

# 17. FRANCE

#### 17.1 Energy Policies and Actions

At present, French energy policy is defined by the Energy Act of July 2005 defining energy policy priorities. It is expressed in the form of four major objectives:

- Contributing to national fuel independence and secure supply
- Improving environmental protection and, especially, taking further action to tackle the greenhouse effect
- Guaranteeing competitive fuel prices
- Contributing to social and territorial cohesion by guaranteeing access to energy for the entire nation

In order to achieve the above objectives, four principal areas of actions were identified:

- To control energy demand: through a series of incentives and programmes, including an energy saving certificate scheme, standards and regulations, together with tax incentives;
- To diversify sources of energy: by increasing the use of renewable energies, keeping the nuclear option open and, in general, by developing a high-performance energy production infrastructure;
- To increase research into energy: because this is essential in order to meet long-term challenges, for example for bio-energies, fuel cells, clean vehicles, energy-efficient buildings, solar energy, capture and underground storage of CO2, 4th-generation nuclear energy;
- To provide methods of transporting and storing energy: adapted to requirements, in particular in order to guarantee the quality of the electricity supply, reinforce the security of the gas and electricity grids and, in general, improve the safety of France's energy supply.

To provide a framework for the above decisions, quantitative objectives were laid down by the Energy Act 2005 defining energy policy guidelines:

- a quartering of CO<sub>2</sub> emissions by 2050;
- average reduction of final energy intensity of at least 2% per year from 2015 and of 2.5% from 2015 to 2030;
- production of 10% of energy needs from renewable energy sources by 2010;
- incorporation of bio-fuels and other fuels of renewable origin to a level of 5.75% by the end of 2008 and 7% in 2010.

## Actions on Energy and Climate

With regard to the big view of saving energy and promoting "clean" energy technologies so as to tackle the problem of climate change, France published a memorandum to "relaunch European energy policy in a perspective of sustainable development"<sup>318</sup> in January 2006. This includes discussion of the need for integrated

<sup>&</sup>lt;sup>318</sup> Full document of the memorandum can be found in the link:



energy policies, for better production and consumption of energy, for reinforcement of research and development and for strengthening international actions, on both energy and climate. France has ratified the Kyoto Protocol to commit on reduction of greenhouse gas emissions, and is pursuing active climate plan. Detail discussion on the climate plan can be referred to section 17.5.

# Actions to Secure Energy Supply

The government also takes measures to ensure the long-term security of energy supplies. With regard to the electricity and gas sector, the public authorities have put in place various instruments to regulate the market so as to ensure the security of electricity supply

## Actions to Improve Energy Independence

To reduce France's energy dependence, it has been decided to promote energy saving and invest in nuclear electricity generation and renewable energies.

- In 2004, it was decided to commence construction of a demonstration model of European Pressurised Water Reactor (EPR), not only in order to replace the present generating facilities, but also to support these facilities and maintain industrial capacity whilst leveraging exports. Furthermore, the law on nuclear transparency and security defines the guidelines in ensuring the continuity of nuclear energy, and in particular entrusts the monitoring of nuclear safety and radiation protection to an independent administrative authority. In addition, the law on the management of radioactive materials and waste was published. It defines the framework, steps and means for the management of radioactive materials and waste.
- A tax credit for energy saving and renewable energies was introduced in January 2005 and reinforced in 2006 by introducing the energy saving certificate scheme.
- For renewable energies, several support programmes have been put in place:
  - Systems of obligatory purchase and the other electricity distributors of electricity generated by renewable energies have given new impetus to interesting sources, such as electricity generated from wind energy.
  - > In parallel, calls for tenders have been issued by the public authorities within the framework of multi-annual investment programming (PPI).
  - > Renewable energies benefit from the tax credit since 2005.
  - > Opening-up of energy markets to competition.

## Energy Research

The establishment of the National Research Agency and the Industrial Innovation Agency ensures the implementation of appropriate research and innovation strategies. The programmes implemented include CO<sub>2</sub> capture and storage, upgrading of agricultural resources using biotechnologies, and energy-efficient buildings.<sup>319</sup>

http://www.industrie.gouv.fr/energie/anglais/memorandum-anglais.htm <sup>319</sup> Referenced to a document named "France's energy situation", http://www.industrie.gouv.fr/energie/anglais/pdf/politique-energetique-ang.pdf



#### 17.2 Environmental Evaluation/SEA in France

French environmental policy has been in existence since the 1970s; today, the environment is mostly taken into account through land-use plans and the environmental appraisal of programmes. Integration of the environment in France can be described as fair to strong; several laws require the inclusion of environmental concerns.

Strategic Impact Assessment (SIA), a French SEA-like instrument, is a legal requirement at policy level for proposed laws and at regional levels for Master and Zoning plans. Voluntary SIAs have taken place since 1980s in areas of land-use planning. SIAs were introduced in the 1990s and were applied to public participation for major transportation projects.<sup>320</sup>

Ordonnance No 2004-489 was issued on 3 June 2004 introducing the European SEA Directive in the Environmental Code<sup>321</sup>, the French Environmental Law<sup>322</sup>, which provides statutory requirement for SEA of plans and programmes.

As mentioned, SEA in France at policy level is governed by Strategic Impact Assessment which is a statutory requirement, while Environmental Code provides statutory requirement for SEA of plans and programmes.

Below shows the principal steps of the overall process, grouped into the four key stages of SEA.

- (i) Environmental diagnosis (an environmental profile describing the state of the environment and listing political objectives at different scales international conventions and protocols, European policies, national objectives, regional objectives, etc)
- (ii) Compatibility analysis (using a matrix) between in focus of the strategic action and the main reference objectives
- (iii) Assessment of the importance of the potential impacts of the whole plan
- (iv) Evaluation of interactions between measures<sup>323</sup>

<sup>&</sup>lt;sup>320</sup> Referenced to "Report on Methodological approaches to SEA (Report on current national procedures), by **B**uilding Environmental Assessment **CON**sensus on the transeuropean transport network, 2004, www.transport-sea.net/filecount.phtml?file=D\_2\_1.doc&PHPSESSID=39b7a6b60cac49071eed204092d2aeb8, page 46 <sup>321</sup> Environmental Code can be obtained from http://195.83.177.9/upl/pdf/code\_40.pdf

<sup>&</sup>lt;sup>322</sup> Refer to Strategic Environmental Assessment: A sourcebook and reference guide to international experience,<br/>BarryDalal-ClaytonandBarrySadler,2004,http://www.iied.org/Gov/spa/documents/SEAbook/Chapter3\_Oct04.pdf, page 70

<sup>&</sup>lt;sup>323</sup> Refer to 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/SEAbook/Chapter3\_Oct04.pdf, page 70



#### 17.3 Environmental Evaluation/SEA on Energy Polices and Actions in France

Energy related SEA in France at policy level is governed by Strategic Impact Assessment which is a statutory requirement, while Environmental Code provides statutory requirement for SEA of plans and programmes in energy sector.<sup>324</sup>

Details of the requirements should refer to section 17.2.

More recently, a number of steps have been taken in preparing to implement the EU Directive on SEA in France. The agricultural, energy and industrial sectors are likely to be important areas for France with regard to the plans and programmes listed in the Directive, but, so far, there has been no experimentation with SEA in these sectors.<sup>325</sup>

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

Exhibit FR-1 Summary of Energy Policies and Actions and SEA Status in France		
(a) Energy Policies and Actions		
Energy Policies and	Policies:	
Actions	• Energy Act 2005	
	Actions:	
	• Issuance of a memorandum to "relaunch European energy policy in a	
	perspective of sustainable development"	
	Climate Plan	
<b>Guidance/Legislations</b>	Energy Act 2005	
for Energy		
(b) Environmental Evaluations / SEA Status in Energy Policies and Actions		
Type of Assessment	Strategic Environmental Assessment	
Requirement	Statutory	
Mechanisms		
Legislation for	Statutory under Strategic Impact Assessment (SIA) for policy level (the	
Environmental	corresponding act is not available)	
<b>Evaluation / SEA</b>	Statutory under Environmental Code for plans and programmes	
Applications	Policies, Plans and Programmes	

<sup>&</sup>lt;sup>324</sup> Referenced to the Environmental Code, http://195.83.177.9/upl/pdf/code\_40.pdf, page 5

<sup>325</sup> Refer to Strategic Environmental Assessment: A sourcebook and reference guide to international experience,<br/>BarryDalal-ClaytonandBarrySadler,2004,http://www.iied.org/Gov/spa/documents/SEAbook/Chapter3\_Oct04.pdf, page 70



#### 17.4 Analysis and Conclusions

In France, energy policies are defined under the Energy Act. The major actions include controlling energy demand, diversifying sources of energy, increasing energy research and providing transporting and storing methods of energy. The French government also takes measures to ensure the long-term security of energy supplies by regulating the energy market. Meanwhile, the government tries to improve energy independence, promote energy saving and invest in nuclear electricity generation and renewable energies. The law on nuclear transparency and security, and the law on the management of radioactive materials and waste were published regarding to the aim on reduction of France's energy dependence. On the other hand, a tax credit for energy saving and renewable energies was introduced through the energy saving certificate scheme.

While the French government aims to ensure long-term security of energy supplies by regulating the energy market, the Hong Kong government also aims to provide reliable supplies of energy at reasonable prices. There were agreements between the government and the private power/gas companies that regulate and monitor the performance of the companies, intervene when necessary in order to safeguard the interests of consumers, ensure public safety and protect the environment.

Regarding the requirements for Environmental Evaluation/SEA in France, SEA at policy level is governed by Strategic Impact Assessment which is a statutory requirement. Besides, Environmental Code provides statutory requirement for SEA of plans and programmes including energy sector.

While the two SEA systems in France are legally binding, there are also two systems for SEA in Hong Kong, including an administrative requirement and a statutory requirement under Schedule 3 of the EIA Ordinance. In view that Hong Kong has an increasing evolvement of policies, plans and programmes in different sectors, it would be a good chance for Hong Kong to extent the application of SEA by enhancing its SEA system and providing specific guidelines referenced to other countries.



Wind farm<sup>326</sup>



Nuclear power station<sup>327</sup>

<sup>&</sup>lt;sup>326</sup> Source: http://www.ecologie.gouv.fr/Energie-environnement.html

<sup>&</sup>lt;sup>327</sup> Source: http://www.jarret.fr/en/nuclear.php



# 17.5 Examples of Energy Policies/Actions or their Environmental Evaluation/SEA

Example FR-1	Climate Plan 2004 <sup>328</sup>
Description of Study	The Climate plan is an action plan that is operational as of 2010 to tighten and accelerate measures to reduce emissions in all sectors. It serves to prepare France
-	for the fundamental changes necessary in the long term in order to tackle climate
	change. For the first time, a specific chapter studies the way in which France
	must adapt to the impacts of climate change.
	The aim of the Climate Plan is to set forth clear and easy ways in which all French
	people can get involved and "do their share" as citizens. The actions will be as
	practical as possible and easy to implement in routine, daily life.
Scope of	The scope of measures in energy sector includes the following:
Assessment/	National awareness-raising and adaptation campaign
Study	Sustainable transport
	<ul> <li>Buildings and eco-homes</li> <li>Industry, energy and waste</li> </ul>
	<ul> <li>Industry, energy and waste</li> <li>Sustainable agriculture and woodlands</li> </ul>
	<ul> <li>Sustainable agriculture and woodlands</li> <li>Sustainable air-conditioning</li> </ul>
	<ul> <li>Local climate plans and exemplary state action</li> </ul>
	<ul> <li>International research and forecasts post-2010</li> </ul>
Outcome of	For energy issues, France is resolutely committed to manage the demand for
Study	energy and develope renewable sources such as wind energy for electricity
	production, and solar, biomass or geothermal energy, in order to reduce emissions
	due to power generation for heat production.
	The Climate Plan includes five key measures that can bring about genuine changes
	in combating climate change:
	• Biofuels
	• Eco-homes: higher tax rebates
	Energy label
	• CO <sub>2</sub> bonus/surcharge
	Sustainable air-conditioning
	Other measures instigating step changes

 $<sup>^{328}\</sup> http://www.ecologie.gouv.fr/IMG/pdf/PLANCLIMATANGLAIS.pdf$