

PART III.
NATIONAL REPORTING GUIDELINES FOR CSD-14/15 THEMATIC
AREAS

A. Atmosphere/Air pollution

Air quality evaluation

Air quality evaluation in Portugal is conducted according to the guidelines of the Air Framework Directive (Directive 96/62/CE) that has been transposed to internal law by Decree-law n° 276/99. Subsequent diplomas have established limit values for the concentrations on environmental air, sulphur dioxide (SO₂), nitrogen dioxide (NO₂) and nitrogen oxide (NO_x), inhalable particles (PM₁₀), lead (Pb), carbon monoxide (CO), benzene and ozone (O₃), and also a threshold for information to be provided to the public concerning O₃, and alert thresholds concerning O₃, SO₂ and NO₂. Furthermore, it established the obligation of elaboration and application of plans and programmes aimed to enforce the observance of the limit values within the settled deadlines, as well as the establishment, whenever there is the risk of overlapping limit values or alert thresholds of immediate action plans so as to reduce that risk and limit the duration of its occurrence.

The Decree-law n° 276/99 was made operational by the "Air Quality Action Plan", which included a set of actions necessary to the implementation of a national system of air quality management and information, aiming not only to keep up to date the knowledge of the existing situation in the entire national territory but also to programme measures in order to ensure that air quality parameters are kept within recommendable levels, as far as environmental protection and population health are concerned.

The air quality diagnosis and the delimitation of the country into zones and agglomerations, as functional management areas, have constituted the base to the application of this Action Plan, which includes a set of actions that have already been taken, among which we point out the following:

- Definition of the evaluation criteria on each of the zones and agglomerations;
- Identification of the most problematic zones and agglomerations, air quality-wise;
- Creation of an air quality index, to be made available to the public on a daily basis;
- Providing on the internet information on air quality in 'almost-real' time;
- Creation of the warning mechanisms to inform the population on the overlapping of the information and alert thresholds;
- Establishment of information control criteria and quality guaranty;
- Redefinition and improvement of the covering of the national network and standardisation of its stations characterization;
- Operationalisation of the database which allows the interchange with national, community and international organizations and is the pillar of all the air quality information system;
- Elaboration of application guides for short term application plans and for air quality implementation programmes and improvement measures.

The air quality information system, which includes data on the measured levels, surpassing of limit values and the Air Quality Index, is available online to the general public at the Environment Institute's webpage www.qualar.org.

The development of a structures routine for following and evaluating natural events with consequences to air quality on the national territory, the using of modelization techniques on air quality evaluation and forecast, and the evaluation of the population exposed to certain air quality levels are other tasks still being carried out and that are considered relevant elements for the consolidation and validation of the above mentioned Action Plan.

As already stated, the process of improving the covering of the air quality monitoring network started in 2001, there being a total number of 73 stations managed by regional authorities in 2005.

Concerning ozone monitoring, there are currently 56 working stations compared to the 29 working in 2001. Apart from permanent stations, regular procedures of ozone level characterizations and other pollutants have been developed, both at local and national level.

As for particulates, the number of plants that measured PM10 and PM2,5, between 2001 and 2005, raised from 20 to 58 and from 1 to 19, correspondingly.

This way, the monitoring of ozone in the air and PM10 currently covers the entire national territory. Furthermore there have been developed studies to determine the representativeness of some background pollution monitoring stations.

Overall, the air quality in Portugal does not pose a problem to some of the pollutants covered by the legislation, like lead and carbon monoxide. Outside major urban areas air quality is considered good. However, in major urban centers – metropolitan Lisbon and Oporto - inhaled particles (PM10) and nitrogen dioxide (NO2) are the pollutants which require most attention; inhaled particles can reach levels above legally established. During the summer months, tropospheric ozone reveals in some regions levels which exceed the threshold established in the legislation.

- Air pollution monitoring

To guarantee an effective monitoring of the air quality a number of criteria and conditions was established, which, simultaneously with legislation for monitoring the emissions of air pollutants from industrial sources and automobile traffic, allow for a better protection of ambient air.

In 2003 the Decree-law n.º 193/2003, 22nd of August, was approved to transpose into national law Directive 2001/81/EC concerning National Emissions Ceilings, and Decree-law n.º 178/2003, 5th of August, to transpose into national law Directive 2001/80/EC concerning Major Combustion Plants.

In compliance with these two Directives Portugal developed the Programme for National Emission Ceilings (PTEN) and the National Plan for Reducing Emissions from Major Combustion Plants (PNRE-CIG), which will lead to the reduction of air pollutants like SO₂, NO_x, VOC, particulates and NH₃, until 2010 and 2007, correspondingly.

To determine the level of reductions of the emissions needed and the policies, measures and mechanisms necessary to tackle the problem, studies were carried for the development of PTEN. These studies will also allow the evaluation of the compliance with the Gothenburg Protocol to the LRTAP convention, which ratified by Portugal in 2005.

The PNRE will enter into force in 2008 and covers 8 industrial units of the energy sector, mineral oil refining, coating mixture and petrochemical, which will be obliged to reduce the mentioned pollutants.

In 2004, decree-law 78/2004, of 3 of April, was approved establishing a new regime of control and prevention of the atmospheric emissions, whose scope of application was widened to include stationary emission sources. This law also establishes for the guarantee of an effective control of the emissions.

In this diploma, it is stipulated, among others aspects, a differentiated monitoring regime in accordance with the season, the amounts of pollutants emitted and the functioning period of each source. The monitoring must be continuous to the sources that emit pollutants above a data mass volume.

Currently, 34 enterprises monitor in continuous the emissions of at least one pollutant, distributed by different fields of activity, for example, energy production, pulp and paper, waste incineration and cement production. The results of this monitoring are sent quarterly to the competent authority thus allowing for the knowledge and attendance of the emissions of the industrial units in question.

- Indoor Air Quality

In this matter, the following diplomas are in approval stage:

- Proposal of a decree-law that approves the National System of Energy Certification and the Indoor Air Quality of the Buildings
- Proposal of decree-law which approves the new Regulation of the Energy Systems and the Buildings Acclimatization (RESBA) and the results of the revision of the previous RESBA
- Proposal of decree-law which approves the new Regulation of the Characteristics of Thermic Behaviour of the Buildings (RCTBB) and the results of the revision of the previous RCTBB (Decree-law 40/99, of 6 February).

- Fuel Quality

Concerning fuel specifications, at this stage Portugal fulfils European Community law on, namely, sulphur content of petrol and road gas-oil and the gas diesel oil.

- Programs on Substances that Deplete the Ozone Layer and which promote options in the scope of the Montreal

A Portuguese enterprise has been developing, since 1997, a program with the aim to adopt alternative methods to the use methyl bromide, "A efficacy treatment of chestnuts and other dry fruits with fluoride sulphide".