

2. MACAU SAR

2.1 Energy Policies and Actions

According to the “Report on the State of the Environment of Macao 2005”, due to the absence of mining resources and favorable conditions for effective utilisation of renewable energy, Macao Special Administrative Region (MSAR) mainly relies on the burning of imported fuels to meet its energy demands. The types of energy used in Macau include gasoline, light diesel oil, fuel oil, petroleum gas, electricity and kerosene. The major energy consuming sectors in 2004 were transportation and commercial such as restaurants and hotels. The industrial and construction sectors consumed comparatively less energy.

The MSAR Government introduces the concept of eco-efficiency which aims to minimise energy and fuel consumption, and reduce wastage and pollution, so as to achieve the highest efficiency.

MSAR Government also promotes better use of energy through promotional activities on how to increase energy effectiveness. At the same time, the MSAR Government studies ways to introduce natural gas, a cleaner and more environment-friendly energy, into Macau from 2007 in order to gradually replace certain types of fuels that are relatively more polluting.³⁰

In December 1999, Macau was included in the international effort to curb global warming – the United Nations Framework Convention on Climate Change (UNFCCC), and was brought under the umbrella of China.³¹ Macau has prepared the source inventories so as to implement the obligation as stated in the UNFCCC.³²

In June 2006, the “Macao Energy Conservation Week” was launched with a series of activities which aims to promote and encourage energy saving. Besides, in order to promote energy conservation among government departments and civil servants, there was a signing of the specialised agreement of “Project of Energy Efficiency and Energy Conservation in Public Department/Institutes”.³³ Details can be referred to section 2.5.

³⁰ Referenced to the Report on the State of the Environment of Macao 2005, <http://www.ambiente.gov.mo/tchinese/05/2005/en/index.htm>

³¹ http://www.imprensa.macao.gov.mo/bo/ii/2002/23/aviso33_cn.asp

³² Referenced to the web site of the Environment Council of Macao, <http://www.ambiente.gov.mo/tchinese/07/lotus26/002.asp>

³³ http://www.gdse.gov.mo/eng/GDSE_Pages/newsDetails.asp?newsIndex=119

2.2 Environmental Evaluation/SEA in Macau

In Macau, no formal provision has been made for a national system of SEA for policies, plans or programmes. The concept of SEA has not been integrated into decision making on any proposed policy, plan or programme yet.

2.3 Environmental Evaluation/SEA on Energy Policies and Actions in Macau

As mentioned above, there is no formal provision made for a national system of SEA for policies, plans or programmes in Macau. The concept of SEA has not been integrated into decision making on any proposed policy, plan or programme yet, including those for the energy sector.

A summary table for the energy policies and actions and SEA status in Macau is presented in **Exhibit MA-1**:

Exhibit MA-1 Summary of Energy Policies and Actions and SEA status in Macau	
(a) Energy Policies and Actions	
Energy Policies and Actions	Policies <ul style="list-style-type: none"> Promotion of better use of energy through promotional activities on how to increase energy effectiveness Introduction of natural gas, a cleaner and more environment-friendly energy Preparation of the source inventories so as to implement the obligation as stated in the UNFCCC Actions <ul style="list-style-type: none"> Macau Energy Conservation Week
Guidance/Legislations in Energy	N/A
(b) Environmental Evaluations / SEA Status in Energy Policies and Actions	
Type of Assessment	N/A (no formal provision made for a national system of SEA for policies, plans or programmes in Macau)
Requirement Mechanisms	
Legislation for Environmental Evaluation / SEA	
Applications	



Energy forum in Macau³⁴



Opening ceremony of the "Macau Energy Conservation Week"³⁵

³⁴ Source: <http://www.my.org.mo/www2/content/view/135/27/>

³⁵ Source: http://www.gdse.gov.mo/eng/GDSE_Pages/GDSEindex.asp

2.4 Analysis and Conclusions

Due to the absence of indigenous energy resources and favorable conditions for effective utilisation of renewable energy, Macau mainly relies on the burning of imported fuels to meet its energy demands. The major energy consuming sectors in 2004 were transportation and commercial such as restaurants and hotels. In order to minimise energy consumption, the Macau government promotes better use of energy through promotional activities on how to increase energy effectiveness. It also introduces the use of natural gas, which is cleaner and more environmental friendly.

The energy situation of Macau is comparable to that of Hong Kong. Both cities have no indigenous energy resources and they rely mainly on imported fuel to generate power. The key energy policy objective for both cities aims to promote energy conservation and increase energy efficiency. While Macau has introduced the use of natural gas, Hong Kong has also used liquefied natural gas (LNG) as fuel in the Lamma Power Station Extension to generate electricity.

In Macau, no formal provision has been made for a national system of SEA for policies, plans or programmes. The concept of SEA has not been integrated into decision making on any proposed policy, plan or programme yet.

While there is no SEA requirement in Macua, Hong Kong has both statutory and non-statutory SEA systems for PPP projects. The statutory requirements govern primarily large scale development projects (i.e. over 20 ha of area or population over 100,000), and the administrative counterpart has been applied to land use planning, transportation and sectoral PPP. It may be a logical next step to consider:

- Combining the administrative requirements into the statutory system; and
- Providing further specific SEA requirements under the category of energy

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

Example MA-1 Macau Energy Conservation Week 2006 ³⁶	
Description of Activity	<p>In June 2006, the “Macau Energy Conservation Week” was launched with a series of activities which aims to promote and encourage energy saving. Macau government has determined to promote energy conservation, and would take the lead to conserve energy by means of energy conservation promotional activities. The series activities of the week got a lot of support from the society.</p> <p>“Macao Energy Conservation Week” took place in all parts of Macau. The theme of the Week is “A Great Life Starts From Energy Conservation”. It is hoped that by means of promotional activities within the Week, it will arouse the energy conservation consciousness of Macao citizens and get to know more about the importance of energy conservation to human society and to the sustainable development.</p>
Details of Activity	<p><u>“Energy Conservation Action”</u> The aim of the “Energy Conservation Action” is to encourage Macau residents not to waste energy, but to conserve it. In order to drive more people to participate and conserve energy, the organiser will announce the number of Macau citizens who have participated the Action at the end of the Week. This activity targets all Macau citizens. Citizen who has done energy conservation actions can register to show his/her participation to conserve energy. The energy conservation actions are: (1) Switch off the lights when not in use; (2) Adjust the air-conditioning temperature to a comfortable level, and avoid any unnecessarily low temperature setting; and (3) Turn off any electrical appliances when not in use.</p> <p><u>“Switching Off the lights for 5 minutes”</u> This activity targets government departments, enterprises and also Macao citizens. They are encouraged to switch off the decorating lights outside the building for 5 minutes at 9 pm on 11th June 2007, in order to response to energy conservation.</p> <p>During the Week, promotional activities regarding government departments include “Energy Conservation Guidelines” and “Casual Wear Day”. In addition, in order to set as a good example that the government takes the lead, a signing ceremony of a specialised agreement of the “Project of Energy Efficiency and Energy Conservation in Public Department / Institutes” was held during the Week. The Energy Conservation project of government departments was officially launched after the signing ceremony.</p>

³⁶ http://www.gdse.gov.mo/eng/GDSE_Pages/GDSEindex.asp