



Policy Instruments for Chinese Sustainable Future:
Environmental Policy Integration and Strategic Environmental Assessment
for the Energy and Transport Sectors

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Understanding the relationship between EPI and SEA

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Project outline

Policy Instruments for Chinese Sustainable Future focuses on the integration of the environment into transport and energy planning in China, both at the policy level and in terms of concrete measures for the two administrative levels of provinces and municipalities. The implementation of this project will help to build transportation and energy-use systems that are environmentally sound and capable of achieving sustainable development in China. As part of the Asia Pro Eco II Programme the project contributes to the programme's main themes for China: energy savings, improved air quality and reduced emissions of GHGs.

At the heart of this project are two closely related mechanisms that are central to the EU efforts to promote sustainability: Environmental Policy Integration (EPI) and Strategic Environmental Assessment (SEA).

The action targets the inadequate reflection on environmental policy objectives and the weakness of the environment as a cross-sectoral priority and the need for information and knowledge of technical/practical solutions that can lead to immediate improvements in the development of sectoral plans. The 30 months Action consists of four work packages and multiple activities.

For further information please look at:

http://www.epi-in-china.com/project_information/summary.html

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Introduction

Within the Asia Pro Eco II project “Policy Instruments for Chinese sustainable future”, there are two central concepts: Environmental Policy Integration (EPI) and Strategic Environmental Assessment (SEA). The European experience of EPI and SEA will be described and analysed in the two reports prepared within Work Packages II.1 and II.2. These reports will also address the relationship between EPI and SEA. Generally speaking, SEA is an established term with a clearly defined process, methodologies and practices. EPI, on the other hand, is a more recent term that has been used to describe the relationship between a wide range of practices and activities (including SEA) that have been going on for a long time under the headings of environmental protection, environmental governance and sustainable development.

The purpose of introducing the EPI concept is to analyse these practices and activities in a more systematic and comprehensive way, in order to be able to assess the progress of key sectors (such as energy or transport) towards environmental protection and sustainability.

In the table below, we propose some basic differences and complementarities between EPI and SEA, in order to facilitate the dialogue on their relevance and usefulness with our Chinese partners. In brief terms, SEA can be seen as a process to achieve EPI, and is thus a sub-set of EPI in practice.

Complementarities and differences between EPI and SEA

Issue	EPI	SEA
Definition	<p>EPI is a concept, a way of thinking about how Government can achieve environmental protection and sustainable development through its day-to-day sectoral activities.</p> <p>EPI can be defined as a continual (i.e. on-going and permanent) process to ensure environmental issues are reflected in all policy- and planmaking of economic and social development sectors. This generally demands changes in political, organisational and procedural activities, and can be supported by procedures and tools. SEA is just one of the mechanisms that can help deliver EPI in a particular sector.</p>	<p>SEA is an assessment process that uses a range of methods and tools.</p> <p>SEA can be defined as the process of environmental assessment that provides for a high level of protection of the environment and contributes to the integration of environmental considerations into the preparation and adoption of policies, plans and programmes with a view to promoting sustainable development.</p> <p>SEA is a process involving certain steps that have been specified in legislation or in guidance.</p>
Key concept	Environmental governance	Assessment
Status	<p>There is no one specific ‘recipe’ for an EPI process, but it is a general concept or principle. The European legislation on EPI states that “environmental protection requirements shall be integrated” in sector policy, it does not specify how this should be achieved in practice. For this reason, the European Environment Agency has recently produced an overall framework of key elements of an EPI process – to guide European Governments in implementing EPI into key sectors, and evaluating progress on EPI:</p> <p>European Environment Agency (2005) <i>Environmental policy integration in Europe: State of play and an evaluation framework</i>, EEA, Copenhagen.</p>	<p>There are many ways in which SEA has been applied throughout the EU and the world. However, contrary to EPI, SEA has recently been regulated in national laws and many technical guidance documents can be found detailing the stages, tasks and methods involved in SEA.</p> <p>For example, for the transport sector:</p> <p>European Commission (2005) <i>A sourcebook on Strategic Environmental Assessment of Transport Infrastructure Plans and Programmes</i>, A report prepared by BEACON for DG TREN, European Commission, Brussels.</p>

Issue	EPI	SEA
Focus of application	<p>Overall economic and social sectors.</p> <p>EPI is typically understood as a continual process within the administrations and institutions responsible for economic and social sectors, such as energy, transport, agriculture, industry, urbanization, education and so on.</p> <p><i>Example of what is meant by 'sector':</i> <i>Example energy sector: energy demand in different sectors, supply of energy from different sources, transmission and distribution of energy, rational use of energy and energy efficiency. In order to understand current and future environmental impacts, we also need to understand the economic and social drivers of the sector.</i></p> <p><i>Example transport sector: demand for mobility and transport (passenger and freight), multi-modal infrastructure, supply of different passenger modes (private and public), issues of accessibility to basic services, issues related to regional development and the need to improve links between the country's economic centre and its peripheral regions.</i></p>	<p>Individual policies, plans or programmes</p> <p>SEA is typically applied to individual policies, plans or programmes from a range of economic and social sectors, such as energy, transport, agriculture, industry, landuse planning and urbanization (depending on legal requirements, or ad hoc practice).</p> <p><i>Example of what is meant by 'plans':</i> <i>Example energy: an energy plan can be comprehensive and be concerned with the whole energy sector in a particular municipality/province/country. It can also be concerned with part of the energy sector, e.g.</i></p> <ul style="list-style-type: none"> - energy supply or energy use, - energy supply from a particular source (such as hydropower), - energy efficiency within a specific sector (such as households). <p><i>Example transport: a transport plan can be comprehensive and concerned with the whole sector in a particular municipality/province/country. It can also be concerned with part of the transport sector, e.g.</i></p> <ul style="list-style-type: none"> - transport infrastructure construction, - infrastructure construction for a particular transport mode (such as roads, railways, waterways), - use of existing transport infrastructure, - development of public transport.
Duration	<p>EPI should take place on a permanent and continuous basis, it does not have a beginning and end. It is not a process that should be started at a certain point in time, but it is a way of working and it is about environmental awareness at different stages in the policy- and plan-making process.</p>	<p>SEA is a process with a clear beginning and end that is undertaken in conjunction with a specific policy, plan or programme.</p>

Issue	EPI	SEA
<p>Defining elements and stages</p>	<p>In order to more easily understand whether EPI takes place in sector policy-making, we can examine EPI in five different elements of the sector policy system (that continuously produces specific policies and plans):</p> <ul style="list-style-type: none"> - commitment and vision - administrative culture and practice - assessment, information, consultation - use of policy instruments - monitoring and evaluation <p>These different elements do not necessarily follow on from each other in a sequential way. We can look at relationships between the different elements, but we can also look at one element in a separate way.</p>	<p>To undertake SEA, we have well-established experiences of good practice that have resulted in different stages:</p> <ul style="list-style-type: none"> - consultation and participation (at different times throughout the process) - scoping: context, baseline, objectives and possible alternatives (iterative stage throughout the process) - assessment (prediction, evaluation) - preparing the environmental report - quality review - monitoring and evaluation <p>A good SEA should include all these stages.</p>
<p>Output / Products (and links between EPI and SEA)</p>	<p>The product of EPI should be an overall improvement in policy and implementation, in line with sustainable development needs (EEA 2005). Effective EPI requires a regular flow of information about the sector's performance in terms of environmental protection and sustainable development, i.e. environmental signals.</p> <p>Many standard reporting mechanisms can be considered interim products of EPI – illustrating progress in EPI implementation. For example: state of the environment reports, reports based on sustainability indicators for the sector in question, ad hoc policy analysis documents that can be produced from time to time, as well as national, provincial or municipal sustainable development strategies.</p> <p><i>Example energy: annual reports on air pollution from coal combustion plants, annual reports on emissions of greenhouse gas from the oil consumed in the municipality/province/country, etc. This provides a general overview for the policy-makers.</i></p> <p><i>Example transport: annual reports on transport use, estimated emissions of pollutants from different transport modes, fuel</i></p>	<p>The product of SEA is typically an environmental report (the contents of which will depend on legal requirements, or ad hoc practice).</p> <p>However, increasingly, SEA is seen as a process that produces several documents or products (e.g. scoping reports, minutes of key meetings, or workshops, etc.).</p> <p>SEA is about using existing relevant environmental information and collecting any additional data necessary for the assessment of a specific policy, plan or programme.</p> <p>If the sector, for which a plan is being proposed, performs well in terms of EPI, then the SEA process will be facilitated in several ways:</p> <ul style="list-style-type: none"> - information on the environmental and sustainability performance of the sector should be readily available; - awareness of the importance of environmental and sustainability issues should be widespread amongst all actors;

Issue	EPI	SEA
	<p><i>consumption in the municipality/province/country, etc. This provides a general overview for the policy-makers.</i></p>	<ul style="list-style-type: none"> - the overall aim of defining environmentally sustainable policies, plans and programmes for the sector should be generally shared by all actors. <p><i>Example energy: some of the annual reports on environmental state may be used as data sources. New data may also be collected on more specific variables and impacts.</i></p> <p><i>Example transport: some of the annual reports on environmental state may be used as data sources. New data may also be collected on more specific variables and impacts, e.g. the impact of infrastructure construction/use on specific environmentally protected sites.</i></p>
Application at different administrative levels of Government	<p>We can examine EPI at all levels; national, provincial, and local. Many of the conditions for EPI will be determined at a higher level.</p> <p><i>Example energy: municipalities can make some decisions themselves about their use and purchase of energy, energy production facilities, and how they encourage their citizens to use energy. Some energy policy objectives are set at higher levels, though, e.g. the objectives to increase energy efficiency by 20%. The availability of energy may also be determined at a higher level, e.g. provincial-level production facilities.</i></p> <p><i>Example transport: provinces make their own plans for roads, railways, and other transport modes. Looking at the conditions for EPI in transport, some objectives and funding for the expansion of transport are determined at national level. The separation of planning for different transport modes also stem from the organization of relevant ministries at the national level. This means that the conditions for EPI at provincial level are more challenging.</i></p>	<p>SEA can be applied to policies, plans or programmes defined for any administrative level of Government.</p> <p>It is most commonly applied to plans and programmes at the municipal and provincial (or regional) levels.</p> <p><i>Example energy: In Xichang, an SEA will be undertaken of the municipal energy plan.</i></p> <p><i>Example transport: In Shaanxi, an SEA is being undertaken of a provincial plan for major road infrastructure (expressways).</i></p>

Issue	EPI	SEA
Measuring effectiveness	In order to measure the success of EPI, we could examine indicators for each of the five different elements of EPI. These could be process indicators that demonstrate new ways of working, e.g. whether a sectoral environmental strategy has been developed. Ultimately, we are also interested in whether integration efforts have led to better sector policy outcomes and a better sector environmental performance.	In order to measure the success of SEA, we could review the quality of the SEA itself and analyse its impact on the final decision and design of the plan/programme.

Explaining the links between the Pro-Eco project EPI and SEA reports

Under the heading 'Output / Products (and links between EPI and SEA)' (first column of the table above) we have described some of the general ways in which the existence of good EPI processes and practices can support and facilitate the application of SEA to the sector. In this section we explain the practical links between the project tasks of producing an EPI and an SEA report.

The EPI Reports, due in 2009, will provide a general overview of the key activities that are being carried out in the transport and energy sectors, which can broadly fall under the heading of EPI activities. The EPI questionnaires, circulated before our June 2007 meeting, are intended as a first task aimed at collecting basic information for such EPI Reports. A content list for the EPI reports will be presented and discussed in July 2007.

The SEA Reports will provide a complete description of the SEA process and results for each case study. The content of these Reports will have to comply with the Chinese legal requirements (and existing guidance), and will also include elements of good international practice. For example, the Scoping Report can become an annex to the final SEA report of the Xichang case study.

A content list for the Scoping report will be presented and discussed in July 2007.

Using the energy sector as an example, the Figure illustrates the link between the material being collected for the EPI Reports, and the information required to complete parts of the Xichang energy Plan SEA (and eventually to be included in the SEA Reports) in green:

Conclusion

Our project intends to provide a first overview of the status of EPI in the energy and transport sectors in China. This overview will help the Chinese and European partners in their task of understanding the strengths and weaknesses of the sector's capacity to take environmental and sustainability concerns into account in all policy and planning activities.

Such understanding is critical in defining the context and scope of the recently introduced SEA procedures in China:

- if the capacity of a particular sector is considered weak, SEA for that sector may have to play a greater role in raising awareness, promoting organizational learning and contributing to the medium and long term change in the culture and practices of that sector;
- if capacity is considered strong, the role of SEA may be more limited to what is traditionally understood as an assessment mechanism.

The insights resulting from the SEA case studies, and the inquiry into EPI practices for the energy and transport sectors will contribute to the final tasks under WP IV.I.

Finally, the EPI workpackages will help understand the potential contribution of Europe's EPI concept (and practice) to China's efforts to strengthen its 'environmental protection campaign' in general, and may also inform its development of a 'macro strategy' for the more systematic implementation of environmental protection throughout the country by all major sectors (initiative launched in 2007).

Useful references:

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