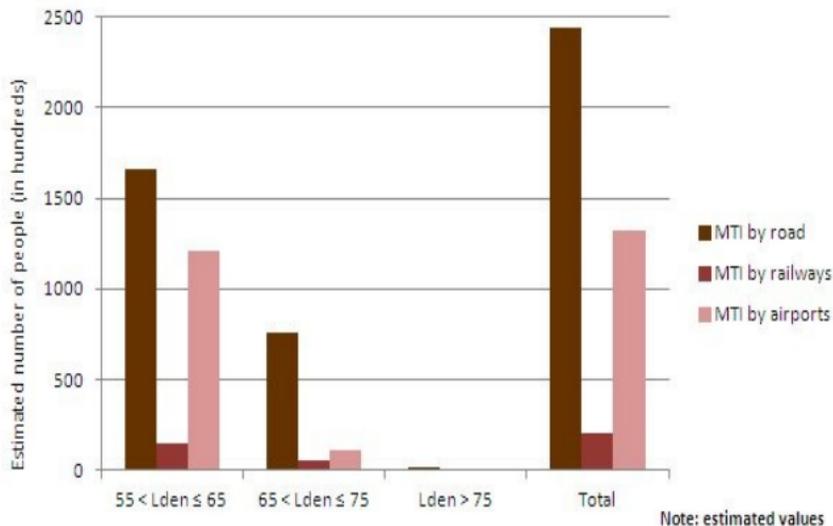
Source: AFN, 2011

In 2010 there were 22 026 occurrences in mainland Portugal; it was thus a decrease of about 16% compared to 2009. These events corresponded to 133 090 hectares of area burned, so the target established in the National Plan for Forest Fire Protection, to 2012, was not met (a burned area less than 100 000 ha/year).

# NOISE



Population of Lisbon exposed to Noise, Lden in dB (A),  
by type of sound source



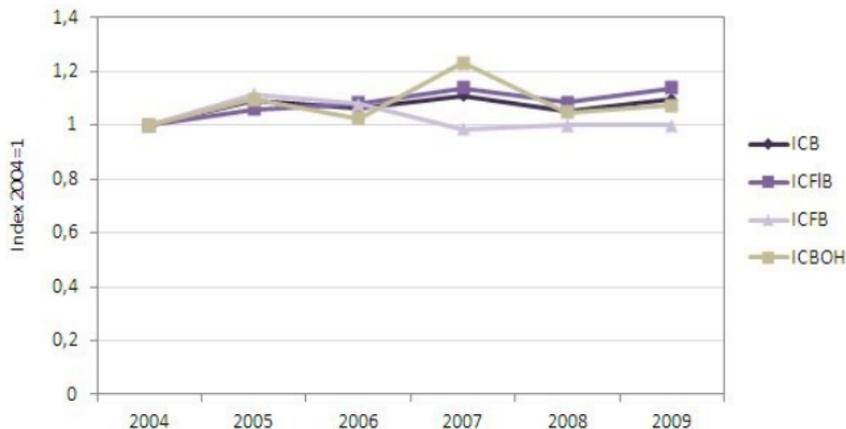
Source: APA, 2011

In 2010, for the three types of noise sources analyzed, road noise was the one that was felt most. It was also concluded that a small percentage of the population was exposed to noise that exceeds the admissible limits, and therefore the action plans should focus primarily on this population.

# BIODIVERSITY



Index of Common Birds (ICB), Index of Common Farmland Birds (ICFIB), Index of Common Forest Birds (ICFB), Index of Common Birds of Other Habitats (ICBOH) in mainland Portugal



Source: SPEA, 2011

Between 2004 and 2009 the Index of Common Birds (ICB) has remained fairly stable, with a slightly positive trend since 2004. In the same period the Index of Common Forest Birds (ICFB) revealed a trend of moderate growth, equivalent to about 13%, whereas the Index of Common Farmland Birds (ICFIB) since 2005 shows a trend of moderate reduction, stabilizing in the last two years.

**Contributions to this report were given by the following institutions:**

AFN – National Forest Authority (MAMAOT); ANCP – National Public Procurement Agency, EPE (MF); CCDR-Alentejo – Regional Development and Co-ordinating Committee of the Alentejo (MAMAOT); CCDR-Algarve – Regional Development and Co-ordinating Committee of the Algarve (MAMAOT); CCDR-Centro – Regional Development and Co-ordinating Committee of the Center (MAMAOT); CCDR-LVT – Regional Development and Co-ordinating Committee of Lisbon and Tejo Valley (MAMAOT); CCDR-Norte – Regional Development and Co-ordinating Committee of the North (MAMAOT); CECAC – Executive Committee of the Climate Change Commission (MAMAOT); DRA Açores – Regional Directorate of Environment of Azores; DRA Madeira – Regional Directorate of Environment of Madeira; DGEG – Directorate General for Energy and Geology (MEE); DPP – Department of Foresight and Planning and International Affairs (MAMAOT); ERSAR – Water and Waste Services Regulation Authority (MAMAOT); GPP – Office of Planning and Policy (MAMAOT); ICNB – Institute for Nature Conservation and Biodiversity (MAMAOT); IM – Institute of Meteorology, IP (MEC); INAG – Water Institute, IP (MAMAOT); INE – National Institute of Statistics, IP (PCM); IPAC – Portuguese Institute of Accreditation (MEE); IPIMAR – Research Institute of Fisheries and Marine (MAMAOT); SPEA – Portuguese Society for the Study of Birds.