

19. AUSTRIA

19.1 Energy Policies and Actions

Austria's energy policy is committed to the following four objectives:

- (i) Security of Supply - Austria seeks the security of energy supply for both the provision of primary fuels to the country as a whole and the delivery of fuels to final consumers. It derives a measure of energy security from storage capabilities within the country, and extensive international pipeline capacities.
- (ii) Cost-effectiveness - The Austrian government seeks cost-effectiveness in assessing all policy decisions, e.g. energy liberalisation, government research and development (R&D) and energy efficiency initiatives.
- (iii) Environmental Compatibility - Austria has traditionally placed great emphasis on the environmental impacts of energy production and use.
- (iv) Social Compatibility - There are forums for the three parties including business, labour and agriculture, to express their views and influence the direction of energy policy.

The above objectives are pursued in the energy sector through various policy activities, including:

- Liberalisation of the energy markets
- Diversification of energy sources
- Diversification of suppliers
- International Energy Agency (IEA) strategies to cope with energy supply disruptions (crisis mechanisms)
- Energy taxation
- Price monitoring
- Public service obligations
- Mandatory oil stocks
- Energy R&D

Climate change strategy

In March 2002, Austria ratified the Kyoto Protocol, which obliges the country to reduce greenhouse gas (GHG) emissions by 13% below 1990 levels by the first commitment period 2008-2012. In order to help formulate a policy to reach this target, the federal government has commissioned a study "Energy Scenarios up to 2020" which projects GHG emissions forecasts running through the year 2020. The study concluded that greater emissions reductions would result in improved macroeconomic conditions. Therefore, the country developed a climate change strategy for which policies and measures intended to mitigate GHG emissions are conducted on three different levels of Austrian government, including the federal level, the Land level, and the municipal level.

Policies for Renewables

Austria currently has two sets of targets for the increase of electricity generated by

renewable energy in the country. The first set of targets is part of the electricity liberalisation laws. These laws include ambitious targets for the inclusion of renewable energies in the electricity mix, and mandate Austrian electricity suppliers to source a minimum percentage of their power from renewable resources.

The second set of targets is to increase the use of renewable energy in Austria. The EU Directive 2001/77/EC establishes a goal of having 78.1% of gross electricity consumption coming from renewable resources for Austria by 2010.

In order to meet these targets, to overcome the obstacles faced by renewable energy and integrate new renewable energy sources into the liberalised electricity market, the Austrian government has instituted two separate mechanisms to support electricity generation from renewable resources. The first is a feed-in tariff which provides above-market prices to power from renewable resources. The second is the pair of minimum renewable sourcing requirements that electricity suppliers must meet.³⁴²

On the basis of the 2002 Eco-Power Act drafted in line with the 2000 Electricity Act, a federally uniform purchasing and payment obligation for "eco-electricity plants" (plants run on solar energy, wind, biomass, biogas, landfill gas, sewage gas, or geothermal energy and certain kinds of waste, but excluding hydropower) had been introduced. By 2008 a share of 4 % (assessed in relation to the total supply of electricity to the end consumer) must gradually have been reached with these energy sources while the present share amounts to about 1 %.

In order to facilitate the introduction of renewable energy sources on the market, numerous promotional instruments exist, from tax incentives and relevant housing construction subsidies or other supporting schemes for trade and industry. In addition, there were research promotion support activities undertaken from basic scientific research to market transition. In the course of the implementation of the Austrian climate strategy and the new formulation of the energy concept, the promotion of renewable energy sources is further intensified.³⁴³

Austria makes substantial use of renewable resources in the form of biomass. Following the announcement of an action plan for biomass by the European Commission that asked the member states to compile national biomass plans of action in December 2005, the Austrian Federal Government set a programme from 2007 to 2011 regarding a national biomass action plan. The goal of the plan is to increase the energetic biomass employment until 2010. There is also a long-term goal for 2020 which is to increase the portion of renewable sources of energy of total energy consumption in Austria in the year 2020. The Federal Ministry for land and forestry, environment and water management have provided the available draft for an Austrian biomass plan of action to these goals. The draft was submitted in the autumn 2006 for further investigation by experts.³⁴⁴

³⁴² Energy Policies of IEA Countries - Austria 2002 Review, <http://www.iea.org/textbase/nppdf/free/2000/austria2002.pdf>

³⁴³ Referenced to the web site of Austria Energy Agency, <http://www.energyagency.at/projekte/ren-in-a01.htm>

³⁴⁴ http://64.233.179.104/translate_c?hl=en&u=http://www.umwelt.net.at/article/articleview/51702/1/7068/

19.2 Environmental Evaluation/SEA in Austria

Since 2004, Austria has been transposing the requirements of the SEA Directive 2001/42/EC into its legal system. The requirements have also been implemented within the framework of various material laws at federal and provincial levels.

At federal level, SEA implementation for waste management, air, noise and water has been concerned by amendment of relevant acts, e.g. Federal Water Management Act, Federal Act on Waste Management, Federal Act on strategic assessment into the transport sector, Federal Act on Environmental Noise and Federal Act on Air Quality.

At provincial level depending on the type of programme the fields of waste, hunting/fisheries, provincial roads, agriculture, noise, nature conservation, land-use planning, regional subsidisation, water supply and waste-water disposal are concerned, either through amendment of their planning acts or through SEA Acts. These SEA Acts cover not only planning, but also other sectors.^{345 346 347} Until mid 2006, Austria had transposed partly, with national legislation in place for certain sectors at federal level and with all the nine Austrian provinces, except Burgenland, having transposed the Directive.³⁴⁸

Various aid tools (e.g. manuals) on the application of the SEA have been worked out at federal and provincial levels, with regard to the content requirements and proposals for practical works from scoping to monitoring, and the assessment of the significance of environmental effects.³⁴⁹

A number of pilot applications of SEA have been undertaken since 1995. SEA pilot studies have been undertaken in Austria covering different geographical areas and planning sectors. All of these applications have improved the planning process, e.g. through considering alternatives, analyzing environmental consequences and documenting the likely environmental effects. Some of the pilots also contributed to the adoption of better quality plans and programmes in which environmental concerns were taken into account in decision-making. Not all of the measures recommended have been implemented and the effectiveness of SEA remains to be seen. In this case, a round table process was used to facilitate effective stakeholder involvement.³⁵⁰

³⁴⁵ Extracted from the "The Relationship between the EIA and SEA Directives - Final Report to the European Commission" by the Imperial College London Consultants, under the section of Austria, http://ec.europa.eu/environment/eia/pdf/final_report_0508.pdf, page 25

³⁴⁶ Details of SEA implementation for the nine provinces in Austria can be refer to "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 5

³⁴⁷ <http://www.umwelt.net.at/article/articleview/56917/1/7404/>

³⁴⁸ Reference to "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 5

³⁴⁹ <http://www.umwelt.net.at/article/articleview/56917/1/7404/> SEA manuals can be found in the following links: <http://www.umwelt.net.at/filemanager/download/14143/>, <http://www.umwelt.net.at/filemanager/download/8357/> & <http://www.umwelt.net.at/filemanager/download/8358/>

³⁵⁰ Extracted from "Strategic Environmental Assessment: A sourcebook and reference guide to international experience" by Barry Dalal-Clayton and Barry Sadler, 2004, http://www.iied.org/Gov/spa/documents/SEAbok/Chapter3_Oct04.pdf, section 3.3.2

In Austria, there is a special SEA model, the 'SEA Round Table', which the SEA is carried out by an SEA team consisting of representatives of local and national authorities, external experts and representatives of interest groups. All members of the SEA team participate in the whole SEA process, from defining objectives to preparing the environmental report. The SEA team tries to find a consensual plan/programme solution with integrated environmental aspects. The SEA Round Table goes beyond the requirements of the SEA Directive. It means more pro-active participation than information and consultation.³⁵¹

SEA activities in Austria also include reviews of international and national approaches and experience, for example in relation to policies and legislation, plans and programmes that will be subject to the SEA Directive and screening procedure and criteria.³⁵²

When carrying out SEA in Austria, it involves the following steps:

- defining the scope;
- preparing the environmental report;
- taking into account the results and decision-making;
- monitoring.³⁵³

³⁵¹ Extracted from a seminar report on "Strategic Environmental Assessment - making a Difference" by Brussels published by the European Environmental Bureau, under the section of "The Development of SEA in Austria", <http://www.eeb.org/activities/SEA/SEA-report.pdf>, page 36

³⁵² Extracted from "Strategic Environmental Assessment: A sourcebook and reference guide to international experience" by Barry Dalal-Clayton and Barry Sadler, 2004, http://www.iied.org/Gov/spa/documents/SEAbook/Chapter3_Oct04.pdf, section 3.3.2

³⁵³ <http://www.umwelt.net.at/filemanager/download/14143/>

19.3 Environmental Evaluation/SEA on Energy Policies and Actions in Austria

In Austria, the SEA Directive was implemented by the legal system at both federal and provincial levels. It is a statutory requirement that SEA has to be implemented for plans and programmes including energy sector.

Details of the requirements should refer to section 19.2.

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

Exhibit AT-1 Summary of Energy Policies and Actions and SEA Status in Austria	
(a) Energy Policies and Actions	
Energy Policies and Actions	Policies: <ul style="list-style-type: none"> ● Climate change strategy ● Electricity liberalisation laws ● Eco-Power Act Actions: <ul style="list-style-type: none"> ● National biomass action plan
Guidance/Legislations for Energy	<ul style="list-style-type: none"> ● Electricity liberalisation laws ● Eco-Power Act
(b) Environmental Evaluations / SEA Status in Energy Policies and Actions	
Type of Assessment	Strategic Environmental Assessment
Requirement Mechanisms	Statutory
Legislation for Environmental Evaluation / SEA	The requirements in SEA Directive have been implemented in Austria within the framework of various material laws at federal and provincial levels
Applications	Plans and Programmes



Low Energy Apartment in Austria - Blending the Natural Environment with Innovation³⁵⁴



Construction of Hydropower plant in Austria³⁵⁵

³⁵⁴ Source: http://www.acegroup.at/cms_data_e/EEZkViklAkDwqtEsVw.shtml

³⁵⁵ Source: <http://www.pap.co.at/sites/hydro.html>

19.4 Analysis and Conclusions

Austria has ratified the Kyoto Protocol in March 2002 and since then the country is required to reduce greenhouse gas emissions by 13% below 1990 levels by the first commitment period 2008-2012. A climate change strategy has also been developed to mitigate greenhouse gas emissions that are conducted on three different levels of Austrian government, including the federal level, land level, and the municipal level. In the meantime, Austrian government exploited generation of electricity by renewables. Laws have been set up to guarantee the inclusion of renewable resources in electricity generation and increase usage of renewable energy.

The key objectives of Hong Kong energy policy are to minimise the environmental impact of energy production and use, and to promote the efficient use and conservation of energy. Similar to Austria, the Hong Kong government considers the development of renewable energy which is a more environmental friendly way for energy generation. In particular, the "Hongkong Electric Clean Energy Fund" aims to promote better understanding and application of renewable energy in Hong Kong. One of the most significant projects is the development of wind turbine on Lamma Island. There were also educational projects designed to enhance public awareness of renewable energy and their environmental benefits

Regarding the Environmental Evaluation/SEA in Austria, the requirements of the SEA Directive 2001/42/EC have been implemented in Austria into its legal system at both federal and provincial levels. Thus, it is a statutory requirement that SEA should be carried out for certain plans and programmes.

While Austria has included the requirements of SEA Directives in various material laws at federal and provincial levels, Hong Kong has also a statutory system to carry out SEA for certain landuse plans under the EIA Ordinance (EIAO). In order to allow responsible agents or departments to explicitly know under what circumstances they need to conduct SEA and how to conduct SEA, Hong Kong's SEA framework may have a more detailed categorisation for different sectors and specific guidelines for each sector would be essential for reference.

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

Example AT-1 Sustainable Building Programme³⁵⁶	
Description of the Programme	<p>The programme is financed by the regional government of Upper Austria and implemented by the Energy Agency in Austria and the relevant government offices.</p> <p>In Austria, public support is provided for the construction of new housing and for retrofitting older dwellings, usually in the form of soft loans for a large percentage of all buildings. The amount of this soft loan varies from region to region, in the region of Upper Austria it is between 37,000 and 57,000 Euro for a single family house. In 1993, the government of Upper Austria decided to introduce an "energy efficiency criteria" into the housing programme for new single/double family houses.</p>
Details of the Programme	<p>The energy efficiency criteria to be met are:</p> <ul style="list-style-type: none"> • An overall energy index for the whole building (at the moment: 65 kWh/m² "useful heating factor"). This energy index is reached mainly by additional insulation and smart windows. • Participation in an obligatory, individual energy advice session; each future home owner spends one hour with a trained energy advisor discussing his/her individual house and the possibilities to save energy in addition to the a.m. requirements. • For every house owner an energy label is issued. <p>Parallel programmes for energy efficiency criteria and building labels connected to financial support exist for multi-family housing.</p>
Results of the Programme	<p>The sustainable buildings programme had the following results between 1993 and 2004:</p> <ul style="list-style-type: none"> • Number of single/double houses: 40,000 houses • Energy savings: 285 million kWh/year • CO₂ reduction: 57 million kg/year <p>Additionally the information aspect led to numerous supplementary investment in energy efficiency (e.g. household appliances) and renewable energy sources (e.g. heating system, hot water supply).</p>
Conclusion and Recommendation	<ul style="list-style-type: none"> • The sustainable buildings programme so far showed very promising results, but it is necessary to continuously "keep the programme going" and adapt it to recent building trends. That is why it has been extended recently to lowest energy houses and is also continuously evaluated. Besides that the energy criteria has already been decreased several times. • Although financial incentives are a good method to direct investment, the combination with an energy advice session proved to be very effective and raised the overall energy efficiency achievements.

³⁵⁶ <http://www.esv.or.at/foto/foto/index.php?id=48&L=4&contUId=0>