

## 16. THE NETHERLANDS

### 16.1 Energy Policies and Actions

The Netherlands has made progress in most energy policy areas. Liberalisation of electricity and gas markets has advanced. The country has ratified the Kyoto Protocol and is pursuing active climate policies. Research and development policy has been rationalised and the initiative towards a sustainable energy system has been launched.<sup>303</sup>

The Dutch government has formulated a number of proposals aimed at reducing greenhouse gas emission and promoting clean energy and its efficient use. These include:

- (i) Clear ambitions for the post-Kyoto period
  - Expansion of the climate agenda to other policy areas and study possible incentives to get a wide coalition of countries involved in farther-reaching effective climate policies
  - Implementation of an inter-departmental policy study for the post-Kyoto climate policy, focusing on the effectiveness and economic consequences of various forms of international climate collaboration and on expanding climate policy to other policy areas such as technology and international funding policy.<sup>304</sup>
- (ii) Renewable energy policy

The Dutch government stimulates the use of renewable energy in order to save the use of fossil fuels and reduce the emission of carbon dioxide. According to the policy framework laid out in the White Paper 1997 "Renewable Energy - Advancing Power", the government has set the following targets: (i) the share of renewable energy in the overall energy supply is to be 10% in 2020; (ii) the share of electricity generated from renewable sources must lie at 9% in 2010.<sup>305</sup>

The Ministry of Economic Affairs is responsible for the development and implementation of the energy policy in the Netherlands. A part of this policy is aimed at stimulating the application of renewable energy. The policy for renewable energy is directed both at its production and at its use. For the production of renewable energy, the government stimulates research and supports investments in the production of renewable energy by means of subsidies and tax arrangements. The use of renewable energy is also stimulated by means of subsidies and special tax arrangements for the use of green power and the application of renewable energy

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<sup>303</sup> Extracted from a paper from the International Energy Agency, [http://www.iea.org/textbase/nppdf/free/2004/Netherlands\\_comp04.pdf](http://www.iea.org/textbase/nppdf/free/2004/Netherlands_comp04.pdf)

<sup>304</sup> Extracted from the document named "Future Environment Agenda: clean, clever, competitive" by the Ministry of Housing, Spatial Planning and the Environment (VROM), <http://www.sharedspaces.nl/docs/internationaal/Toekomstagenda%20-%20vertaling%20Engels.pdf>, pages 53-61

<sup>305</sup> Referenced to the Renewable Energy Review - The Netherlands in May 2004, [http://www.erec-renewables.org/fileadmin/erec\\_docs/Projcet Documents/RES in EU and CC/Netherlands.pdf](http://www.erec-renewables.org/fileadmin/erec_docs/Projcet Documents/RES in EU and CC/Netherlands.pdf), page 5

options in the construction of houses.<sup>306</sup>

(iii) Sustainability package

The Dutch government has developed a sustainability package, which provides funds distributing amongst the areas of energy conservation, clean fossil fuels (CO<sub>2</sub> storage) and renewable energy sources (including innovative biofuels).

(iv) Energy for development

The Dutch government will devote itself to establishing a sustainable, healthy and accessible energy supply in developing countries by taking steps that include the following:

- Applying the World Bank's set of financial instruments more effectively
- Using the Dutch financial instrument that is aimed developing countries more for energy-related matters
- Encouraging the transfer of Dutch experience and expertise, in such areas as energy efficiency and long-range agreements for energy

(v) Transition to sustainable mobility

This involves the development and expedited application of sustainable engine fuels (natural gas, biofuels and hydrogen), economical and clean vehicles, and route guidance and communication systems (to improve traffic flow). The Dutch government has suggested the following future-proof proposals:

- Decarbonising fuels for traffic - promote the transition of fuels with a lower carbon content
- Expanding CO<sub>2</sub> emissions trade
- Fees for operating polluting vehicles and vessels - the polluter pays
- Coalitions for clean cars<sup>307</sup>

<sup>306</sup> Referenced to the web site of the Netherlands national energy agency, [http://www.senternovem.nl/Offshore\\_Wind\\_Energy/background\\_information/Energy\\_policy.asp](http://www.senternovem.nl/Offshore_Wind_Energy/background_information/Energy_policy.asp)

<sup>307</sup> Extracted from the document named "Future Environment Agenda: clean, clever, competitive" by the Ministry of Housing, Spatial Planning and the Environment (VROM), <http://www.sharedspaces.nl/docs/internationaal/Toekomstagenda%20-%20vertaling%20Engels.pdf>, pages 53-61

## 16.2 Environmental Evaluation/SEA in the Netherlands

In the Netherlands, there are two separate systems for environmental assessment on policy, plan and programme (PPPs), including:

- (i) Environmental test (E-test) – required for drafting laws and regulations in order to inform policy-making; and
- (ii) Strategic Environmental Impact Assessment (SEIA) – applied to specified plans, programs, and projects.

Both of them are distinct in concept and approach, and are implemented separately and independently of each other.<sup>308</sup>

### Environmental test (E-test)

The E-test is an administrative system, also regarded as an ‘Environmental Protection Scrutiny’ (EPS) process – with definition to any brief explanatory note on environmental assessment, for drafting laws and regulations in order to inform policy-making. It was introduced in 1995 (reformed in 2002) by the Cabinet (Official Gazette 1995, No.15). It is an initiative by the Ministry of Housing, Spatial Planning and the Environment (VROM) and the Ministries of Economic Affairs and the Ministry of Justice.<sup>309</sup> The main aim of the E-test is to identify the potential environmental effects of draft laws and regulations in order to inform policy-making. It has been applied to the introduction of new bills, general administrative orders and ministerial decrees and orders and amendments. In addition, other policy intentions can be tested as well, such as plans and notes, for their environmental effects. However, the Minister of VROM preferred in the first period to focus on draft regulations in applying the environmental test.<sup>310</sup>

### Overall process for E-test

Between 1996 and 2001, the minimum procedural requirements for implementation of the E-test corresponded to three main stages: (i) screening and scooping; (ii) impact analysis and documentation; and (iii) review and submission. A new E-test procedure was approved by the Council of Ministers in October 2002 and became obligatory on 1 March 2003. It has been consolidated into two main phases:

- (i) Quick scan: Used by the responsible ministry to substantiate the need for draft legislation, to identify potential significant effects and propose the tests to be carried out;
- (ii) Appraisal and documentation: E-test (and other appraisals) carried out in accordance with a written agreement on the information to be included in the

<sup>308</sup> 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](http://www.iied.org/Gov/spa/documents/SEAbok/Chapter3_Oct04.pdf), pages 73-76

<sup>309</sup> Netherlands Ministry of Housing, Spatial Planning and the Environment, <http://www2.vrom.nl/pagina.html?id=7378>

<sup>310</sup> Strategic Environmental Assessment at the Policy Level: Recent Progress, Current Status and Future Prospects, Barry Sadler, [http://www.iaia.org/Non\\_Members/Conference/SEA%20Prague/SEA%20at%20the%20Policy%20Level.pdf](http://www.iaia.org/Non_Members/Conference/SEA%20Prague/SEA%20at%20the%20Policy%20Level.pdf), page 70

Explanatory Memorandum, which is reviewed by the Proposed Legislation Desk and Ministry of Justice and directed for comment to the Ministry of Environment.

### Strategic Environmental Impact Assessment (SEIA)

The SEIA is a statutory system, also regarded as SEA process, applied to specified plans, programmes, and projects. Under the EIA Decree (1987), specified plans and programmes are subject to the procedure laid down in the Environmental Management Act (2006). Such plans and programmes include national plans for waste management, electricity generation and water supply, and regional land use plans for the location of major new housing, industrial or recreational areas. SEIA for specified plans and programs follows a mandatory process, including examination of alternatives, public involvement in the scoping and review phases and review of the quality of the information by the independent EIA Commission.<sup>311</sup>

### Overall process for SEIA (refer Exhibit NL-2)

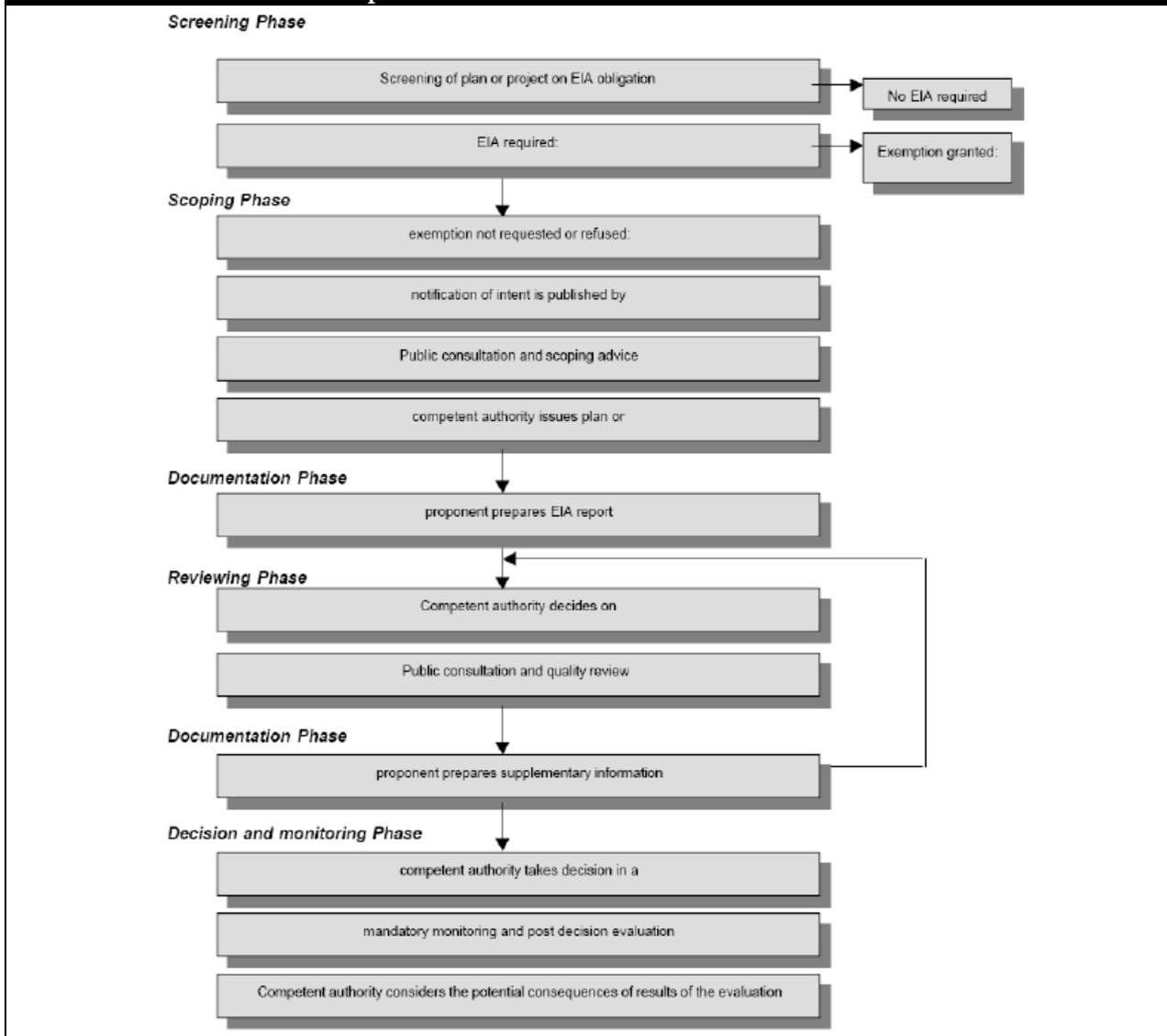
- (i) Inception memorandum (also called notification of intent or starting note) – The proponent presents the inception memorandum with a brief description of the proposed activity. The competent authority makes the memorandum public. The procedure begins.
- (ii) Public participation comment and advising – This participation and advising aims at the guidelines for the contents of the assessment report, named “Environmental Impact Statement (EIS)”.
- (iii) Guidelines – Define the environmental effects and alternatives to be assessed in the EIS.
- (iv) Production of EIS – The proponent is responsible for drawing up the EIS.
- (v) Public participation, advising and hearing on EIS – After the acceptance of the EIS by the competent authority, the EIS shall be commented by the public and the advisers. A hearing is included.
- (vi) Review, decision and evaluation – The EIA Commission reviews the EIS both for completeness and scientific quality, taking into account the comments from the advisers and public participation. In cooperation of the proponent, the competent authority evaluates the environmental impacts on the basis of the evaluation programme. If necessary, the competent authority may order extra mitigating measures to reduce the environmental effects.<sup>312</sup>

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<sup>311</sup> 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](http://www.iied.org/Gov/spa/documents/SEAbok/Chapter3_Oct04.pdf), pages 73-76

<sup>312</sup> Extracted from “The Texts of the Regulations on environmental impact assessment in the Netherlands” by the Ministry of Housing, Spatial Planning and the Environment, the Netherlands, 2000, <http://www.eel.nl/documents/EIA%20NL.pdf#search=%22%22EIA%20Decree%22%20site%3A.nl%22>, page 11

**Exhibit NL-2 Main Steps of SEIA in the Netherlands**



Notes:

- SEIA of national and regional plans and programmes follows the same procedure as EIA for projects. In the above flow chart, the term EIA is used for both strategic and project EIA.
- Legal requirements include the description of alternatives, including the one that would be the best from an environmental point of view. Social impacts directly stemming from environmental effects are typically included; other social impacts and economic impacts are not legally required as part of an EIA.<sup>313</sup>

<sup>313</sup> Referenced to the “Environmental Impact Assessment in the Netherlands – Views from the Commission for EIA in 2002”, <http://www.eia.nl/mer/commissie/img/grboek2002.pdf>

### 16.3 Environmental Evaluation/SEA on Energy Policies and Actions in the Netherlands

Energy-related plans or programmes in the Netherlands follow the requirements of the EIA Decree, as such SEIA should be carried out to evaluate environmental impacts.

For those energy-related laws and regulations involving policy-making in the Netherlands, E-test should be carried out as an administrative EPS process with a brief explanatory note on environmental assessment.

Details of the requirements should refer to section 16.2.

A summary table for the energy policies and actions and SEA status in the Netherlands is presented in **Exhibit NL-2**.

Exhibit NL-2 Summary of Energy Policies and Actions and SEA Status in the Netherlands	
<b>(a) Energy Policies and Actions</b>	
<b>Energy Policies and Actions</b>	Policies: <ul style="list-style-type: none"> <li>● Clear ambitions for the post-Kyoto period</li> <li>● Renewable energy policy</li> </ul> Actions: <ul style="list-style-type: none"> <li>● Sustainability package</li> <li>● Energy for development</li> <li>● Transition to sustainable mobility</li> </ul>
<b>Guidance/Legislations for Energy</b>	N/A
<b>(b) Environmental Evaluations / SEA Status in Energy Policies and Actions</b>	
<b>Type of Assessment</b>	<ul style="list-style-type: none"> <li>● E-test</li> <li>● Strategic Environmental Impact Assessment (SEIA)</li> </ul>
<b>Requirement Mechanisms</b>	<ul style="list-style-type: none"> <li>● For E-test, it is an administrative requirement, while for SEIA, it is a statutory required.</li> </ul>
<b>Legislation for Environmental Evaluation / SEA</b>	<ul style="list-style-type: none"> <li>● For E-test, it is required under the Official Gazette 1995, No.15</li> <li>● For SEIA, it is regulated by the Environmental Management Act</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>● For E-test, it is required for policies</li> <li>● For SEIA, it is required for plans and programmes</li> </ul>



Large-scale power generation on natural gas and biomass in the Claus power plant in Maasbracht <sup>314</sup>



A wind turbine of an offshore wind farm <sup>315</sup>

<sup>314</sup> Source: <http://www.ecn.nl/nieuws/newsletter/archive-2006/>

## 16.4 Analysis and Conclusions

The Netherlands has ratified the Kyoto Protocol and is pursuing active climate policies. In responding to Kyoto Protocol, the Dutch government has formulated a number of proposals aimed at reducing greenhouse gas emission and promoting clean energy and its efficient use. One of the proposals is related to the production and the use of renewable energy. The Dutch government also sets targets to increase the share of renewable energy in the overall energy supply to 10% in 2020. Others include distributing funds in energy conservation and clean fossil fuels, establishing a sustainable, healthy and accessible energy supply in developing countries, and developing sustainable engine fuels, economically clean vehicles, and route guidance and communication systems.

Hong Kong has been aware of the development of renewable energy in order to restrain the rise in energy demand and for sustainable development of the territory. The Hong Kong government sets target of having the range between 1 and 2% of Hong Kong's total electricity supply met by power generated from renewable sources by the year 2012. This was hope to be achieved by promoting the use of renewable energy in Hong Kong through conducting studies and publicising results of the studies, public education, demonstration projects, etc. Under the agreement between the energy private sectors, the Hong Kong government also requires the power companies to use renewable energy to generate electricity and to implement demand side management.

With regard to the requirements of the Environmental Evaluation/SEA in the Netherlands, E-test is an administrative EPS process for drafting laws and regulations in order to inform policy-making, with a brief explanatory note on environmental assessment. SEIA is a statutory SEA system applied to specified plans, programmes and projects under the EIA Decree. The requirements apply to those energy-related policies, plans programmes and projects.

In Hong Kong, SEA is applied in areas of sectoral strategies and policies, territorial land use planning and transportation strategies and policies. The SEA application in the Netherlands is comparatively extensive, includes spatial planning, plan for river routing, National policy plan on aspects like shell mining, mineral resources and industrial and drinking water supply, etc. 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.

<sup>315</sup> Source: <http://www.offshore-energy.nl:8080/offshore/projects/dowec/foto4.htm>

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

<b>Example NL-1 Wind Energy Plan Zeeland, the Netherlands <sup>316</sup></b>	
<b>Type of Study</b>	Strategic Environmental Impact Assessment (required statutorily under the EIA Decree)
<b>Description of Study</b>	The document is not a full SEA report. As mentioned in the document, different scenarios for power supply, including wind energy, were compared. It resulted in a target for wind energy capacity development in the Netherlands, and the recommendation to consider the spatial impacts (impacts sensitive for site selection) at lower tiers of decision-making about these wind energy locations. The SEA also compared two alternatives for site selection for wind energy parks: a small number of large wind energy parks or a large number of small parks (or individual wind turbines). Basing their judgements on a generic assessment of spatial impacts and taking cumulative and synergistic impacts of the individual turbines in one park into account, a deconcentration policy can be recommended.
<b>Summary of Alternatives</b>	The main decisions and alternatives in the SEA with respect to wind energy were: <ul style="list-style-type: none"> <li>• a production target of 1000 MW of wind energy in the year 2000 and 2000 MW in the year 2010.</li> <li>• alternative site selection strategies for wind energy parks and turbines.</li> </ul>
<b>Scope of Assessment/ Study</b>	The evaluation parameters considered in the study include: <ul style="list-style-type: none"> <li>• Noise</li> <li>• Safety</li> <li>• Emissions to the atmosphere</li> </ul>
<b>Environmental Measures</b>	The environmental measures for impacts were not mentioned in the document.
<b>Outcome of Study</b>	<ul style="list-style-type: none"> <li>• There was a clear tiering of impacts; at the national level, the whether and how much questions were addressed and linked to cumulative global, regional and local impacts, and at regional level the where and how questions were addressed and linked to the individual local impacts only</li> <li>• The SEA at the regional level aimed at making project EIAs superfluous by providing an environmental framework for decision-making at project level.</li> </ul>

<sup>316</sup> [http://www2.vrom.nl/Docs/internationaal/environmental\\_assessment.pdf](http://www2.vrom.nl/Docs/internationaal/environmental_assessment.pdf), pages 37-39

<b>Example NL-2 SEA for National Plans for Electricity Production <sup>317</sup></b>	
<b>Type of Study</b>	Strategic Environmental Assessment
<b>Description of Study</b>	The document is not a full SEA report, but just overviews the SEA process for electricity supply in the Netherlands for the selection of fuel type and technology, and for the site selection of the power stations. Details for the process, such as public participation and independent quality review, were described.
<b>Summary of Alternatives</b>	There should be alternatives for fuel choices by percentage of production between coal and gas. Besides, there should be alternatives for technology. For coal, it includes traditional coal (powder) and advanced coal (gasification). For gas, it includes natural gas and oil gasification. Finally, there are integrated alternatives between the fuel choices and the technology. Other environmental friendly alternatives are considered, e.g. use of low sulphur coal.
<b>Scope of Assessment/ Study</b>	The evaluation parameters considered include: <ul style="list-style-type: none"> <li>● Air quality</li> <li>● Acid rain</li> <li>● Global warming</li> <li>● Solid waste residues</li> </ul>
<b>Environmental Measures</b>	The environmental measures for impacts were not mentioned in the document.
<b>Outcome of Study</b>	<ul style="list-style-type: none"> <li>● The fuel type of new electricity plants in the Netherlands will adopt the technology of coal gasification.</li> <li>● 33% coal and 67% gas scenario in 2010</li> <li>● The total capacity for the new electricity plants in 2010 will be 6000MW</li> </ul>

<sup>317</sup> [http://www.eia.nl/ncea/pdfs/sea/casestudies/netherlands\\_electricity\\_plans\\_0312\\_vh.pdf](http://www.eia.nl/ncea/pdfs/sea/casestudies/netherlands_electricity_plans_0312_vh.pdf)