

20. PORTUGAL

20.1 Energy Policies and Actions

Energy is at the top of the national agenda in Portugal. There are three main goals set by the Portugal President for the 2nd semester of 2007, including:

- to lead the negotiations between European (EU) Member States in order to achieve a political agreement for the new Energy Internal Market Directive;
- to promote the required brainstorming regarding national burden sharing targets to be set in the new EU Renewables Energy Sources Directive;
- to work closely with the Commission in the new EU Strategic Plan for Energy Technologies (SET-Plan).³⁵⁷

In October 2005, the National Energy Strategy, substituting for the previous 2003 strategy, was approved. The strategy defines the major political guidelines and most relevant measures in the energy area, with the following principal objectives:

- to guarantee security of energy supply, by diversifying primary resources and energy services and promoting energy efficiency;
- to stimulate and encourage competition, protecting consumers and promoting corporate competitiveness and efficiency;
- to guarantee the environmental adequacy of the energy process as a whole, reducing its environmental impacts on a local, regional and national level.

The major strategic guidelines, established to achieve these three objectives, include the liberalisation of the electricity, gas and fuel markets; creation of a competitive structural framework; growth of renewable energy supply; promotion of energy efficiency; an efficient and environmentally sound public supply of energy; reorganisation of the energy sector tax and incentive systems; energy perspective and innovation; and communication, awareness and assessment of national energy strategy.

The National Energy Strategy 2005 provides for the restructuring of the energy sector, by expanding the scope of activity of the principal operating companies, for there to be more than one relevant integrated operator in the electricity and natural gas sectors. It also provides for the linkage of the regulated assets in the natural gas sector (reception, transport and storage) with the current electricity grid and transport operator.

National Programme for Climate Change

In 2004, the National Programme for Climate Change (PNAC) was approved. PNAC quantifies Portugal's necessary reductions to comply with its Kyoto target and details policies and measures for all activity sectors. There is a particular focus on the energy sector (excluding transport), which will account for between 18% and 24% of the national reduction. Measures related to renewable energy sources and energy efficiency improvements will play a key role in meeting Portugal's target.

Under the European Union Emissions Trading Scheme (EU-ETS), the National Plan for the Allocation of Greenhouse Gas Emissions Licenses (PNALE) was approved in March

³⁵⁷ Referenced to the web site of Portuguese Government,
<http://www.min-economia.pt/listPage.aspx?idCat=111&idMasterCat=105&idLang=1&idContent=285&idLayout=1>

2006. Portugal is using the flexibility measures provided for in the Kyoto Protocol to meet half of its commitment.

Energy Efficiency Policies

Through its Incentives Programme for the Modernisation of the Economy (PRIME), the government has been backing projects to improve energy efficiency and promote efficient co-generation, in various sectors of economic activity, excluding the residential sector.

In 2004 and 2005, the Energy Efficiency Programme in Buildings was implemented. This programme covers the services and residential sectors, dealing with implementing technical energy efficiency standards and energy systems, with the objective of supporting energy policy for the sector. For residential sector, two regulations were in force with regard to the characteristics of thermal behaviour of buildings and the air-conditioning system in buildings. Energy efficiency is promoted in the industrial sector through the Regulations for the Management of Energy Consumption (RCGE).³⁵⁸

Renewable Energy Policies and Actions

Portugal has set the third largest EU target by 2010 regarding the annual amount of electricity generated from renewable sources – 45%. It has the highest growth rates in EU in wind power during 2005 – 2006, being currently the 5th country with the largest wind power installed capacity. Below shows some actions:

- Portugal has set a diversified endorsement policy for non-conventional renewable energy, namely in solar power, waves and biomass;
- Portugal has licensed the biggest solar PV power plant in the world in Moura, which will be operative by the end of 2007 and it has been at the final stage to launch a world leading wave technology.

The Portuguese Government has recently set new ambitious targets for the near term future in renewable energy, including:

- to reach 5.7MW of wind power by 2012, compared to 540 MW in 2004, which represents a tenfold increase;
- to develop wind-hydro power complementary policy to 70% of the untapped hydro potential, compared to 45% in 2004;
- to promote new technologies like waves, microgeneration and solar plants.

All combined, with these measures Portugal will be able to achieve by 2010 a target of 17% of all primary energy needs covered by renewable energy. Adding the biomass contribution for industrial and household heating, Portugal will be in a very strong position to comply with the EU goal of 20% of renewables by 2020.³⁵⁹

³⁵⁸ Referenced to a document "International Energy Agency - 2006 Standard Review of Portugal, http://www.iea.org/textbase/nppdf/free/2006/SR_Portugal.pdf

³⁵⁹ Referenced to the web site of Portuguese Government, <http://www.min-economia.pt/listPage.aspx?idCat=111&idMasterCat=105&idLang=1&idContent=285&idLayout=1>

20.2 Environmental Evaluation/SEA in Portugal

In Portugal, the legislation that would transpose the SEA Directive was still under preparation in mid-2006. There is a guidance available regarding strategic impact assessment (SIA) of land-use/spatial plans (regional, inter-municipal, municipal, urban plans, coastal areas plans, natural protected areas plans and water reservoir plans). The National Directorate General issued the Guidance in 2003 for Land-Use Planning and Urban Development.^{360 361}

The Guidance sets out a technical methodology for SIA to be used during the planning process as part of the conception, preparation, discussion, approval and implementation of spatial plans in Portugal. It applies to regional special, inter-municipal, and municipal master plans as defined in the Spatial Planning Act and regulations (Law n. 48/98 of 11th August, and Decree-Law n. 380/99, of 22 September 1999). The SIA methodology is designated to be used in close articulation with the planning methodology, to fit to the sequence and nature of planning activities and functions that are normally part of a plan development process.³⁶²

While most EU member states has transposed the SEA Directive by mid-2006, Portugal is one of the states identified that had no SEA legislation in place. As part of Portugal's moves to comply with European SEA Directive, guidance for SEA of Land-Use Plans available in 2003 provides an administrative requirement to implement SEA.

However, Portugal has had a poor record of integrating the environment into strategic decision-making. There are no legal requirements for SEA in Portugal. The existing EIA legislation is exclusively applied to projects; elements of environmental evaluation are incorporated into regional and local land use planning, in the preparation of a national energy plan and a national system for industrial waste management.³⁶³

³⁶⁰ Extracted from the "SEA in spatial/land use planning in the 25 EU member states - a July 2006 update", <http://www.laum.uni-hannover.de/uvp/aktuell/SEAINMS2006.pdf>, page 7

³⁶¹ The guideline can be referred to

<http://www.rec.org/REC/Programs/EnvironmentalAssessment/pdf/seminar2004/SEAGuidance-Portugal.pdf>

³⁶² Extracted from the "Strategic Environmental Assessment: A sourcebook and reference guide to international experience", Barry Dalal-Clayton and Barry Sadler, 2004, http://www.iied.org/Gov/spa/documents/SEAbok/Chapter3_Oct04.pdf, page 99

³⁶³ Referenced to the "Report on methodological approaches to SEA, including draft version of D5.1 (Report on current national procedures)" by the Building Environmental Assessment CONsensus on the transeuropean transport network (BEACON), July 2004, http://www.transport-sea.net/filecount.phtml?file=D_2_1.doc&PHPSESSID=39b7a6b60cac49071eed204092d2aeb8, pages 55 - 57

20.3 Environmental Evaluation/SEA on Energy Policies and Actions in Portugal

In Portugal, the legislation that would transpose the Directive was still under preparation in mid-2006. As part of Portugal's moves to comply with European SEA Directive, guidance for SEA of Land-Use Plans available in 2003 provides an administrative requirement to implement SEA. The Guidance sets out a technical methodology for SIA to be used for regional and local land use planning, in the preparation of a national energy plan and a national system for industrial waste management.

Details of the requirements should refer to section 20.2.

A summary table for the energy policies and actions and SEA status in Portugal is presented in **Exhibit PT-1**.

Exhibit PT-1 Summary of Energy Policies and Actions and SEA Status in Portugal	
(a) Energy Policies and Actions	
Energy Policies and Actions	Policies: <ul style="list-style-type: none"> • National Energy Strategy Actions: <ul style="list-style-type: none"> • National Programme for Climate Change • National Plan for the Allocation of Greenhouse Gas Emissions Licenses • Energy Efficiency Programme in Buildings
Guidance/Legislations for Energy	N/A
(b) Environmental Evaluations / SEA Status in Energy Policies and Actions	
Type of Assessment	SIA for land-use/spatial plans and programmes
Requirement Mechanisms	Administrative
Legislation for Environmental Evaluation / SEA	<ul style="list-style-type: none"> • Guidance on SIA of land-use/spatial plans • National Directorate General for Land-Use Planning & Urban Development (2003)
Applications	<ul style="list-style-type: none"> • Plans and Programmes

20.4 Analysis and Conclusions

In Portugal, the National Energy Strategy defines the major political guidelines and most relevant measures in the energy area. It restructures the energy sector by expanding the scope of activity of the principal operating companies and provides linkages for the natural gas sector with the electricity grid and transport operator. There are also programmes in response to the Kyoto Protocol, and other policies implemented to improve energy efficiency. Besides, Portuguese Government has set target to have a greater percentage use of renewable energy in industrial and domestic field.

For the energy situation of Hong Kong, the key objectives of the energy policy are to ensure that the energy needs of the community are met safely, efficiently and at reasonable prices, and to minimise the environmental impacts of energy production and use and promote the efficient use and conservation of energy. The basic approaches are comparable to that implemented in Portugal, such that both places aim to promote renewable energy and to set targets on renewable energy and sustainable energy consumption, and to promote energy efficiency and conservation as part of a sustainable energy policy.

For the Environmental Evaluation/SEA in Portugal, the legislation that would transpose the Directive was still under preparation in mid-2006. As part of Portugal's moves to comply with European SEA Directive, guidance for SEA of Land-Use Plans available in 2003 provides an administrative requirement to implement SEA. The Guidance sets out a technical methodology for SIA to be used for regional and local land use planning, in the preparation of a national energy plan and a national system for industrial waste management.

When comparing the SEA situation with Hong Kong, it has a statutory system to carry out SEA for certain landuse plans under the EIA Ordinance (EIAO). There is also an SEA Manual published by the Hong Kong Environmental Protection Department to provide a systematic guidance on SEA process.



Wind farm in Portugal³⁶⁴



Solar power plant near Serpa, Portugal ³⁶⁵

³⁶⁴ Source: <http://www.min-economia.pt/innerPage.aspx?idCat=51&idMasterCat=13&idLang=1>

³⁶⁵ Source: http://en.wikipedia.org/wiki/Photovoltaic_power_stations

20.5 Examples of Energy Policies /Actions or their Environmental Evaluation/SEA

Example PT-1	E4 Programme (Energy Efficiency and Endogenous Energies) ³⁶⁶
Description of the Programme	The Portuguese government launched the E4 Programme (Energy Efficiency and Endogenous Energies) in 2001, which aimed at promoting a consistent and integrated approach to energy supply and demand. The programme consists of a set of diversified measures which hope to promote energy efficiency and the use of renewable energy sources. It also seeks to upgrade the competitiveness of the Portuguese economy and to modernise the country, and at the mean time, to preserve the environment by reducing gas emissions.
Goals of the Programme	<p>The Portuguese government hopes to exploit the renewable energy sources for power and thermal generation. It aimed to increase the delivery of its gross electricity consumption by 2010.</p> <p>The goals of the Programme by the Portuguese government include increasing wind power from 300MW (2001) to 3750 MW and for photovoltaics, the government aims to increase to 150MW, which is currently 2MW only.</p>
Mechanism of the Programme	<p>The E4 Programme relies upon the following actions:</p> <ul style="list-style-type: none"> ● The introduction of natural gas, which aims at progressively substituting oil and coal in the energy balance; ● The liberalisation of energy market by opening this former state-owned sector to competition and private investment; ● Diversification of the access to energy sources available in the market and increase of the security of services provided by energy suppliers; ● Promotion of the improvement of energy efficiency, thereby contributing to reduce energy intensity and the external energy bill, on the one hand, responding to climate change, on the other hand, laying special emphasis on the opportunities and means of optimising demand-side efficiency; ● Promotion of the use of endogenous energy sources, namely hydro, wind, biomass, solar (both thermal and photovoltaics) and waves, establishing a highly dynamic compromise between technical and economic viability and environmental constraints. <p>The emphasis for the next ten years will be put on energy efficiency (supply and demand sides) and exploitation of endogenous (renewable) energy.</p>

³⁶⁶ Extracted from "Renewable energy in the European Union - Portugal"
http://en.wikipedia.org/wiki/Renewable_energy_in_the_European_Union#_note-4
 Referenced from "Portugal", <http://www.iea-pvps.org/ar01/prt.htm>
 Referenced from "Portugal", <http://iea-pvps.org/ar03/prt.htm>