

Annex I – Case Studies

1 Czech Republic: Tourism Policy

Name of the case:

Czech Republic / tourism policy

1.1 Why this case was chosen

The Czech Republic has a long-standing tradition of conducting Environmental Impact Assessments (also Strategic Environmental Assessment, hereinafter Impact assessment) of policies and plans. This impact assessment taking into account environmental impacts is stipulated by a national law dating from 1992. The impact assessment is carried out with regard to political “concepts”, signifying plans / policies which are formally adopted by the national or regional governments.

There is a myriad of policies in the Czech Republic that have been subject to an impact assessment. The case of tourism policy was chosen because tourism has important impacts on the environment (e.g. effects due to traffic, construction activities, impact on protected areas, etc.). Furthermore, the impact assessment of the Tourism Policy has been largely covered by the literature treating Impact Assessments (specifically Strategic Environmental Assessments, SEA).

1.2 Basic details of the Case

The subject of the impact assessment is

- the **Czech Tourism Policy**, a general policy document laying down the basic objectives in the field of tourism in the Czech Republic;
- the **Sector Operational Program (SOP) for the Tourism and Spa Industry** formulating strategic objectives primarily in the economic field (competitiveness of services and products, increasing of revenues from tourism).

These two documents are principally separate documents for which two separate impact assessments have been carried out.¹ As the SOP is a document elaborating on the general principles of the Tourism policy, the two impact assessments are construed as an entity and will both be described in this report.

The Ministry for Regional Development having discretion for Tourism policy in the Czech Republic worked out the Tourism Policy Document in 1999. The basic assumption was that tourism would become a strategic economic sector in the Czech Republic.

¹ See World Bank, 2005, Case Studies of Policy Strategic Environmental Assessment, p. 22.

1.2.1 Czech Tourism Policy

The **Czech Tourism Policy** aims at improving the Czech share in international tourism, motivating Czechs to spend their vacation in the Czech Republic, fostering regional tourism and tourist hotspots, improvement of tourist services, promoting the development of SME in the tourist sector.²

In order to achieve these objectives, the Tourism Policy lays down a series of broad strategies for tourism:³

- Intensifying the public relations abroad to attract tourists to the Czech Republic;
- Elaboration of regional development strategies;
- Clear distribution of public responsibilities in the field of tourism;
- Setting up of an integrated information system;
- Optimisation of ministerial co-operation;
- Reduction of value-added tax for accommodation and catering services;
- Clampdown on illegal business activities;
- Improvement of travel guide services;
- Improvement of requirements concerning catering in private accommodations;
- Improvement and intensification of formation;
- Improvement of consumer protection;
- Introduction of standards for the accommodation and
- Framework for state support to the tourism sector.

In its original version environmental aspects or targets were not included in the Czech Tourism Policy. The revised Tourism Policy, which took into account the results of the impact assessment procedure, was adopted in 2002. As a result of the SEA the final policy has included environmental objectives like: “promotion of sustainable development of tourism and soft kind of tourism”.

The broad strategies of the Tourism Policy have been made more concrete in 1999 with the **“Sector Operational Programme for the Tourism and Spa Industry”** (hereinafter SOP), which is a part of the National Development Plan (NDP) of the Czech Republic for the years 2000-2006. The inclusion of this programme in the NDP has the important consequence that tourism projects become eligible for funding by EU-funds.⁴ The SOP had four major objectives:

² See for this description: Eva Novakova, *Tourismuspolitik in Transformation am Beispiel der Tschechischen Republik*, Dissertation 2003, [http://www.unisg.ch/www/edis.nsf/wwwDisplayIdentifier/2824/\\$FILE/dis2824.pdf](http://www.unisg.ch/www/edis.nsf/wwwDisplayIdentifier/2824/$FILE/dis2824.pdf) (03 August 2006).

³ Ibidem, p. 178.

⁴ For this reason, the conduction of an impact assessment for the SOP was also obligatory due to European law. Council Regulation (EC) No. 1260/99, which set out the requirements on information and publicity measures to be carried out by Member States in relation to activities supported by the European Social Fund.

- the creation of new employment in tourism;
- the support of SMEs;
- the increase of budget contribution, and
- an increase of the revenues (esp. foreign currency).

To attain these objectives, several measures are invoked, i.a.:

- Improvement of tourism-related infrastructure;
- Creation of new tourism products;
- Increase of regional offers; etc.

In 2002, the SOP was revised and environmental aspects / objectives were included as a result of the SEA procedure.

1.2.2 Date the impact assessment was released

The SEA for first version of SOP was carried out in 2001; the SEA for the Tourism Policy has been completed in spring 2002. Please note, the SEA of the SOP was remade in the middle of 2002 (same as some other OPs were significantly remade after receiving comments from the first round of consultations with Brussels) and additional SEA was carried out for SOP later in 2002.

1.3 The framework for the analysis

Why the impact assessment was carried out. There is a specific law in the Czech Republic, the law on the Assessment of Environmental Impacts that makes impact assessments of “concepts”, including policies for certain sectors, i.a. tourism, mandatory. The impact assessment was carried out in the year 2001/2002.⁵ As for the impact assessment of the “Sector Operational Programme for the Tourism and Spa Industry” the requirements of EU Directive 1260/99⁶ had to be taken into account as well. This Directive stipulates i.a an environmental ex-ante appraisal of schemes co-financed by European funds.

The focus of the IA procedure. Only environmental aspects were considered in the SEA of the policy and the SOP.⁷

The formal IA procedure. Both the Tourism Policy and the SOP underwent a similar impact assessment process carried out by the same team, which was composed of three Environmental Assessment experts from the Prague-based independent Regional

⁵ In 2004 the law cited above was changed and further requirements were added.

⁶ COUNCIL REGULATION (EC) No 1260/1999, of 21 June 1999, laying down general provisions on the Structural Funds.

⁷ However some of the indicators that were proposed for the implementation of the Policy/SOP based on the environmental targets, were including also economic and social aspects.

Environmental Centre (REC).⁸ The impact assessment of the SOP took six months (including the consultations with public), the impact assessment of the broader Tourism Policy four months.

The steps for the SEAs were as follows:

1. Review of key tourism issues;
 - Analysis of baseline environment;
 - Strengths, Weaknesses, Opportunities and Threats (**SWOT**) analysis to show how the tourism sector is linked to the environment;
2. Assessment of proposed goals / objectives for the protection of the environment;
3. Assessment of proposed measures, and activities within measures using impact matrices;
4. Assessment of proposed implementation and recommendation of monitoring measures.

At the end of each step, the 3-person SEA team met with the Ministry for Regional Development, which allowed the SEA team to present and discuss the proposed modifications to the Tourism Policy/SOP and to reach consensus prior to their adoption. Moreover, a workshop was organised to prepare draft indicators to allow the Ministry to monitor future progress regarding achieving the agreed environmental goals. For a more detailed description of the steps taken in the impact assessment please see below 1.5).

Institutional ownership of the IA procedure. The Ministry for Environment had initially stated that an impact assessment had to be done for the Tourism Policy and SOP.⁹ The Ministry for Regional Development took actively part in the Impact Assessment process.

Apart from this, there is no legal requirement set for evaluation of economic and social impacts.¹⁰

1.4 Case Context

An intact and attractive environment is an asset for local tourism. Environmentally healthy areas are normally ideal places for re-creation. At the same time, unrestrained tourism constitutes a danger for the environment. Enhanced tourism causes a more of traffic, construction activities, waste, etc.. This might diminish the attractiveness of certain regions,

⁸ The following description of the process follows closely the report given in the Case Studies of Policy Strategic Environmental Assessment, World Bank, 2005.

⁹ World Bank, 2005, p. 23.

¹⁰ Documents prepared for the EU Structural funds were a subject to socio-economic *ex-ante* evaluation, in line with the EU Regulations (approach to this type of evaluation differs significantly from the SEA from the methodological point of view).

especially when there is a surplus of construction activities having a negative effect on the landscape of a certain region.

Therefore, tourism policy is generally acknowledged to aim at fostering tourism where tourism does not harm the environment and in a way that does not cause negative environmental effects. Long-term stability of the environmental balance in the different tourism regions should be attained. Important factors are environmental soundness of tourism, saving of resources, sparing of infrastructure, harmony with the landscape and reduction of waste.

The consideration of all these aspects results in the concept of sustainable tourism. Sustainable tourism is not delegated to environmental policy. Instead, the primary objective of sustainable tourism remains the attraction of tourists into the Czech Republic. Yet, as the EIA Act in the Czech Republic requires, the tourism policy has to take into consideration environmental aspects and set environmental targets.

There is no formally set requirement in the Czech Republic to align policy proposals with the any national sustainable development strategy or an environmental policy plan. However, practice of today shows that it becomes a standard requirement as an outcome of the scoping phase of the fact-finding procedure made by the responsible authority for the SEA (at least for those assessment where the Ministry of Environment is in charge)

1.5 Aspects considered in the impact assessment

The experts carrying out the SEA assessed all the individual parts of the draft concept. The method of assessment applied is not legally standardised.¹¹

The **first step** of the impact assessment identified environmental weaknesses and threats to the environment in the tourism policy.

The weaknesses included:

- Low share of eco-tourism products and offers within the overall tourism sector;
- Absence of strategic planning in the management of tourism in protected areas.

The threats included:

- Underestimation of the need to protect the natural heritage and landscapes;
- Underestimation of the importance of public transport in areas of tourism;
- Decreased environmental quality in urban areas;
- Decreased aesthetic quality of landscapes (e.g. mobile phone antennae and other landscape visual impacts).

¹¹ There are, however, legally binding regulations on impact assessment to be found in Annex 9 of the EIA/SEA Act. They are also defined on case by case basis with the fact finding procedure.

Amendments to the Policy and the SOP to address these findings were proposed by the consultants and accepted by the Ministry based on the knowledge of SEA experts and relevant literature.

The **second step** of the impact assessment of Tourism Policy and SOP dealt with the strategic goals of the Policy and the SOP. In this stage, the SEA process tangibly integrated environmental concerns into the Policy and the SOP.¹²

The SEA team recommended that the goals of the SOP that are based on the State Policy on Environment should be based upon concepts of environmentally sustainable tourism cited within the Report of the UN Secretary General on Tourism and the Protection of the Environment (UN Council (UN Council for sustainable Development no. 7, document No. E/CN.17/1999/Add. 3). The Policy's goals were supplemented with an additional goal that raised the importance of environmental protection in the delivery of the Policy.

A number of environmental goals were formulated as reference targets.

- Introduction and utilisation of new tools for the protection of environment, which increase long-term competitiveness of tourism services (e.g. EMS, EMAS, voluntary agreements, use of environmentally friendly products, eco-labelling, etc.);
- Reduction of excessive visitation at the most popular destinations through better tourism management;
- Time and space diversification of tourism (including off-seasonal tourism and diversification of gateways);
- Support for environmentally friendly means of transport at more popular destinations including city/town centres (e.g. cycling, walking and public transport);
- Linkage of the concept of carrying capacities and limitations during the planning and development of tourism infrastructure;
- Incorporating improvement of local environment as part of the activities of tourism facilities;
- Protection of historical environment (care of cultural and natural environment);
- Support to the participation of key interest groups in proposing tourism products;
- Monitoring of tourism development (the whole industry or localities) according to set indicators of sustainable development and regular publication of these data; and
- Raising awareness among tourists about the characteristics and sensitivities of local environment and principles for protection.

These reference objectives serve the purpose of the assessment of the SOP (its goals, measures and type of activities) and these were also used, in the later stage of the assessment, for formulation of criteria for the implementation plan selection of projects, monitoring of real impact of the SOP. It means also, that the following targets were not to become strategic goals of the program itself, they were used for the assessment of the proposed measures of the Programme (following the approach of **objective-led appraisal**):

¹² World Bank, 2005, p. 25.

The **third step** of the impact assessment included a more detailed assessment of the Tourism Policy and SOP: the criteria examined in this assessment are also mentioned in the Czech EIA Act and include:

- Population;
- Ecosystems (air, water, soil, fauna and flora);
- Anthropogenic systems (material assets, heritage);
- Infrastructure;
- Landscape
- Large-scale impacts such as carrying capacity.

The assessment process was carried out by three SEA specialists, with two assessors making impact evaluation judgements and the third assessor determining resultant modifications to be made to the Policy and SOP to avoid or mitigate the impacts. There was much discussion with the Ministry of Regional Development on the impacts but consensus was attained after 3-4 days of meetings for the SOP and less than one day for the policy. The measure of accreditation of tourism destination was added, other measures were revised according to the results of the impact assessment.

An additional output was the generation and revision of environmental targets for tourism projects that would be approved under the SOP. These targets were generated from the ten environmental goals that were drafted in the previous stage. The ten targets that were used to generate project selection criteria are listed below:

- Introduction and utilisation of new tools for the protection of environment, which increase long-term competitiveness of tourism services (e.g. EMS, EMAS, voluntary agreements, use of environment friendly products, eco-labelling, etc.);
- Reduction of excessive visitation of the most heavily visited destinations;
- Time and space diversification of tourism (including off-seasonal character of tourism and diversification of gateways);
- Support of environmentally friendly means of transport at territories attractive for tourism, including city / town centres (support for cycling, walking and public transport);
- Respect for the limits of carrying capacities while distributing tourism infrastructure;
- Improvement of local environment within activities of tourism facilities;
- Protection of historical environment (care of cultural and natural environment);
- Support to the participation of key interest groups in proposing tourism products;
- Monitoring of tourism development (the whole industry or localities) according to set indicators of sustainable development and publication of these data;
- Informing visitors about the specifics of local environment and principles of its protection.

In the **last step**, the SEA team proposed a series of monitoring requirements that would allow the Ministry to track the effectiveness of the SOP and the accuracy of the judgements made in the SEA. These recommendations were in three tiers:

- Monitoring of program-SEAs triggered (e.g. SEA of Golf Course developments) as a result of the SOP;
- Environmental evaluation of individual project applications against the selection criteria generated in the policy-SEA by environmental authorities; and
- Evaluation of environmental monitoring results against predictions made in the Policy SEA.

The conformity of lower-level actions with the principle targets of the policy was regarded primordial. The SEA team paid also attention that the SOP be conform with the Tourism Policy.

At the end of the SEA process a workshop was organised to define indicators to measure the achievement of the environmental reference objectives of the Policy and the SOP. So far, the Ministry has, however, not taken any steps to put these criteria to use?¹³

1.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ¹⁴	Score and comments
Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?	The Czech Tourism Policy and the SOP have originally not considered environmental objectives. During the course of the impact assessments environmental (reference) targets have been included/applied.
Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?	Yes, however, before the SEA has been carried out, the objectives of the policy have not included environmental aspects to a large extent.
Identification of options: Are environmental concerns considered in all or only one option?	No options have been offered by the Ministry of Regional Development, which is the author of the Policy and SOP, but the SEA team has formulated other

¹³ In the SEA for the State Policy of Tourism Development for the Czech Republic 2007-2013, carried out in 2006, a monitoring system was proposed for the implementation of the Policy, including the set of indicators and criteria to be used for the appraisal/selection of projects and for the monitoring of real environmental impacts of the Policy. The proposal is included in the final statement of the Ministry of Environment which will be submitted together with Policy to the Government approval. Thus it depends, whether the requirement to introduce the proposed system, will be adopted by the Government in the decision-making process)

¹⁴ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

	<p>targets, objectives, etc. and proposed them to the Ministry for approval.</p> <p>See above: the SEA team proposed a new strategic goal (accepted): “To contribute to conservation and improvement of the quality of environment and sustainable development of the tourism”.</p> <p>And then, based on the State Environmental Policy and other relevant documents, has proposed a set of 10 environmental reference targets (accepted) – for the purpose of assessing the impacts of proposed objectives, measures, activities – so called objective-led appraisal – now a standard procedure based on the EC Directive).</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - Range of analysis: to what extent have environmental aspects been considered compared to other impacts? - Depth of analysis: have environmental aspects been considered qualitatively or quantitatively? - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<ul style="list-style-type: none"> - <i>(Very good)</i> Environmental effects have been largely considered in the impact assessment process. The impact assessment has tried to move the Czech Tourism Policy and the SOP into line with sustainability. - <i>(Good)</i> Environmental aspects have been considered Qualitatively - <i>(Unsatisfactory)</i> No cost-benefit estimation has been done. - The tools used in the impact assessment have been based on the Czech EIA Act. (at that time the §14 of the Act Nr. 244/1992 Coll., has applied).
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p>No answer.</p>

<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p>(Good) Yes, the SEA team developed a series of indicators for monitoring, especially the achievement of the environmental targets laid down in the Tourism Policy, but the monitoring has not been done by the Ministry.</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p>No stakeholders were involved. The impact assessment was carried out by a private consultancy firm, the Regional Environmental Centre.</p> <p>The Ministry for Regional Development was part of and often consulted in the impact assessment process. However, inter-departmental participation was limited.¹⁵</p> <p>The policy objectives were largely altered in the course of the SEA and adapted to sustainable objectives.</p>

1.7 Influence on decision-making

The analysis of environmental impacts was indeed considered as part of the decision-making process. The impact assessment was carried out before the tourism policy and the SOP were formally adopted by the Czech Government. There was a constant exchange between the Ministry of Regional Development and REC discussing which conclusions can be drawn for the political process from the different results of the impact assessment (different stages, see above). The results have by all means been considered in the final political decision on the Tourism Policy.

The analysis of environmental impacts were not considered alongside any analysis of economic impacts, but the analysis of environmental impacts was the primary objective of the impact assessment. Hence, the environmental effects played an eminent role in the impact assessment. The impact assessment used criteria of sustainability to examine the Tourism Policy and the SOP.

Furthermore, the analysis of environmental impacts did influence the policy choice. The key outcomes of the Strategic Environmental Assessment of the **Tourism Policy** were as follows¹⁶:

- Revisions were made to the list of tourism issues;
- A strategic target referring to environmental protection was added; and

¹⁵ The World Bank Policy SEA Case studies, 2004, p. 32.

¹⁶ See World Bank, 2005, p. 31.

- A monitoring and evaluation scheme was incorporated to allow checks to be made on lower-level actions.

The key outcomes of the SEA of the **SOP** were as follows:

- Revisions were made to the list of tourism issues;
- Replacement of Strategic Targets with sustainability-led targets;
- Rewording of measures;
- Insertion of new measures to introduce a system of tourism destinations and establish an inter-Ministerial Working Group to ensure the SEA process continues.

As practice-related outcomes were reported as follows:

- Promotion of greater inter-Departmental and Ministerial co-operation and understanding of environmental issues in the sector;
- A change of attitudes in the Ministry and related departments involved in Tourism toward the environment in general, resulting in the incorporation of sustainability issues

The SEA procedure was the only cause why environmental aspects have been considered in the Policy/SOP.

1.8 Lessons learned and Conclusions

The effective integration of sustainability issues at an early stage of the development of the SOP helped to ensure that the subsequent policy formation procedures followed sustainable objectives. A major lesson learned is therefore that an impact assessment should be conducted at an early stage of policy development. The impact assessment should be able to have an influence on the development.

The fact that there was much communication between the SEA team and the Ministry helped to reach a consensus and to make the Ministry sensitive to environmental concerns.

The impact assessment of the Czech Tourism Policy and SOP has added sustainability-led criteria to the policy targets of the Czech Tourism Policy and SOP. Thus, there is evidence that analysis of environmental issues promotes better integration of environmental concerns into other policy areas.

Environmental aspects were considered well, because the impact assessment (SEA) was required by Czech law and environmental aspects had to be assessed.

2 Denmark: Air Duties

Name of the case:

Abolition of passenger levies for air-borne journeys / financial promotion of new particle filters / financial promotion of use of excess heat (Act no. 1415 of December 21, 2005)¹⁷

2.1 Why this case was chosen

Denmark is one of the EU Member States which has an obligatory impact assessment procedure for laws and policies, which has been used for quite some time already. It is therefore a country eligible for a case study.

The case of the law mentioned above fits the requirements of this project because it deals with a subject matter not being immediately related to environmental affairs but which is rather intended to boost the profits of Denmark's regional airports. The Ministry with discretion for the legal measure is the Ministry of Taxation (homepage <http://www.skm.dk/foreign/>). Yet, the impact assessment regarding the law mentioned above, includes the examination of environmental effects, hence the probable effects of the law the environment are mentioned in the explanatory note of the law.

2.2 Basic details of the Case

The subject of the impact assessment is a national law aiming at changes to various existing laws.

The law contains the following measures:

- Reduction by half by 2006 and complete abolition by 2007 of the air duties to be paid by passengers for plane trips.

The act aims at an amendment and later repeal of the Act on duty on certain flights: There will be a reduction on the rates by 50 percent in 2006 and a repeal of the law as from 1 January 2007. Consequently, in 2006, the duty rate on flights covered by the definition of heavy aviation is reduced from DKK 75 to DKK 37,50, the duty rate on flights covered by the definition of light aviation is reduced from DKK 37,50 to DKK 18,75. No duty will be levied any more from 1 January 2007 on.

- Reduction of registration fees for new diesel cars featuring low fine particle emissions

It is expected that all newly bought diesel cars will be equipped with a particle filter to meet EU standards by 2010. Even before this date, registration fees are not intended to have the

¹⁷ The proposal was finally divided into two proposals after 2nd parliament reading. Therefore Act. No. 1415 only contains Abolition of passenger levies. Act. No. 1416 of December 21, 2005 contains the rest. (See Danish Legal Information: <http://147.29.40.91/DELFIN/HTML/A2005/0141630.htm>).

effect that diesel-cars with filters get too expensive. Therefore, there will be a reduction of the registration fees of new diesel-cars boasting particle filters for cars sold from 2006.

- Reduction of CO₂-tax and energy tax with regard to the use of excess thermal energy

In order to foster the use of industrial excess heat, the taxes on the use of this energy resource are reduced when the thermal energy is put to use externally / sold. The tax imposed on the production of energy is decreased from 55 % to 40 % on the energy price. This will lead to a loss of state revenues amounting to 15 Mio. Kronen yearly.

2.3 The framework for the analysis

Why the impact assessment was carried out. A general Regulatory Impact Assessment (RIA) procedure has been in place in Denmark for over ten years. The basis for this IA procedure is a circulation of the Danish Prime Minister's Office (Prime Minister's Office Circular N 31 of 26 February 1993 replaced by Prime Minister's Office Circular N. 12 of 11 January 1995 and later by Prime Minister's Office Circular N. 159 of 16 September 1998. , see at Danish legal information: <http://147.29.40.91/DELFIN/HTML/C1998/0015909.htm>) laying down the details of the procedure. All law projects and projects to be adopted by the government are subjected to an impact assessment procedure examining the following effects/consequences:

- Financial consequences;
- Administrative consequences;
- Effects on the economy;
- Effects on the environment;
- Aspects concerning compatibility with EU law.

Quality control of the legislation is always done with regard to consequences for the public sector.

The Ministry which is responsible for the respective law proposal is the authority which supervises and co-ordinates the regulatory impact assessment. The Prime Minister's Office is supervising the overall process, but the appropriate ministries are involved in the work, among others by producing guidance for their specific area.¹⁸

The impact assessment is part of the legislative process. The results of the impact assessment are submitted along with the law proposal to Parliament. Moreover, it is made public on the government's homepage.

The focus of the IA procedure. The requirement for each law to be subjected to an impact assessments was introduced in Denmark to evaluate the economic and administrative impacts on the public sector as well as the administrative consequences for the citizens and companies in general and the environmental effects. With the help of this written evaluation,

¹⁸ See the latest collective guidance, where the Ministry of Finance was the driving force: http://www.oav.dk/graphics/OAV/Dokumenter/Vejledninger/Bevillingsomraade/Vejledning_om_konsekvensanalyser.pdf.

which forms part of the documents available to the Member of Parliament before the votes, the legislator can base their decisions on an extensive examination of the respective law's effects. A priori there is no priority of one aspect over the other.

Environmental assessments were indeed integrated with economic assessments. There is an examination report attached to the law text, which contains deliberations on economic, social and environmental aspects.

The formal IA procedure. As mentioned above, there is a formal impact assessment procedure for law projects in Denmark, which i.a. examines environmental impacts. The impact assessment has been done by the Ministry of Taxation. In the case of air duties a working group analysed a broad spectrum of the consequences of changed air duties. The impact assessment of the law has included the following aspects:

- Financial consequences for the general public;
- Administrative consequences for the general public;
- Financial consequences for the business community;
- Administrative consequences for the business community;
- Environmental consequences;
- Regional consequences;
- Administrative consequences for the citizens;
- Relationship with EU Law.

Institutional ownership of the IA procedure. Always the Ministry, which is responsible for a law project supervises the impact assessment. All relevant ministries can of course always be consulted. Furthermore, in the drafting process of new legislation the text often is drafted together with the relevant ministry, agency etc. For the environmental assessment, the coordinating Ministry decides whether the Ministry of the Environment has to be consulted or whether it takes care of the assessment itself.¹⁹ In the case of the law project described in this report, the Ministry for Environment was not consulted.

2.4 Case Context

Reduction and abolition of air duties:

It is the primary objective of the Danish government to enhance the economic capacity of the regional airports. Therefore, plane trips will be rendered cheaper with the short-term abolition of passenger fees. This policy is suited to foster air travel at the expense of other ways of travelling. Taking into account the specific emissions of aeroplanes which contribute to climate change, there is an underlying conflict between free mobility in aeroplanes and emission abatement, which necessitates an environmental assessment.

¹⁹ The Ministry for the Environment does not have a record enumerating all cases where it has been consulted, so no number can be given if it is regularly consulted or not.

Reduction of registration fees for new diesel cars

Registration fees are first and foremost a source of revenues for the Taxation Ministry. On the other hand, they might impede citizens from purchasing new cars with new filters. Hence, there is a potential conflict between Finance Policy and the promotion of environmentally sound products. The Ministry of Taxation, thus, takes into account environmental matters.

Danish Policy wishes to further the purchase of cars with effective particle filters, therefore the government lowers the level of the registration fees for these cars.

Reduction of CO₂-tax and energy tax on the use of excess thermal energy

Generally, there is a sophisticated tax system on energy production in Denmark. This tax provides a source of revenue for the public budget but it also fosters environmental aims as it renders costly ineffective energy production and waste of energy. In order to foster energy efficiency, the tax is lowered for the use of excess thermal energy. The conflict lies again in the different aims of Finance Policy and Environmental Policy.

For all three matters can be said that in general the co-operation between Danish ministries is said to be professional, also especially between The Ministry of Taxation and the Ministry of Environment.

Political context. The Prime minister's Office Circular expresses the level of the integration of environment at the policy level. Thus, it cannot be said whether there is generally a high level requirement or not. But there is a requirement to align policy proposals with the environmental strategies, as the ministry in charge is asked to take in consideration how the proposal will effect the goals in the environmental strategies. The general guidelines can be found in the publication from the Ministry of Finance and in the given case in the translated draft.

2.5 Aspects considered in the impact assessment

Aspects examined in the impact assessment. The impact assessment of the law considered economic, social, environmental as well as legal effects of the law. In detail the impact assessment examined effects on :

- Budget;
- Public administration;
- Economic situation in Denmark (economic and administrative effects);
- Environment;
- Regional consequences;
- Citizens (administrative effects);
- Legal situation (compatible with EU law).

So, the quintessential aspects of sustainable development have been examined and conclusions drawn.

Environmental aspects addressed. With regard to the **abolition of air duties** for plane trips, the effect on the environment in general was assessed. The report states that the abolition of these fees will lead to an increase of passengers taking planes by 4 % of which 2 % switch from train and car to plane. It is recognised that there will be negative effects on the environment as a whole. The extent of these negative effects varies according to the grade of frequentation of these planes are fully frequented and the types of planes that are employed on flights to new destinations.

With regard to the **reduction of registration fees for new diesel cars** featuring low fine particle emissions, the impact assessment report examines the emissions of particles in the road-bound traffic. The report says that the emissions from diesel passenger cars (cars for private use) has been on the rise in the last years, which is mainly due to the fact that the number of sold diesel cars has increased. The rise of particle emissions emanating from private cars (all private cars) has risen from 400 tons in 1999 to 800 tons in 2002. The report says that these increased particle emissions have negative effects on public health and are therefore costly for the national economy. Generally the particle emissions are already considerably limited by EU emission legislation. Still, a further decrease of particle emissions – i.e. beyond the objectives of the EU legislation – is regarded desirable. Hence, cars with particle filters will be financially furthered, as with this technology, emissions of particles can be decreased by up to 80 %.

With regard to the **reduction of CO₂-tax and energy tax when using excess thermal energy**, the report says that this use will be advantageous to the environment as a whole as it helps save primary fuels. There will, however, not be a CO₂-gain if the displacement of fossil fuels takes place within the area covered by quotas. There will merely be more CO₂-quotas available.

Apart from these aspects, the law does not have any other environmental effects.

Level of analysis. With regard to the **abolition of passenger fees**, the effects on the environment have only been roughly measured. No quantitative data were given.

With regard to the **reduction of registration fees for new diesel cars**, the report dealt specifically with the reduction of particle emissions. This reduction was quantified with up to 80%.

With regard to the **reduction of CO₂-tax** and the energy tax when using excess thermal energy, the environmental benefits emanating from the use of this energy were assessed especially with regard to CO₂ emissions.

As the assessment report clearly states there are no other environmental effects than those covered, it can be assumed that all environmental aspects have been assessed.

2.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ²⁰	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p>Passenger Duties: The problem definition for the reduction/abolition of passenger duties does not take into account environmental matters but only refers to competitive aspects.</p> <p>Registration fees for new diesel cars: The problem is that diesel vehicles cause fewer CO₂-emissions than petrol vehicles on the one hand but cause more particle filter emissions on the other hand. Therefore, cars with particle filters should be promoted financially.</p> <p>The reduction of energy/CO₂-tax-rates for the recovery of excess heat is due to environmental considerations. Enterprises must be given reasonable conditions to invest in environmentally and financially sensitive utilisation of excess heat that can reduce total energy consumption. The extent of tax-rate-reduction is limited by the consideration that the tax system should not give enterprises too great an incentive for the “production” of excess heat in unfair competitions with ordinarily taxed district heat production.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p>(Good) The assessment describes the main policy objectives pursued with the three measures.</p> <p>Environmental considerations are not taken into account in the description of the policy of abolishing passenger fees.</p> <p>They are, however, the main considerations for the policy of lowering registration fees for new diesel cars with particle filters and the lowering of the energy- and CO₂-tax for the recovery of</p>

²⁰ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

	excess heat.
Identification of options: Are environmental concerns considered in all or only one option?	Not mentioned: No options have been analysed.
Impact analysis: <ul style="list-style-type: none"> - range of analysis: to what extent have environmental aspects been considered compared to other impacts? - depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?): - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<p><i>(Good)</i> Environmental aspects have been assessed alongside with socio-economic consequences. Depending on the policy objective of the measure, the negative effects on the environment are tolerated (abolition of passenger fees) or are decisive for the adoption of the measure (lowering of registration fees and energy tax an excess heat);</p> <p><i>(Satisfactory)</i> The most important environmental aspects have been assessed but quantitative data has not always been given;</p> <p>No cost benefit estimation has been given.</p> <p>No formal tools have been used.</p>
Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?	No options have been developed.
Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?	No monitoring.
Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?	Not quite clear, probably not.

2.7 Influence on decision-making

As the impact assessment report has been attached to the law proposal for information for the Members of Parliament, the Parliament has – at least theoretically – voted in full knowledge of the provisioned effects of the law.

The impact assessment report contained a chapter on economic consequences of the law as well as a chapter on environmental consequences. Environmental impacts were thus considered alongside the analysis of economic impacts. Furthermore, they were equal in importance in the report. The lowering of registration charges and the energy tax were primarily environmental measures, therefore the environmental assessment was very important.

2.8 Lessons learned and Conclusions

The impact assessment procedure is a standard procedure for all law projects and is intended to enrich the knowledge of the Members of Parliament about the potential effects of the law proposals that they are called upon to vote. Provided the impact assessment is carried out in an independent and expert fashion, the impact assessment reports are tools suited to improve the quality of the legislator's work. The method of impact assessment is very balanced taking into account the different important social, economic, environmental and legal aspects.

As environmental aspects have to be at least screened in the process of assessing a law project, the “assessor” has to work out the environmental dimensions of a law project and assess the possible environmental effects. It can be assumed that this procedure raises the environmental awareness of the policy makers even though the extent of this awareness-raising cannot be measured.

3 Denmark: Financial Statements Act

Name of the case:

Danish Financial Statements Act²¹

3.1 Why this case was chosen

Denmark is one of the EU Member States which has had an obligatory impact assessment procedure for over ten years. The regulatory impact assessment discussed in this text was introduced in 1998.

The case of the Danish Financial Statements Act fits the requirements of this project because it deals with a subject matter which is not immediately related to environmental affairs. Yet, the Danish impact assessment procedure requires the examination of environmental effects, hence the probable effects of the Danish Financial Statements Act on the environment are mentioned in the explanatory note of the law.

3.2 Basic details of the Case

Country: Denmark

The Danish Financial Statements Act was extensively revised with the Danish Act on Commercial Enterprises' Presentation of Financial Statements, etc. (the Financial Statements Act) of 7 June 2001. Subsequently there have been minor adjustments which have entered into force for accounting years commencing 1 January 2005 or later (Act no. 99 of 18 February 2004). The Amendments have streamlined the Danish Financial Statements Act with European law.

The subject of the Danish Financial Statements Act is the annual report to be completed by companies. The annual report includes the financial statements published each year by the enterprises and organisations subject to the Financial Statements Act. This Act identifies who is subject to the duty of filing accounts and the regulations to be met in the preparation and publication of the annual report. The 2001 Amendment brings environmental conditions explicitly into legislation, and the adjustments from 2005 incorporate the environment to an even greater extent.²²

The Amendments tried to minimise the administrative burdens on companies but added new obligations, most importantly a description of the environmental effects caused by the companies' activities to be included in the Management review, which is part of the Annual Report. The section on environment has to include proposals for measures to prevent or

²¹ It proved to be difficult to obtain the necessary "primary" information for this case study. Therefore, the report relies on the information contained in some studies and cannot answer all questions. It might therefore be incomplete.

²² See report by Environmental Agency: http://www.mst.dk/homepage/default.asp?Sub=http://www.mst.dk/udgiv/publications/2006/87-7614-983-8/html/kap05_eng.htm.

reduce the negative effects on the external environment. In 2004, an amendment to the Danish Financial Statements Act obligates large companies to give a more detailed report on environmental issues, i.a. the financial development of the company and environmental matters.

In this context, external environment means natural, physical surroundings such as air, water, flora, fauna and non-renewable resources such as fossil fuels and minerals. As a consequence, medium and large-sized enterprises have had to report on the environmental effects caused by their activities since 2001.

3.3 The framework for the analysis

Why the impact assessment was carried out. A general Regulatory Impact Assessment (RIA) procedure has been in place in Denmark for over ten years. The basis for this IA procedure is a circulation of the Danish Prime Minister's Office (Prime Minister's Office Circular N 31 of 26 February 1993 replaced by Prime Minister's Office Circular N. 12 of 11 January 1995) laying down the details of the procedure. All law projects and projects to be adopted by the government are subjected to an impact assessment procedure examining the following effects/consequences:

- Financial consequences;
- Administrative consequences;
- Effects on the economy;
- Effects on the environment;
- Aspects concerning compatibility with EU law.

Quality control of the legislation is always done with regard to consequences for the public sector.

The Ministry which is responsible for the respective law proposal is the authority which supervises and co-ordinates the regulatory impact assessment.

The impact assessment is part of the legislative process. The results of the impact assessment are submitted along with the law proposal to Parliament. Moreover, it is made public on the government's homepage.

The focus of the IA procedure. The requirement for each law to be subjected to an impact assessments was introduced in Denmark to evaluate the economic and administrative impacts on the public sector as well as the administrative consequences for the citizens and companies in general and the environmental effects. By this written evaluation, which forms part of the documents available to the Member of Parliament before the votes, the legislator can base their decisions on an extensive examination of the respective law's effects.

The latter examines the environmental effects to be expected to emanate from the respective law project. A priori there is no priority of one aspect over the other. Environmental assessments integrated with economic assessments.

The formal IA procedure. As mentioned above, there is a formal impact assessment procedure for law projects in Denmark, which also examines environmental impacts.

For the environmental assessment, there are guidelines edited by the Ministry for the Environment which contain a “checklist” of environmental effects. In the event that no environmental effects of the law can be discerned, the absence of environmental effects has to be stated in the impact assessment report.

The process of this impact assessment as laid down by the Prime Minister’s circulation consists of four steps :

- Screening: In this step the assessors decide whether there are any environmental effects to be expected from the law;
- Scoping: In this step, the assessors decide on the scope of the environmental assessment with the help of the checklist;
- Assessment: The final detailed assessment is carried out by the Ministry having discretion for the respective law (for example: Finance Ministry for the law on Air duties described in this case study);
- Publication: The result of the assessment is added to the official law proposal.

These are the minimum requirements for the analysis of the environmental effects in the impact assessments of laws. The guidelines of the Ministry of the Environment advise also the impact assessment of “alternatives” to the official law text and public participation. Moreover, they also include a description of the objective of the law / alternatives and the environmental compensation measures. Furthermore, monitoring methods should be developed to make sure that the negative environmental effects of the law do not exceed an acceptable extent.

3.4 Case Context

Basically, the field of accounting and the completion of yearly balances by companies, serve the purpose to inform the public and more specifically creditors about the well-being of the firm.

The primary objective of the amendment to the Financial Statements Act was to standardise the way of accounting in Denmark. Where possible it was also intended by the legislator to simplify accounting and reporting procedures.

The introduction of the obligation of environmental reporting counteracts the legislator’s intention to simplify reporting for the companies. By this measure, the companies should be made aware of the environmental effects of their consequences. It is expected that the companies a bigger effort to reduce these environmental impacts when their reports are made public.

3.5 Aspects considered in the impact assessment

What aspects did the impact assessment examine?

The impact assessment addresses the following aspects

- Economic effects;
- Administrative impacts on the state and companies;

- Environmental impacts;
- Administrative impacts on citizens;
- Relationship of the law with EU law.

Which environmental aspects have been addressed?

The analysis of the environmental impacts is focussed on the obligation for companies to work out a report on the environmental effects of their activities.

The result of the environmental assessment of the amendment of the Danish Financial Statements Act in 2001 is constituted by the assumption that the increased publicity of the environmental impacts of the respective company will push the company to reduce environmental pollution emanating from its activities. In the assessment of the amendment in 2004, the same effect was assumed for the extension of reporting duties for large-sized companies.

Environmental impacts have not been analysed fully, there have only been assumptions regarding the influence that the new reporting obligations would have on the environment-related behaviour of companies.²³

3.6 Evaluation of Environmental Policy Integration in the IA²⁴

Step in assessment process ²⁵	Score and comments
Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?	<i>(Little attention)</i> The problem definition is focussed on minimising administrative burdens of the companies. Environmental do not play a decisive role.
Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?	<i>Could not be established.</i>
Identification of options: Are environmental concerns considered in all or only one option?	<i>(Unsatisfactory)</i> The assessment is based on a comparison between the status quo and the proposed changes. No other alternatives for changes of laws

²³ see information in EU Presidency Paper: http://www.betterregulation.ie/attached_files/Pdfs/Report%20on%20RIA%20in%20the%20EUa.pdf (19 June 2006). Obviously no other environmental aspects have been considered.

²⁴ As there has been more information on the RIA in 2004, the RIA in 2004 is described.

²⁵ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

	have been developed and/or examined. ²⁶
<p>Impact analysis:</p> <p>range of analysis: to what extent have environmental aspects been considered compared to other impacts?</p> <p>depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?):</p> <p>cost benefit estimation: have environmental costs and benefits been considered? Have they been compared?</p> <p>use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects?</p>	<p>(<i>Unsatisfactory</i>) Only changes of behaviour of the companies with regard to environmental effects have been assessed.²⁷</p> <p>(<i>Unsatisfactory</i>) The environmental effects have only been supposed but not examined quantitatively²⁸</p> <p>(<i>Unsatisfactory</i>) No cost-benefit evaluation</p> <p>(<i>Unsatisfactory</i>) No formal tools have been used.</p>
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	No options have been presented.
<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	No.
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	Not quite clear, obviously not.

²⁶ see information in EU Presidency Paper: http://www.betterregulation.ie/attached_files/Pdfs/Report%20on%20RIA%20in%20the%20EUa.pdf (19 June 2006).

²⁷ *Ibid.*

²⁸ *Ibid.*

3.7 Influence on decision-making

The impact assessment report has been attached to the law proposal for information for the Members of Parliament. So, in theory, the Parliament has voted in full knowledge of the provisioned effects of the law.

The impact assessment report contained a chapter on economic consequences of the law as well as a chapter on environmental consequences. They were equal in importance in the report. The lowering registration charges and the energy tax were primarily environmental measure, therefore the environmental assessment was very important but nevertheless it did not influence the policy choice.

3.8 Lessons learned and Conclusions

The impact assessment procedure is a standard procedure for all law projects and is intended to enrich the knowledge of the Members of Parliament about the potential effects of the law proposals that they are called upon to vote. Provided the impact assessment is carried out in an independent and expert fashion, the impact assessment reports are tools suited to improve the quality of the legislator's work.

4 EU: Strategy for Biofuels

Name of the case:

Impact assessment of the Communication on an EU strategy for biofuels

4.1 Why this case was chosen

The case is a representative example for an impact assessment carried out for EU policies. Having been completed in 2006, it shows the state of the art in EU impact assessment. EU policy on the promotion of biomass and in particular on biofuels has been developing rapidly in recent years, which makes it an interesting issue. While not primarily environment-driven, the policy area is closely related to environmental concerns, and environmental impacts play an important role in the Impact Assessment.

4.2 Basic details of the Case

EU policy on biomass and biofuels is developed by the energy branch of the Commission Directorate “Energy and Transport”. The legislative community framework for the promotion of biofuels consists of the 2003 Biofuels Directive²⁹ and Article 16 of the Energy Tax Directive³⁰. The Biofuels Directive sets indicative targets (“reference values”) for biofuel use in the Member States, but also states in the Explanatory Memorandum that co-ordinated decisions on fiscal, energy and environmental policies are needed for biofuels to reach a substantial share of total EU fuel consumption. A Biomass Action Plan³¹ was released in December 2005, which presented data from the Member States showing that the indicative target for the EU would not be met and announced further proposals and action in 2006.

The Biofuels Strategy³² takes up the issues concerning biofuels raised in the Action Plan and sets out three main aims:

- To promote biofuels in the EU and developing countries, ensure that their production and use is globally positive for the environment and that they contribute to the objectives of the Lisbon Strategy by taking into account competitiveness considerations;
- To prepare for the large-scale use of biofuels by improving their cost-competitiveness;
- To explore the opportunities for developing countries – including those affected by the reform of the EU sugar regime – for the production of biofuel feedstocks and biofuels.

²⁹ Directive 2003/30/EC of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport (OJ L 123, 17.05.2003).

³⁰ Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for taxation of energy products and electricity (OJ L 283, 31.10.2003).

³¹ Communication from the Commission: Biomass action plan. COM(2005)628 final, Brussels, 07.12.2005.

³² Communication from the Commission: An EU Strategy for Biofuels. COM(2006)34 final, Brussels, 08.02.2006.

The Strategy proposes action in seven areas: stimulating demand, capturing the environmental benefits, developing production and distribution of biofuels, expanding supplies of feedstock, enhancing trade opportunities, supporting developing countries, and supporting research and development.

The Strategy on Biofuels comes in the form of a communication and thus is not a legislative instrument. A report on the implementation of the Biofuels Directive, which might lead to revision of the Directive, is due in 2006; a public consultation process on this was closed 10 July 2006.³³ This report and review will also build upon the Action Plan and the Strategy.

The Impact Assessment on the Biofuels Strategy³⁴ was released together with the Strategy itself on 8 February 2006. It partly draws on the impact assessment that was carried out for the Biomass Action Plan³⁵. It mainly looks at impacts in the EU Member States, but also takes into account possible effects on developing countries.

4.3 Case Context

Production and use of biofuels are related to the policy areas of energy, transport, agriculture, and climate protection, and thus are strongly linked to a number of environmental issues. Environmental impacts of biofuels basically take effect via three different pathways.

First, the use of biofuels reduces the emissions of greenhouse gases compared to fossil fuels, although they are not entirely carbon-neutral. The growth in emissions from transport is a particular concern in the EU, and increasing the share of biofuels could contribute to reaching the EU's Kyoto targets. The impact assessment describes this effect in detail and gives a quantitative estimate (based on a literature survey) of the amount of emissions that may be saved by replacing fossil fuels with biofuels.

Second, the cultivation of energy crops is linked to the environment through agricultural land use practices. It may influence the amount of fertiliser and pesticides used per hectare, irrigation demands, or cause changes in land use, in particular the use of set-aside lands. For instance, large-scale increases in energy crops production in tropical countries might lead to habitat destruction and negative consequences for biodiversity.

The third issue to be considered in terms of environmental impacts are emission standards and pollution produced during combustion of biofuels. Emissions of particulate matter, volatile organic compounds, carbon monoxide, nitrogen oxides, hydrocarbons and other compounds may differ between fossil fuel and biofuel combustion.

Depending on the trade regime for biofuels, biofuel policy in the EU may also influence the extent of feedstock cultivation in developing countries and thus entail environmental impacts outside the EU.

³³ See http://ec.europa.eu/energy/res/legislation/biofuels_consultation_en.htm.

³⁴ Commission staff working document: Annex to the Communication from the commission - An EU Strategy for Biofuels: IMPACT ASSESSMENT. SEC(2006)142, Brussels, 08.02.2006.

³⁵ Commission staff working document: Annex to the Communication from the commission – Biomass action plan: IMPACT ASSESSMENT. SEC(2005)1573, Brussels, 07.12.2005.

Usually energy and transport policy easily conflict with environmental concerns, as energy use causing emissions and transport infrastructure projects often running counter to nature conservation objectives. The promotion of biofuels can be seen as an approach to at least partly reconcile the conflicting interests.

4.4 Aspects considered in the impact assessment

For the EU, the assessment considers impacts on the environment, on fuel supply and fuel prices, on agricultural markets, on employment, on competitiveness, innovation and other industries, and on costs. For developing countries, impacts are analysed with regard to the economy, the environment, and social issues. The assessment thus covers the three pillars of sustainable development – the economy, ecology and social aspects.

The **methodology** chosen for the impact assessment is based on the definition of different scenarios and options. Three approaches to the further development of biofuel policy are identified, which group together different possible combinations of measures.³⁶

- The first option forms a “Business as usual” scenario which assumes that no further measures in addition to the existing ones are taken. The 2010 targets would not be achieved under this scenario.
- A “Regulated market-based approach” is defined as the second option. Under this scenario, different instruments are employed to increase demand and market share of biofuels. With regard to the supply of biofuels and the trade regime, the scenario assumes that existing regulatory instruments are continued and that a balanced approach in trade negotiations is taken with regard to domestic producers and trading partners. About half of the projected biofuel demand of the EU-25 in 2010 would be served by domestic production.³⁷
- The third option represents a “Deregulated market-based approach”. On the demand side, the option is similar to option 2. However, with regard to supply the scenario assumes a deregulation, mainly a phasing-out of existing tariff duties and of existing agricultural instruments supporting biofuels. Under this scenario, imports of feedstock would play a larger role – only 27% of EU biofuel demand in 2010 would be served domestically.

For assessing the competitiveness and cost effects of the policy proposal, two economic environments are differentiated: a low global energy price level, and a high global energy price level.

The **assessment of the environmental impacts** forms a substantial part of the document and is presented first. The three main links to the environment mentioned above (climate change and fossil fuel substitution, impacts from feedstock cultivation, combustion of biofuels) are covered for the EU.

³⁶ See Impact Assessment, SEC(2006)142, p. 9-11.

³⁷ Impact Assessment, SEC(2006)142, p. 22.

- **Climate change:** Reference to life-cycle analyses is made, which generally show that the use of biofuels results in net reductions of carbon emissions.³⁸ A literature survey yields quantitative information on the reduction of greenhouse gas emissions for biofuels from different European feedstocks as compared with fossil fuel emissions. On the basis of this information, general (mainly qualitative) conclusions are drawn for the different scenarios considered.
- **Feedstock cultivation:** a qualitative discussion of potential effects is provided, with reference to the fact that no quantitative studies on possible changes in cropping patterns and input use are available. The four main issues discussed are 1) areas brought into production, 2) change in crops cultivated for biofuels, 3) change in use of chemical inputs, 4) avoiding agricultural land abandonment. Potential negative effects are highlighted, and it is emphasised that safeguards may be necessary to ensure that the net environmental balance is positive. Monitoring for environmental standards is proposed.
- **Combustion:** This type of impact is discussed in less detail than the other two. Qualitative judgements are provided to the effect that the combustion of biofuels may lead to lower pollutant emissions than that of fossil fuels, but no information sources are indicated.

Environmental impacts also feature in the assessment of potential impacts in developing countries. A listing and brief outline of possible environmental impacts in developing countries is presented covering the following issues: pressure on sensitive ecosystems and biodiversity, soil fertility, pesticide use, water, climate change mitigation, atmospheric pollution, soil erosion and sedimentation. This section is based mainly on a qualitative discussion, however, a case example on Brazil is presented that includes some figures on air pollution. The point is made that effects will differ between the scenarios 2 and 3, since the degree of market regulation and tariff duties will influence the balance between EU domestic production and imports. It is mentioned that for a more in-depth analysis a case-specific study would be necessary.

In summary, an effort is clearly made by the Impact Assessment to cover all environmental impacts that might arise from policy developments promoting biofuels. However, the depth of the analysis varies between different impact categories. The third category – emissions from fuel combustion – is not analysed in much detail at all. The (mostly positive) impacts with regard to climate change are illustrated by quantitative data, while the (potentially negative) impacts from feedstock cultivation are only discussed qualitatively, due to a lack of data.

According to environmental group EEB, the assessment of impacts might lead to different conclusions if the policy was seen in a wider context and if it was compared to alternative policies. For instance, EEB suggests that the introduction of biofuels might reduce pressure on the car industry to produce more fuel-efficient cars, that other policy measures such as increasing fuel efficiency and promoting cleaner transport modes might lead to more effective

³⁸ Impact Assessment, SEC(2006)142, p. 13.

environmental gains, and that biomass might be used for energy production in an environmentally better way than converting it to biofuel.³⁹

4.5 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁴⁰	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Satisfactory)</i> The debate on biofuels from the beginning has centred around the issues of climate change mitigation, ensuring energy supply and reducing import dependence. The biofuels directive “aims at promoting the use of biofuels ... with a view towards contributing to objectives such as meeting climate change commitments, environmentally friendly security of supply and promoting renewable energy sources”. However, the potential negative effects from feedstock cultivation were not that high on the agenda at the early stages of discussion.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Good)</i> Both the strategy and the impact assessment present environmental concerns as one of the main drivers for the initiative, emphasising the necessity to reduce greenhouse gas emissions from transport. This argument is first made, followed by the importance of securing energy supply and diversifying energy supply sources.</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p><i>(Good)</i> Environmental impacts are considered for all three options.</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - Range of analysis: to what extent have environmental aspects been considered compared to other impacts? - Depth of analysis: have environmental aspects been considered qualitatively or 	<ul style="list-style-type: none"> - <i>(Good)</i> The environment is one of six issues for which impacts are analysed. Extent and depth of the analysis is comparable to that of the other issues.

³⁹ EEB Press Release: Biofuels no panacea: EEB urges Commission to keep close watch on wider environmental and social impacts.

⁴⁰ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

<p>quantitatively? (if quantified: monetarisation, physical quantification? Other forms?):</p> <ul style="list-style-type: none"> - Cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - Use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<ul style="list-style-type: none"> - (<i>Satisfactory</i>) Depth of analysis varies between impact categories. Quantitative information (from literature) is given with regard to climate change mitigation potential, while the impacts of feedstock cultivation on the environment are only discussed qualitatively. Emissions from fuel combustion are not analysed in much detail. - (<i>Unsatisfactory</i>) Environmental benefits and costs are presented but cannot be directly compared. While the benefits for climate change are expressed in quantitative terms, neither the potentially beneficial impacts nor the negative impacts of feedstock cultivation are quantified. - (<i>Little attention</i>) The Impact Assessment does not itself use a specific tool for the assessment of environmental impacts. However, reference is made to studies based on life-cycle analysis.⁴¹ With regard to the environmental impacts of feedstock cultivation, the IA notes the lack of studies using a farming system approach, which would take into account possible changes in cropping patterns, input use at farm level, and the effects of these changes on the overall ability of farms to provide environmental services.
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p>(<i>Not mentioned</i>) Of the three options analysed by the impact assessment, the Strategy for Biofuels recommends the second option (regulated market-based approach, favouring balanced approach in trade negotiations).⁴² No further explanation is given as to which aspects</p>

⁴¹ Impact Assessment, SEC(2006)142, p. 13.

⁴² EU Strategy for Biofuels, COM(2006)34 final, p. 4.

	(environmental or others) were most relevant for this decision.
Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?	(Good) A monitoring scheme for environmental standards is proposed in order to improve the knowledge about environmental impacts of feedstock cultivation and to avoid the risk that the environmental gains from greenhouse gas emission reductions are outweighed by negative environmental impacts at the local level.
Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?	<p>(Good) The development of the EU Biomass Action Plan and the Biofuels strategy involved an extensive consultation process both with external stakeholders and within the European Commission:</p> <ul style="list-style-type: none"> - On-line public consultation February/March 2005 - External stakeholder meeting March 2005 - Internal meetings of Commission services and with main stakeholders - Cabinet/Inter-service steering group representing fourteen cabinets and thirteen services of the Commission, which accompanied the drafting of the Communication on biofuels. <p>The summary documents show that environmental concerns were only one among many issues raised or discussed by the stakeholders.⁴³ The summary derives the main message that the support for bioenergy has to concentrate on those production chains that earn the largest energy, environmental and cost benefits (e.g. largest GHG savings, no generation of waste, soil and water</p>

⁴³http://ec.europa.eu/energy/res/biomass_action_plan/doc/results_consultation_bap.pdf (results of on-line consultation on Biomass Action Plan); http://ec.europa.eu/energy/res/biomass_action_plan/doc/esg_meeting_minutes_v2.pdf (Minutes of external stakeholders group meeting on 4 March 2005).

	<p>pollution; p. 9), and that clear criteria should be set up. This idea re-appears in general terms in the biofuels strategy (p. 9).</p> <p>The current review of the Biofuels Directive also involved a stakeholder consultation process, which was closed 10 July.</p>
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4.6 Influence on decision-making

The Impact Assessment on the Strategy for Biofuels was carried out ex-ante and informed policy makers who were working on the formulation of the Strategy. The Strategy recommends one of the three policy options analysed by the Impact Assessment, namely the second option “regulated market-based approach”.⁴⁴

The analysis of environmental impacts was certainly considered as part of the decision-making process, since they feature prominently in the Impact Assessment. However, it is not indicated which criteria – environmental or others - were most relevant for this decision, and it is likely that the socio-economic impacts e.g. on fuel supply, agricultural markets, and employment also played an important role.

The Biofuels Strategy contains a section on “capturing environmental benefits”. The measures announced under this heading clearly address issues identified as potentially problematic by the Impact Assessment.⁴⁵ The Commission will

- examine how biofuel use can count towards CO2 emission reduction target for car fleets and explore and maybe propose measures to ensure optimal greenhouse gas benefits. The Strategy thus reacts to the finding of the Impact Assessment that the extent of reduction differs between different feedstocks and between policy scenarios.
- work to ensure the sustainability of biofuel feedstock cultivation in the EU and developing countries. Concerns raised in the Impact Assessment that feedstock cultivation may have negative environmental consequences in EU and developing countries are thus addressed. However, measures to be taken are not flushed out in any detail and reference is made to the cross compliance rules under the Common Agricultural Policy (CAP).

With regard to developing countries, the Commission will⁴⁶

- examine how the EU can assist the development of national biofuel platforms and regional biofuel action plans that are environmentally and economically sustainable.

Environmental concerns raised by the Impact Assessment on the EU Strategy on Biofuels are also influencing the further development of EU biofuels policy. The public consultation

⁴⁴ EU Strategy for Biofuels, COM(2006)34 final, p. 4.

⁴⁵ EU Strategy for Biofuels, COM(2006) 34 final, p. 9-10.

⁴⁶ EU Strategy for Biofuels, COM(2006) 34 final, p. 14-15.

process carried out with regard to the review of the Biofuels Directive asked stakeholders for their opinion on a certification system to ensure that cultivation methods meet minimum environmental standards, and how such a system could be designed.⁴⁷

⁴⁷http://ec.europa.eu/energy/res/legislation/doc/biofuels/2006_05_05_consultation_en.pdf, p. 9.

5 EU: Rural Development

Name of the case:

EU Rural Development Strategy

5.1 Why this case was chosen

This case study is a good example of an EU IA, because the area in which it is carried out – rural development – is not primarily environmental. Rural areas are economically challenged as household incomes are lower than average, the working population is ageing and the dependency on the primary sector is relatively high. Furthermore, there are significant social challenges like low population density or even depopulation, poor access to services and a narrower range of employment options. Furthermore, rural development policy is the 2nd pillar of the Common Agricultural Policy (CAP)⁴⁸ and as the majority of land used in the EU-25 is by agriculture and forestry,⁴⁹ the environmental challenges are also quite significant.

5.2 Basic details of the Case

The EU impact assessment, released on 5 July 2005, was carried out for the Proposal for a COUNCIL DECISION on Community strategic guidelines for Rural Development (Programming period 2007–2013). The new rural development regulation defines the purpose and the scope of assistance from the rural development fund (as laid out in the Council Regulation on support for rural development by the European Agricultural Fund for Rural Development. They are governing the Community support for rural development). The Community strategic guidelines identify within this framework the areas important for the realisation of Community priorities, in particular in relation to the Gothenburg sustainability goals and to the renewed Lisbon strategy for growth and jobs.⁵⁰ The guidelines recognise that strong economic performance must go hand in hand with the sustainable use of natural resources. More specifically, the Community guidelines for rural development will help to:

- Identify and agree the areas where the use of EU support for rural development creates the most value added at the EU level,
- Make the link with the main EU priorities (Lisbon and Gothenburg) and translate them into rural development policy,
- Ensure consistency with other EU policies, in particular in the field of cohesion and environment,

⁴⁸ The first pillar is the market policy.

⁴⁹ The data for the concrete amount of this majority vary from 77% (cf. SEC(2005)914, p. 3) to nearly 90 % (cf. SEC(2004)931, p. 12).

⁵⁰ IA report on Community strategic guidelines for Rural Development (SEC(2005)914), p. 4.

- Accompany the implementation of the new market oriented Common Agricultural Policy and the necessary restructuring it will entail in the old and new Member States.

The impact assessment of the Council Decision builds on and updates the impact assessment report accompanying the proposal for a Council Regulation on support for rural development by the European Agricultural Fund for Rural Development.⁵¹ The following answers are based on both IA reports.

5.3 The framework for the analysis

Why the impact assessment was carried out. Since 2003, there is an obligatory IA system within the EU. But although IA reports are desirable for all policy proposals, a formal IA is only required for items on the Commission's Work Programme (WP), that is, all regulatory proposals, White Papers, expenditure programmes and negotiating guidelines for international agreements (with an economic, social or environmental impact) . In addition, the Commission may, on a case-by case basis, decide to carry out an impact assessment of a proposal which does not appear on the WP.⁵² The IA was thus done due to both the importance of the programme and the scope, respectively the severity of the expected impacts.

The focus of the IA procedure. The formal IA procedure⁵³ intends to focus on economic, environmental and social impacts. Theoretically, environmental assessments are integrated with economic assessments.

The obligatory EU IA system is divided into a two stage process. In the first step, a so called "roadmap" filters the proposals that will be subject to impact assessments. The latter is then carried out by the responsible DG, taking other affected DGs into account and informing the Secretary General.

Box: Proposed key analytical steps in impact assessments:

1. Identify the problem.
2. Define the objectives.
3. Develop main policy options.
4. Analyse their impacts.
5. Compare the options.
6. Outline policy monitoring and evaluation.

Stakeholder consultation and the collection of expertise can run throughout the whole process.

How the IA has been carried out. The IA for this case study did not take all of the mentioned analytical steps into account.⁵⁴ The problems were identified and a large part of

⁵¹ IA report on Community strategic guidelines for Rural Development (SEC(2005)914), p. 2.

⁵² Impact Assessment Guidelines, (SEC(2005)791), updated March 2006, p. 6.

⁵³ Cf. Impact Assessment Guidelines, (SEC(2005)791), updated March 2006.

the process was spent on the definition of the objectives. But, the analysis of impacts and the comparison of policy options were carried out only cursorily, if they were carried out at all.

Institutional ownership of the IA procedure. The EU Commission owns the IA procedure and the different responsible DGs carry out the analyses.

5.4 Case Context

Environmental context. Regardless of the links between rural development and the environment, one has to keep in mind that the whole of Europe's cultural landscape is a result of hundreds of years of human activity in this area. So, the relation between the natural environment and the farming practices is complex. On the one hand, many valuable habitats in Europe are maintained by extensive farming, which depends more or less on an intact environment, and on the other hand, agricultural practices can of course also have an adverse impact on natural resources.

Requirements. There is a high-level requirement to integrate environmental objectives in agricultural policy. This was already stated in the Cardiff Strategy, but is continuously stressed e.g. through CAP. Furthermore, strong efforts are being undertaken to integrate environmental concerns at the government level.

Furthermore, there is an indirect requirement to align policy proposals with the European Sustainable Development Strategy (EU SDS), which was adopted by the Gothenburg European Council in 2001. The EU IA system stems from this strategy, as it is the means to ensure that policy proposals are not assessed against the goals of Sustainable Development.

5.5 Aspects considered in the impact assessment

An impact analysis as such does not exist. Rather, the assessment of options compares the advantages and disadvantages in general terms. Within these general terms, environmental, social and economic aspects have been considered. A detailed table shows the measures to be taken under each option. For the environmental Axis of the rural development policy, the following aspects have been mentioned:⁵⁵

- Less favoured areas with environmental restrictions
- Mountain LFA
- Agri-environment/animal welfare (compulsory)

⁵⁴ Cf. Roadmap for the Policy Proposal "Council Decision for Community Strategic guidelines for rural development for the 2007-2013 programming period", DG AGRI 2005/AGRI/004, (http://ec.europa.eu/comm/off/work_programme/20050128_clwp_roadmaps.pdf, p. 61-62) and IA report on Community strategic guidelines for Rural Development (SEC(2005)914).

⁵⁵ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development (SEC(2004)931), p. 30.

- Afforestation of agricultural land, forest environment, forest medium to high risk fire prevention, support for non-productive investments (environmental and public amenity value; agriculture, forestry), other forestry
- Environmental protection in connection with agriculture, forestry and landscape management and improving animal welfare
- Natura 2000 agricultural and forest areas

Level of Analysis. Although the analysis of environmental impacts is weak in terms of methods and tool use as well as the depth of analysis, the problem analysis contains a detailed account of the interrelation of rural development and the natural environment.

Furthermore, the IA does not include a full analysis of the impacts of the different options at all. Compared to economic and social issues, the environmental dimension was covered equally.

Rural development policy is decentralised and basically forms a framework for Member State activities. So, diversity is important, and Member States have a lot of flexibility. Consequently, it is difficult to measure ex-ante impacts. Another problem is that it is a multi-annual programme which, at least in the past, has changed quite a lot from one programming period to the next. This makes it difficult to assess medium- and long-term effects ex-ante.

Modelling is not so useful for RD policy, in particular for estimating effects ex-ante. It may be beneficial to clarify some trends, challenges and problems, especially comparing different scenarios. But even for this purposes, the usefulness is limited.

5.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁵⁶	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p>(Good) Although weak in itself, the problem definition contains an extended appreciation of the environmental dimension of rural development.⁵⁷ Dedicates an subchapter to environmental issues.⁵⁸</p>

⁵⁶ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

⁵⁷ IA report on Community strategic guidelines for Rural Development (SEC(2005)914), p. 3.

⁵⁸ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, pp. 12-14.

<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Satisfactory)</i> Enhancing the environment is one of three objectives to be pursued.⁵⁹ The so-called Axis 2: land management / environment aims at ensuring the delivery of environmental services by agri-environment measures in rural areas.⁶⁰</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p><i>(Satisfactory)</i> The IA identified three options with varying consideration of environmental issues. The first option mentions environmental considerations, the second emphasises them as well and the third emphasises them even more.⁶¹</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - Range of analysis: to what extent have environmental aspects been considered compared to other impacts? - Depth of analysis: have environmental aspects been considered qualitatively or quantitatively?(if quantified: monetarisation, physical quantification? Other forms?): - Cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - Use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<p><i>(Unsatisfactory)</i> Impact analysis in the IA was weak. Environmental aspects have been considered, but the depth of analysis in general, as well as the use of instruments was unsatisfactory.⁶²</p>
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p>Environmental aspects were considered in the selection of options. The selection, however, was not based on any sophisticated criteria approach.⁶³</p>

⁵⁹ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, pp. 18 and 20.

⁶⁰ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, p. 20.

⁶¹ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, pp. 21-29.

⁶² IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, p. 29.

⁶³ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, p. 36.

<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p>For each option detailed, monitoring schemes are set out in the IA report covering all measures under the respective option. Environmental issues are not explicitly mentioned therein but are implicitly covered, since each option includes environmental measures.⁶⁴</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p>Extensive stakeholder consultation took place. The IA report does not specify the affirmation of participants, although interviews confirm the involvement of environmental NGOs. The conclusions do not cover environmental issues.⁶⁵</p>

5.7 Influence on decision-making

Because of time constraints, the two processes – the impact analysis and the decision-making process – were simultaneous. In the preparations, it emerged that most policy-makers, experts and other stakeholders would prefer option 2 of the impact assessment, which was also the basis for the final policy proposal. This was also the outcome of the conference bringing together all stakeholders, although the decision was determined during the preparations and not at the conference itself. Environmental aspects were not only considered alongside other impacts, but they also had the same importance. Although it is not quite clear why environmental aspects were as important as the other aspects, this circumstance seems to be owed to the natural relationship between environmental issues and rural development. Furthermore, the strategic framework for rural development policies, CAP, strongly focuses on environmental issues. The impact assessment did influence the decision-making process, but not in a crucial manner.

5.8 Lessons learned and Conclusions

The case study on EU rural development policy shows that the tools need to be adapted to various policy areas. Furthermore, the timing of the analysis within the consultation process is very important. It is obvious that analyses that are conducted in parallel to the decision-making process can not be considered in advance. In addition, it can be learned that the

⁶⁴ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, pp. 21-29.

⁶⁵ IA report on Proposal for a Council Regulation on support to Rural Development by the European Agricultural Fund for Rural Development, pp. 31-33.

relationship between the subject and the environment determines the extent to which environmental aspects are considered in the analysis. Although it cannot be definitely proved, the analysis of environmental issues promoted a better integration of environmental concerns into the rural development policy. It is important to note that the environmental dimension was strong in this area beforehand (CAP).

6 EU: Transport Network

Name of the case:

Extended impact assessment of the proposal amending the amended proposal for a decisions amending Decision No 1692/96/EC on the trans-European transport network

6.1 Why this case was chosen

This case was chosen because it is a broad policy proposal, it includes all EU Member States and is not country specific. This case will show how better co-operation among Member States, with respect to transport policy, will make cross-border transportation more efficient. Furthermore, as changes and improvements to transport policy are not primarily initiated by environmental concerns, this case study shows how one can integrate environmental issues into other policy sectors.

The transport sector is one of the biggest producers of GHG emissions in the EU. This case is important because it addressed global climate change concerns and attempts to mitigate emissions. The impact assessment shows that addressing environmental concerns can also be economically beneficial, as reducing air pollution diminishes external costs.

6.2 Basic details of the Case

An effective economy relies upon the successful transportation of goods and people. Economic growth can be slowed as a result in a lack of efficient infrastructure. In order to deal with increased problems surrounding transportation, especially trans-european, the Commission of the European Communities facilitated a report outlining current trends as well as proposing two scenarios, the European scenario and the European+ scenario, that respond to the transportation problems the EU currently faces. The goal of the trans-European transport network (Ten-T) policy is to improve competitiveness and balanced territorial development of the EU economy through sustainable transport, integration of the networks of the new Member States, greater coherence at European level of investment decisions, involving private funding, and improving infrastructure planning and subsidiarity issues.⁶⁶ An impact assessment was undertaken to examine the sociological, economic, and environmental impacts of each of the scenarios. The impact assessment report, released on 01.10.2003, recommended that the European+ scenario be used, as its benefits far outweighed the benefits of the European scenario.

⁶⁶ Commission of the European Communities. "Extended impact assessment of the proposal amending the amended proposal for a decision amending Decision No 1962/96/EC on the trans-European transport network. Brussels, 01.10.2003, p. 7-11.

6.3 The framework for the analysis

See case study on rural development.

6.4 Case Context

Transportation is an issue which has strong environmental implications. As the EU is committed to reducing GHG emissions, increases in transport networks need to take into account its potential impacts on the ability to reach the targets set out by the Kyoto Protocol. Since the transportation sector had the fastest growing energy demands in the 1990s, this sector contributes significantly to GHG emissions.⁶⁷ Expanding transportation networks within EU could increase GHG emissions due to greater commuter use without proper mitigation policies in place. As such, there are inherent structural conflicts between creating new transport networks and environmental concerns. Vehicles and trains will always cause some pollution, even when some modes of transportation are better environmentally speaking than others. In addition, increasing road and rail lines can also segment land and affect animal migration.

6.5 Aspects considered in the impact assessment

The impact assessment of the two scenarios considered economic, modal rebalancing, social, and environmental sustainability impacts in comparison to the current policy trend.

With respect to economic issues, the impact assessment looked at the overall cost of enlarging transport networks within the EU and the benefits associated with such an expansion. Furthermore, with respect to economic benefits, growth associated with increased international traffic, reduced travel times, and improved infrastructure was also analysed. Indirect economic growth associated with increased construction activity was also addressed.

Modal rebalancing is an important goal set by the white paper *European transport policy for 2010*, with the objective to return modal shares to their 1998 levels⁶⁸. Increasing the use of sea motorways as well as railways were analysed and both scenarios will redress the balance between transport modes.

Social aspects considered were accident reduction (vehicle), regional accessibility and connectivity, and increases in employment. Most attention focused on regional accessibility and connectivity to ensure balanced development within the EU as a whole and with specific interest towards the acceding countries.

Environmental impacts were addressed in this impact assessment; however, the policy stresses that environmental impacts need to be considered on a project level and cannot truly be addressed within the policies' larger EU scope. With that in mind, the policy did analyse how the TEN-T projects would affect GHG emissions, since the Kyoto Protocol

⁶⁷ CEC (Brussels, 01.10.2003), p. 23.

⁶⁸ CEC (Brussels, 01.10.2003), p. 42.

needs to be adhered to. The two scenarios were analysed to see which choice would reduce GHG emission costs more. In addition, the impact assessment analysed TEN-T projects which were in proximity to Natura 2000 sites. This analysis highlighted projects that would need mitigate impacts associated with infrastructure development.

6.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁶⁹	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Satisfactory)</i> Transport policy can affect the environment greatly if left unchecked and the policy proposal integrated environmental concerns. However, environmental issues were not greatly considered, as economic growth is the main goal of the policy.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Satisfactory)</i> The policy does take into account environmental impacts. Issues taken into account were potential increases in GHG emissions and impacts to Natura 2000 sites. Also, a policy objective of the proposal is sustainable transportation through rebalancing modal shares i.e. focusing on rail and water transport as they tend to be less harmful to the environment.</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p>Both options deal with environmental concerns.</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - range of analysis: to what extent have environmental aspects been considered compared to other impacts? - depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?): - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: 	<p>Environmental and social aspects of the project were similarly marginally considered and economic impacts were heavily emphasised. Environmental aspects were considered quantitatively. The project estimates that the diversification of transport networks and decreased road congestion will aid in emission reductions and help save €4 billion with the European model and €7 billion with the European+ model. Currently, no cost benefit analysis has been undertaken as the policy believes such an analysis needs to occur on a project</p>

⁶⁹ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

<p>Have tools been used especially suited to address environmental aspects?</p>	<p>by project basis. An analysis regarding the impact of new transport networks on Natura 2000 sites used mapping technologies to see which Ten-T projects would affect these Natura sites.</p>
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p><i>(Little attention)</i> Environmental impacts minutely contributed to the final choice of the preferred policy. Benefits to the environment are secondary and happenstance to the transport changes the preferred policy makes.</p>
<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p><i>(Little attention)</i> As the paper strongly states, assessment and monitoring of environmental impacts needs to occur on a project level.</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p><i>(Good)</i> As soon as the policy paper was published, the Commission facilitated public debate and consultations. A conference including 500 participants took place in November 2002. The Energy and Transport Forum and the European Economic and Social Committee both consulted on various aspects of the policy paper. After receiving 77 comments from different stakeholders, the Commission amended its policy and integrated several of the comments submitted such as “strict criteria for selection of the priority projects, new mechanisms for operational and financial co-ordination between Member States and clearer rules on the motorways of the sea.”⁷⁰</p>

⁷⁰ CEC (Brussels, 01.10.2003), p. 54.

6.7 Influence on decision-making

Although environmental impacts were analysed in the impact statement, they did not play a big role in the decision-making process. Environmental concerns were addressed, but the impact assessment stressed the need to deal with environmental concerns on a project level. The decision to recommend the European+ scenario fell largely on socio-economic lines; however, it is worth noting that this model is more beneficial towards the environment than the European scenario is. The decision-making focused on socio-economic aspects such as how much money would be saved through reducing congestion delays and travel times. Furthermore, the policy focused on how much each model would increase GDP growth and employment. The main focus on transport policy was not to mitigate environmental concerns, yet they were broadly addressed as the EU is beginning to integrate environmental issues into all of its policies. In this impact assessment, environmental issues were mostly quantified in economic terms. Reductions in GHG emissions were quantified monetarily, as the European+ model will save around €7 billion compared to the current policy.

6.8 Lessons learned and Conclusions

The impact assessment from this case study emphasised the need for co-operation between Member States, especially with acceding countries. An important lesson to be learned from this policy proposal is that Member States need to work together. Cross-border transport projects have been hindered in the past by Member States by different timetables and financial negotiations.⁷¹ Furthermore, political actors in the past have prioritised national projects over cross-border projects to gain local approval. By improving co-ordination and framing the debate in a way as to benefit all Member States, projects involving multiple countries will be more successful. Improving transport links between countries can benefit firms in various countries, as they will be able to move their wares more efficiently.

This impact assessment does appear to give evidence that analysis of environmental issues promotes better integration of environmental concerns into other policy areas. For example, reducing congestion is environmentally beneficial as particulate matter will decrease; in addition, reducing congestion is socially beneficial as “better accessibility to regional centres and to tourist destinations during their leisure time is of relevance to citizens in their daily life.”⁷² Furthermore, reducing congestion reduces transport times for business, thus positively impacting economic growth.

There is evidence that a strong commitment to environmental policy integration promotes inclusion of environmental issues in impact assessments. The EU is committed improving the environment while also strengthening economic growth. Environmental concerns were not a strong focus in this impact assessment because the TEN-T policy is broad; however, they were still included to stress the EU’s commitment to environmental concerns. Additional impact statements will be undertaken at a project level, and those impact assessments will have a greater focus on environmental impacts.

⁷¹ CEC (Brussels, 01.10.2003), p. 20.

⁷² CEC (Brussels, 01.10.2003), p. 47.

One of the general goals of the TEN-T policy is to create a sustainable transport system. Environmental impacts must be considered in order to have such a system. One of the determining factors for the inclusion of an environmental assessment is the Kyoto Protocol. Transportation and GHG emissions are closely linked. Since the EU is committed to the Kyoto Protocol, the impact assessment was careful to include potential impacts of increasing transport networks on the environment. Furthermore, the policy proposal focused on rebalancing transport modals, in part so it would relieve congestion on roads, but also so GHG emissions could be reduced.

7 EU: ACP Economic Partnership Agreements

Name of the case:

Sustainability Impact Assessment of the EU-ACP Economic Partnership Agreements

7.1 Why this case was chosen

EU Trade SIA. The case is a good example of an EU Trade Sustainability Impact Assessment, in which environmental issues are explicitly considered in the context of sustainability. The Trade SIA system, which first began in 1999 to inform a new round of WTO negotiations, predates the EU IA system introduced in 2002. Trade SIAs were a new concept at that time and the methodology continues to be refined. Today, trade SIAs are the most sophisticated form of impact assessment undertaken by the European Commission.⁷³ Lessons learned from the Trade SIA experience could help enhance the EU IA system.

Extensive in-country stakeholder consultation. A key objective of the SIA is to have a comprehensive consultation process that includes all stakeholders (e.g. regional organisations, African-Caribbean-Pacific (ACP) country representatives, civil society and business representatives).⁷⁴

7.2 Basic details of the case

In June 2000, the EU and 77 African, Caribbean and Pacific (ACP) countries signed the Cotonou Agreement, a treaty on foreign aid, trade, investment, human rights and governance. The main objectives for ACP-EU co-operation (as stated in Article 19 of the Agreement) are “poverty reduction and ultimately its eradication; sustainable development; and progressive integration of the ACP countries into the world economy”.⁷⁵

Under the Agreement, Economic Partnership Agreements (EPAs) are the major instrument of economic and trade co-operation. To assist the EPA negotiation process, the SIA examines the impact of trade on the economic, social and environmental pillars of sustainability. See box “SIA Objectives” below.

The SIA examines policy options and scenarios. Phase I (2002-2003) consists of a qualified preliminary SIA and two regional in-depth SIAs (in West Africa and the Caribbean). Phase II (2004-2005) consists of three sectoral studies: 1) agro-industry in West Africa, 2) tourism services in the Caribbean region; and 3) fisheries in the Pacific region. See box “SIA Documents” below.

⁷³ European Commission. 2006. *Handbook for Trade Sustainability Impact Assessment*, p. 7, http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127974.pdf.

⁷⁴ See PricewaterhouseCoopers. 2002. *Sustainability Impact Assessment*, <http://www.sia-gcc.org/acp/uk/index02.php>.

⁷⁵ See PricewaterhouseCoopers. 2004. *Qualified Preliminary EU-ACP SIA of the EPAs: Phase One. Executive Summary*, http://www.sia-gcc.org/acp/download/acp_eu_sia_2004.pdf, p. 3.

The overall budget for the EU-ACP Trade SIA is one million Euro over four years (2002-2006).⁷⁶ The project was undertaken for the European Commission by a consortium of four organisations: PricewaterhouseCoopers (PwC) Sustainable Business Solutions, GREDI (Groupe de Recherche en Économie et Développement International), Forum for Africa and GRET (Research and Technology Exchange Group). Local experts were also consulted.

Box 1. Objectives of the EU-ACP Trade SIA

The aim of the SIA is to ensure that EPA negotiations take sustainable development fully into account. There are five main objectives:

1. **Information** -- provide information on the linkages of trade and development
2. **Research** -- link study literature to negotiation-related research
3. **Policy development** -- help define desirable policies for negotiators
4. **Stakeholder support** -- create a basis for stakeholder discussion about the sustainability implications of the trade negotiations
5. **ACP participation** -- help ACP countries participate actively in negotiations in a way that promotes sustainable development.

Source: PricewaterhouseCoopers. 2002. *Sustainability Impact Assessment*. <http://www.sia-gcc.org/acp/uk/index02.php>.

Box 2. Public reports of the EU-ACP Trade SIA

Phase I Summary Reports:

- All-ACP-EU preliminary SIA (25 pp.)
http://www.sia-gcc.org/acp/download/acp_eu_sia_2004.pdf
- West-African ACP Regional SIA (10 pp.)
http://www.sia-gcc.org/acp/download/acp_eu_sia_w-africa_2004.pdf
- Caribbean ACP Regional SIA (9 pp.)
http://www.sia-gcc.org/acp/download/acp_eu_sia_caribbean_2004.pdf

Phase II Summary Reports:

- Executive Summary (35 pp.)
http://www.sia-gcc.org/acp/download/pwc_sia_acp20july2005-executive-summary.pdf

All public EU-ACP Trade SIA documents are available online at <http://www.sia-gcc.org/acp/uk/news.php>.

⁷⁶ Also, 10% of DG Trade's 2002 budget went to the Trade SIA programme. Source: European Commission. DG Trade. 2005. *Sustainability Impact Assessment of trade agreements – making trade sustainable?* Background Paper. DG Trade Seminar. Brussels. 6-7 February. pp. 28-29. http://trade.ec.europa.eu/doclib/docs/2005/february/tradoc_112380.pdf

7.3 The framework for the analysis

Why the impact assessment was carried out. Trade SIAs are an assessment tool introduced by the EU Commission to identify how trade negotiations impact sustainability. The objective of the programme is to guide the trade negotiation process toward a more sustainable outcome. Broad stakeholder consultation is used as a means to increase participation and transparency.

The focus of the IA procedure. The formal Trade SIA procedure relies on both quantitative and qualitative analysis of the impact of trade on sustainability. Four categories of impacts are of primary interest: economic, environmental, social and governmental/institutional impacts. Environmental assessments are integrated with economic assessments in the context of sustainable development. In addition, non-trade sustainability issues are assessed to see if trade agreements can contribute to addressing these challenges.

Box 3. Procedure used in the EU-ACP Trade SIA

The EU-ACP Trade SIA relies on analyses of policy options and scenarios. These analyses are designed to give concrete input to the trade negotiators to ensure sustainable development objectives are considered in policy formulation. Key elements of the SIA methodology are:

1. **Options/scenarios** – defining the options/scenarios and provide a clear analysis of how the different options will affect social, economic and environmental areas;
2. **Impacts** -- analysing the expected magnitude of the impacts, using both qualitative and quantitative techniques;
3. **Policy responses** – identifying domestic or EU policy measures that can reduce any adverse impacts of liberalisation and/or promote positive impacts.

Source: PricewaterhouseCoopers. 2002. *Sustainability Impact Assessment*. <http://www.sia-gcc.org/acp/uk/index02.php>.

Institutional ownership of the IA procedure. The impact assessment procedure used was developed in consultation with the European Commission. In March 2006, the European Commission published the *Handbook for Trade Sustainability Impact Assessment*, which describes the methodology of Trade SIAs conducted for the Commission, and highlights the key issues and principles involved.⁷⁷ This is the procedure used in the EU-ACP Trade SIA.

Annex 1 contains two flow diagrams detailing the IA procedure used in the EU-ACP Trade SIA. Annex 2 contains diagrams describing the Trade SIA process more generally.

⁷⁷ European Commission. 2006. *Handbook for Trade Sustainability Impact Assessment*. http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127974.pdf.

7.4 Case Context

Environmental context. The economic activity associated with increased trade can have significant impacts on resource use, environmental pollution and the health of ecosystems. Agriculture is important to the economies of ACP countries, and is a major contributor to environmental degradation in these regions, as well. Resource extraction industries, also important to these economies, have a direct impact on the environment.

Economic context. Agriculture and resource extraction industries frequently have an adversarial relationship to environmental regulation and review. This stems from the increases in firm costs and reductions in firm profits that result from compliance with environmental rules. Trade liberalisation—usually the main aim of trade negotiations—is primarily pursued to increase economic growth, promote efficient production and lower consumer prices. Actors pursuing trade liberalisation are often philosophically averse to environmental rules.

Political context. The EU Trade SIA system is an explicit effort to include sustainability factors in a negotiation process that would otherwise leave them inadequately addressed. DG Trade recently provided its own description of the European political context for the adoption of the Trade SIA system:

Implementation of SIA is one element of a broad set of policy activities aiming at integrating sustainability into EU policy. . . . As part of the Commission's efforts to mainstream sustainability into EU policies, DG Trade has committed itself to integrate sustainability concerns in its policy making. . . . [I]t has been part of DG Trade thinking since 1997 or earlier that the integration of sustainability into trade negotiations can contribute to a better liberalisation, by demonstrating that EU trade goals are part of a long term and more balanced view, and thus helping to create an atmosphere of trust with our negotiating partners as well as with European constituencies.⁷⁸

Several NGOs—initially supportive of the programme—now question the credibility of the Trade SIA process, saying that the true political will is lacking to ensure that Trade SIAs actually have an influence on the trade negotiation process. In 2003, a joint statement was released by 31 European NGOs, criticising the Trade SIA process for not addressing fundamental flaws that were preventing it from achieving its stated aims. The criticism included claims that Trade SIAs have a pro-liberalisation bias, are too disconnected from actual policy formulation, conduct inadequate scenario analysis, place too much of the response burden on trading partners (not the EU), and lack a mechanism for trading partners to jointly implement SIA recommendations.⁷⁹

⁷⁸ European Commission. DG Trade. 2005. *Sustainability Impact Assessment of trade agreements – making trade sustainable?* Background Paper. DG Trade Seminar. Brussels. 6-7 February. p. 12. http://trade.ec.europa.eu/doclib/docs/2005/february/tradoc_112380.pdf

⁷⁹ Network Women in Development Europe (WIDE). 2003. *EC Sustainability impact assessments: greenwashing or real political will?* NGO joint sign-on statement. February. http://www.eurosur.org/wide/EU/Trade/SIA_Feb.htm. See also World Wildlife Fund. 2003. *The EC SIA programme – where are we now?* NGO strategy meeting – 'Sustainability, Environmental Protection and the WTO Cancun Ministerial', Berlin http://assets.panda.org/downloads/annex_10.doc; as well as Network Women in Development Europe (WIDE). 2002.

7.5 Aspects considered in the impact assessment

The study examined a broad range of economic, social, environmental and governmental/institutional aspects. This following text focuses on the environmental impacts included in the EU-ACP Trade SIA.

In Phase I, key environmental challenges in ACP countries were identified. The challenges were: 1) deteriorating land quality, 2) increasing air pollution, 3) degradation of coastal and marine resources, 4) high levels of biodiversity and important habitats, and 5) deforestation (Phase I Summary, pp. 10-11). In Phase II, the study examined the key environmental variables most relevant for each regional sector selected for detailed study:

- **Agro-Industry in West Africa.** The key environmental variables examined were 1) land use and 2) use of inputs (Phase II Summary, p. 8).
- **Tourism Sector in the Caribbean.** The key environmental variables examined were 1) land use, watersheds and coastal ecosystems, 2) use of natural resources, and 3) pollution, wastewater and solid waste (Phase II Summary, p. 20).
- **Fisheries in the Pacific Region.** The key environmental variables examined were: 1) fish stocks, 2) marine habitat, and 3) pollution (Phase II Summary, p. 27).

Level of Analysis. Environmental impacts received fairly detailed qualitative assessments. The assessments described the key environmental variables and used a case study or scenario approach to evaluate the impact of trade agreements on these variables. In contrast with economic aspects, which received quantitative analysis through econometric models, environmental variables were not quantitatively examined. The SIA provides only an indication of the direction of the impact (positive, negative or neutral) and some indication of its magnitude (insignificant, minor, significant, etc.). In some cases, proposals for how negative impacts could be mitigated were proposed.

Though Trade SIAs like the EU-ACP SIA address each of the three pillars of sustainability—economic, social and environmental—the environment is often given lesser consideration, especially when compared to the economic aspects of sustainable development. This could be due to the dual commitment of the Trade SIA process to both trade liberalisation and sustainable development.

In Phase II of the EU-ACP Trade SIA, there were extensive policy recommendations aimed at improving the sustainability of fisheries in the Pacific countries. By comparison, there were relatively few environment-specific recommendations in the West Africa agriculture and Caribbean tourism Phase II sector studies. This difference appears credible and points to a process that can weigh and prioritise the economic, social and environmental components of sustainable development.

7.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁸⁰	Score and comments
Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?	<i>(Good)</i> Environmental considerations are thorough as well as specific to various regions and trade issues.
Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?	<i>(Good)</i> The Trade SIA requires explicit consideration of the environment in the context of sustainable development.
Identification of options: Are environmental concerns considered in all or only one option?	<i>(Good)</i> Environmental concerns are mentioned in all options.
<p>Impact analysis:</p> <ul style="list-style-type: none"> - range of analysis: to what extent have environmental aspects been considered compared to other impacts? - depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?): - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<ul style="list-style-type: none"> - <i>(Satisfactory)</i> Environmental aspects appear to be given an equal level of treatment in the qualitative assessment. Economic aspects receive greater quantitative assessment. - <i>(Satisfactory)</i> Environmental aspects have only been considered qualitatively, with neither physical quantification nor monetarisation. - <i>(Satisfactory)</i> No cost-benefit estimation was conducted for any impact (economic, social or environmental). - The Trade SIA does not use a specific tool for the assessment of environmental impacts. (In contrast, basic econometric techniques were used to assess economic impacts.)
Criteria to select options, procedural steps to select options: did the consideration of any	<i>(Little attention)</i> No evidence has been found that the EU-ACP Trade SIA has

⁸⁰ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

environmental impacts contribute to the final choice of the preferred policy?	already had an impact on EU negotiators, though the Commission says that the Trade SIA will be taken into account. Evidence has been found that the SIA has had an impact on stakeholder involvement (See Annex 3).
Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?	(None) The Trade SIA is an <i>ex ante</i> instrument that informs the negotiation process prior to a trade agreement. There are no provisions for <i>ex post</i> assessment
Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?	(Good) The Trade SIA made an explicit effort to involve stakeholders, though there are many systemic barriers to their effective involvement. The Trade SIA lists all stakeholders involved and stakeholder events held, which assists transparency.

7.7 Influence on decision-making

No evidence has been found regarding whether the EU-ACP Trade SIA has already been considered by trade negotiators or affected their decision-making. EU Trade SIAs have been criticised by the NGO community for their lack of influence on the policy-making process.

In its handbook on the Trade SIA process, the Commission describes its intent to improve the integration of results into policymaking:

Trade SIAs are followed up with position papers in which the Commission responds to findings. These papers should also show how the findings will be taken into account in the development of policy for negotiations. Position papers should be posted on the internet once they are endorsed and the process of integrating results into policy-making should be more systematically implemented and improved. This will be key to ensuring the mid-term credibility and relevance of the Trade SIA programme.⁸¹

Annex 3 contains the Commission's written response to questions sent to DG Trade in the course of preparing this case study. The questions addressed whether the Commission could provide evidence that the EU-ACP Trade SIA had already had an impact on EU negotiators.

⁸¹ European Commission. 2006. *Handbook for Trade Sustainability Impact Assessment* p. 40. http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127974.pdf.

7.8 Lessons learned and conclusions

Based on the existing critiques of the SIA process, the key lessons to be learned from the general Trade SIA process appear to be:

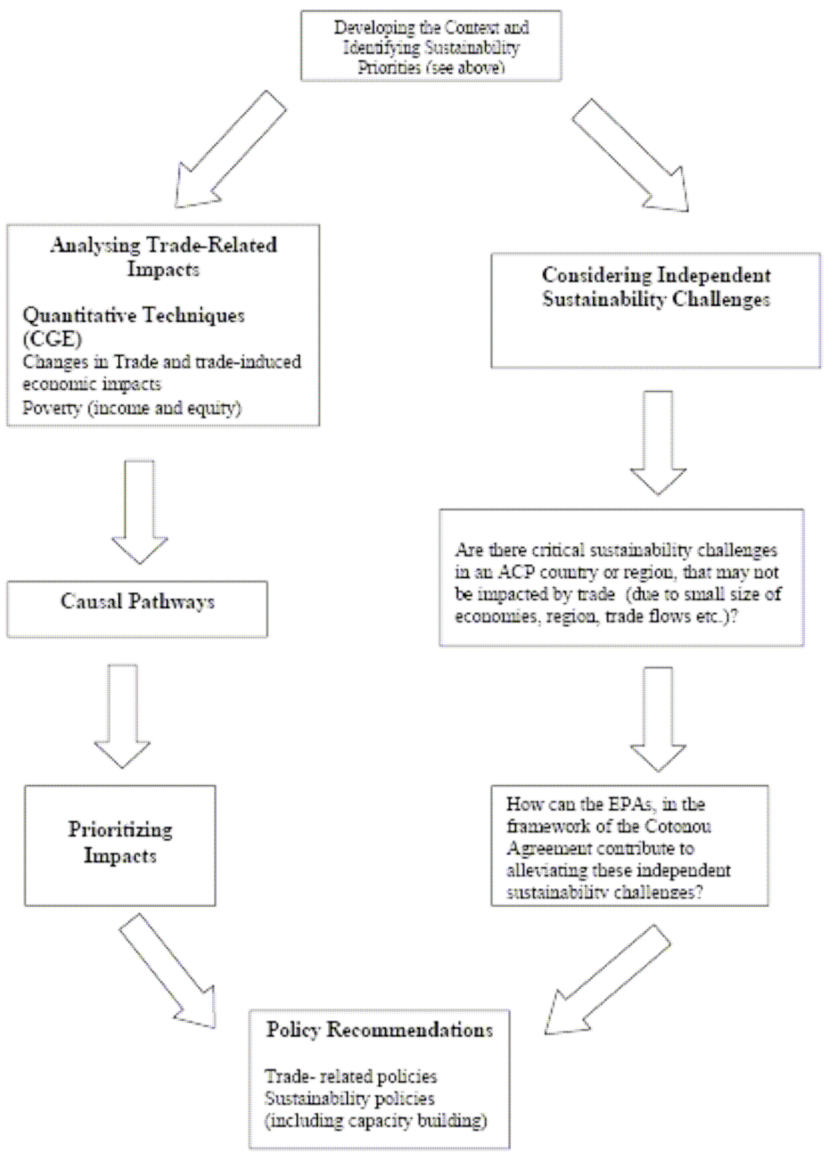
1. The importance of formally integrating the information gained through impact assessments into the policy-making process, and
2. The importance of providing visibility for stakeholders and the public into that policy integration.

The EU-ACP Trade SIA provides evidence that the explicit requirement to integrate environmental issues through an SIA promotes their visibility in the trade negotiation process. Without the Trade SIA, this would not have happened to this extent. It is also clear from the European Commission's various description of the Trade SIA programme, that it stems from the EU's commitments to sustainable development as outlined in the EU primary law (Amsterdam Treaty), as well as both international commitment to sustainability and global concerns expressed about the influence of trade liberalisation on sustainability.

The fact that DG Trade has made ongoing efforts to refine the methodology and incorporate stakeholder comments in that process also shows a willingness to revise and improve Trade SIAs so that the aims of the programme can be attained.

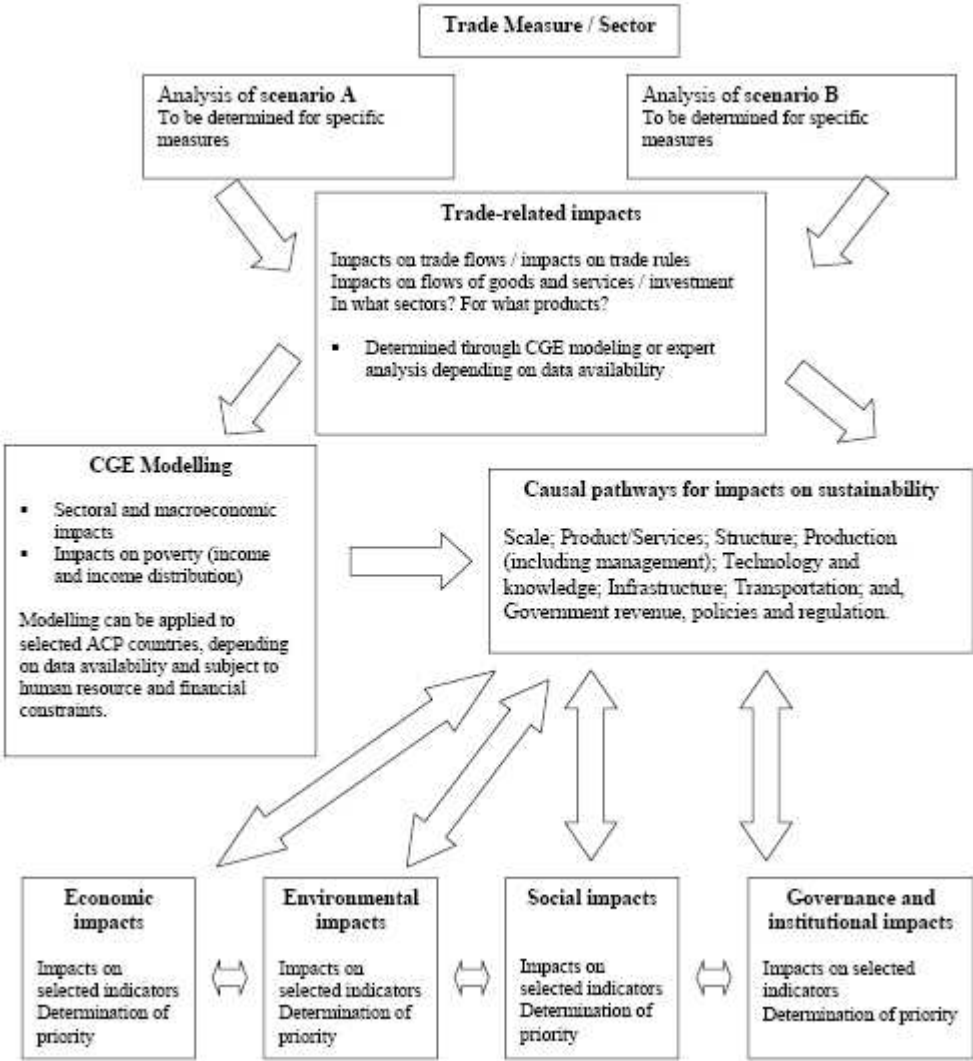
7.9 Annex 1. Procedure Used in the EU-ACP Trade SIA

Figure 1. Summary of the Analytical Approach



Source: Reproduced from PricewaterhouseCoopers. 2004. *Qualified Preliminary EU-ACP SIA of the EPAs: Phase One. Executive Summary.* p. 24. http://www.sia-gcc.org/acp/download/acp_eu_sia_2004.pdf.

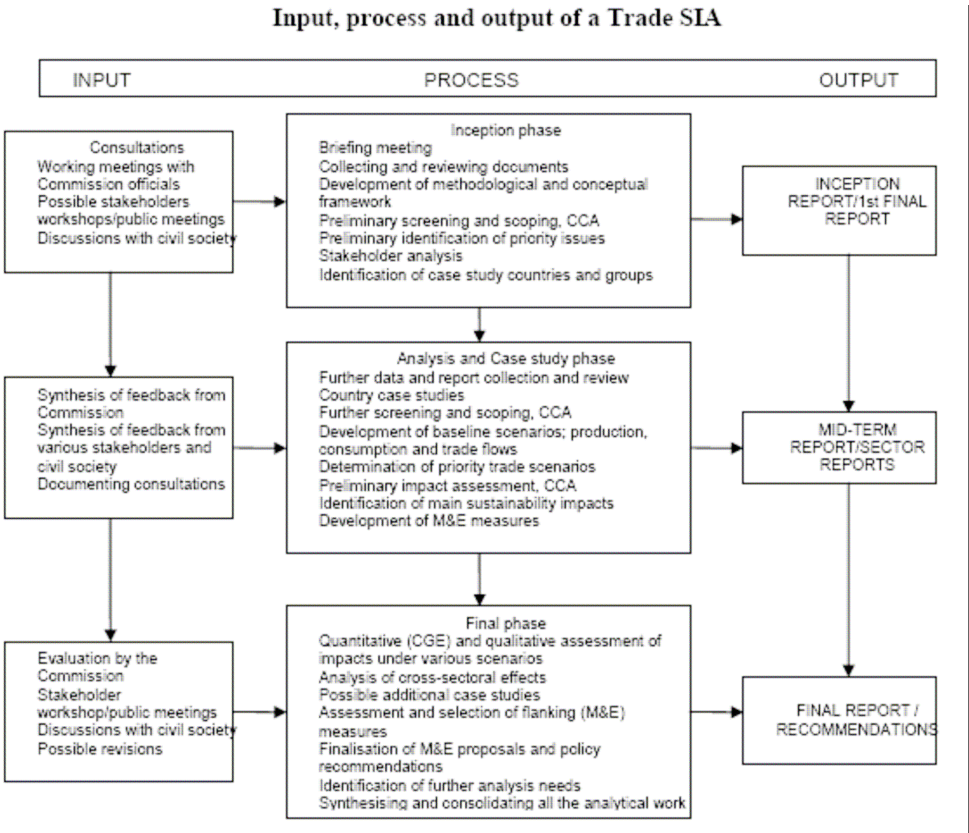
Figure 2. Illustration of the Analytical Approach for Trade-Related Measures



Source: Reproduced from PricewaterhouseCoopers. 2004. *Qualified Preliminary EU-ACP SIA of the EPAs: Phase One. Executive Summary.* p. 25. http://www.sia-gcc.org/acp/download/acp_eu_sia_2004.pdf.

Annex 2. General Procedure Used in Trade SIAs

Figure 1. Trade SIA flow diagram



Source: reproduced from European Commission. 2006. *Handbook for Trade Sustainability Impact Assessment*. p. 12. http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127974.pdf.

Figure 2. Trade SIA deliverables

What is the Trade SIA consultant expected to do?

- 1 **fine-tune the specific methodological framework** for each Trade SIA with a clear indication of the analytical and quantitative tools to be used.
- 2 **deliver an economic analysis of the projected results of the negotiations** underway, including on trade in services and issues regarding trade rules. This analysis should include impacts on trade, welfare, GDP and employment.
- 3 **carry out a preliminary assessment**, in the light of anticipated changes in trade and the economy, which presents an overview of sustainable development issues affected by the result of the negotiations and an indication of any further sector studies which appear to be called for. Identify areas of social and/or environmental stress or potential stress.
- 4 **carry out detailed sector studies** emerging from the preliminary overview. Analyse the expected magnitude of impacts and make appropriate use of qualitative and quantitative techniques.
- 5 **provide a final synthesis**, including suggested complementary policy measures (in the EU or in partner regions) or other adjustments that might be effective in tackling any adverse impacts of liberalisation, and/or in promoting its positive impacts.

Source: reproduced from European Commission. 2006. Handbook for Trade Sustainability Impact Assessment. p. 16. http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127974.pdf

7.10 Annex 3. Response of the European Commission to questions regarding the impact of the EU-ACP SIA

In October 2006, Ecologic contacted the European Commission (DG Trade) via email regarding the impact that the EU-ACP Trade SIA has had on negotiators' decisions and negotiating positions. The complete set of questions as well as the Commission's response appear below.

Questions

1. How have the findings of the EU-ACP Trade SIA been incorporated by negotiators and what impact has it had on their decision-making and negotiating positions?
2. What public information is available that documents these effects of the EU-ACP Trade SIA?

Response

Both EC and ACP negotiators will take the SIA recommendation into account. This is already foreseen by most of the joint EU-ACP road maps, which outline the plans and schedules for the negotiations with each of the six ACP regions. The findings of the SIA can also be considered by the regional preparatory task forces (RPTFs), which are responsible for looking at technical assistance and capacity building needs in relation to the negotiation and implementation of the EPAs. The SIA has already served as an important tool for communication with stakeholders. And stakeholders have had a real impact on the SIA. As an example, ESA negotiators were consulted on the proposal for the Phase II of the SIA, which involved looking at food crops in the ESA region. ESA negotiators were not in favour of this proposal and a decision was therefore taken to postpone the SIA of the ESA region to Phase III and to propose another sector for this analysis.

We are also ensuring links between the EC's SIA and those undertaken by individual ACP countries and ACP regions. The EC has a €20 programme for capacity building in support of the EPA negotiations, which has so far helped to fund around 40 regional and national ACP impact assessments. The Commission is keen to discuss the findings of these and other studies with our negotiating partners but it is up to the ACP to share their studies with us – the ownership of the studies are fully on their side. The EC's SIA will take into account those studies that have already been shared with us.

All reports of ACP SIAs Phase II exercises with SADC; ESA and Central Africa Phase III are available on the following web site:

http://ec.europa.eu/trade/issues/global/sia/studies_geo.htm#acp.

8 Finland: Climate Change Strategy

Name of the case study:

National Climate Change Strategy

8.1 Why this case was chosen

The Impact Assessment of the National Climate Change Strategy has several interesting aspects. The assessment itself is comprehensive and is a very good example on how to conduct an environmental assessment of a broad strategy, including some innovative approaches, such as the survey of attitudes towards climate change.

The assessment is not a RIA as such, as the assessment has been triggered by the Regulation transposing the SEA Directive. Consequently the assessment has a strong environmental focus and any economic or social impacts are assessed mostly in connection with environmental impacts.

8.2 Basic details of the Case

The selected case study is the impact assessment of the Finnish Climate Change Strategy. In 2003 the Finnish government decided to renew the earlier climate Strategy taking the contents of the EU emission trading Directive and the Kyoto mechanisms into account. It was decided that the renewed strategy would be presented to the Parliament in the form of a report. The strategy presents the Government's outline and measures for the future energy and climate policy.

The strategy gives an estimate of how the actions presented will affect the energy costs of energy uses, the State economy and other economic indicators, such as the GDP, the consumption expenditure of households, and employment.

The impact assessment report⁸² was launched in 2005.

8.3 The framework for the analysis

The assessment process applying to bills and other proposals, such as government resolutions and ministry decisions was established in 1998 in response to the Government's programme to improve the preparation of laws. The Finnish RIA requires all statutes to be appropriately assessed and monitored for their overall environmental impact.

⁸² SYKE (2005) Ympäristöarviointi kansallisesta strategiasta Kioton pöytäkirjan toimeenpanemiseksi, No, 802.

All bills submitted to the Parliament are required to include separate sub-chapters on environmental, economic and administrative effects. This assessment tends to be merely a formality and so far no bill has been returned from Parliament because of the lack of a proper assessment. Ex-post monitoring is the responsibility of each ministry⁸³.

The impact assessment of the selected National Climate Change Strategy case study differs from a typical RIA. The strategy did not trigger a RIA as it is not a piece of proposed legislation. Instead the environmental assessment was triggered by the SOVA regulation (which implements the SEA Directive), requiring an impact assessment to be conducted on plans and programmes. A full blown SEA was not required, as the strategy does not deal with permitting, but an impact assessment was required, which “to a sufficient degree” assesses the environmental impacts of a plan and programme. The assessment was required to cover the direct and indirect impacts of the National Climate Strategy within and outside the borders of Finland on:

- human health, living conditions and satisfaction;
- soil, water, air, climate, flora, fauna and biodiversity;
- infra-structure, material assets, landscape, urban landscape and cultural heritage;
- use of natural resources; and
- the interrelationship of the above.

Based on this requirement, the Ministry of Trade and Industry commissioned the Finnish Environment Institute to conduct the impact assessment.

Ownership of IA procedure:

The ministries have wide discretionary powers as to how the assessment is carried out, and individual ministries are not responsible for its execution to outside bodies. The Ministry of Justice and its Bureau of Legislative Inspection is perhaps the most relevant institution as it is responsible for monitoring the compliance of Ministries' RIAs. However, it has been widely recognised that this monitoring is not working well and that there is a clear gap between what is happening in practice and what is actually required. In terms of developing the RIA process the Ministry of Finance and the Ministry of Justice are the lead ministries in developing the RIA process (setting up working groups, etc.). All this, of course (being Finland), in co-operation with other ministries and stakeholders.

8.4 Case Context

Environmental aspects are an integral part of both climate change and energy issues. The Climate Change Strategy sets both environmental targets as well as drafts a range of scenarios up to 2025.

⁸³ Ervasti K., Tala J. And Castrén, E. (2000) *lainvalmistelun Laatu ja Eduskunnan Valiokuntatyö*, Publication 172, National Research Institute of Legal Policy, Helsinki.

There are no requirements as such to align policy proposals with the national sustainable development strategy or other environmental policy plans. Guidelines for the assessment of legislative proposals have been issued by the Council of State and intend to promote and support comprehensive expert assessment of the environmental impact of all new legislation. The EIA Act from 1994 requires that when an authority prepares a plan, programme or policy the implementation of which is likely to have a significant impact on the environment, its impact must be investigated and assessed to the necessary extent. This applies to policy on taxation, payments and subsidies and to the "EIA/SEA Directive sectors" .

These so called HELO-instructions establish the need for an assessment by reference to the different functions of legislation and their potential impacts. The guidelines also require that the various alternatives and their environmental impact shall be examined broadly and methodically, including the zero alternative. The HELO-instructions are complemented by separate instructions issued by Ministries.

The energy and climate policy in Finland is based on the national Climate Strategy adopted in 2001. In 2003 the Government decided to renew the Strategy, taking the contents of the EU emissions trading Directive and the Kyoto mechanism into account. It was decided that the renewed strategy would be presented to the Parliament as a report. The report was prepared under the Government's ministerial working group, chaired by the Minister of Trade and Industry.

The strategy covers the outlook of greenhouse gas emissions, implementation of Kyoto commitments, energy policy outlines and objectives, the use of energy by communities and buildings, objectives related to transport, the role of municipalities and the use of energy and climate policy steering tools

8.5 Aspects considered in the impact assessment

The Impact Assessment follows the structure of the National Climate Strategy and covers the environmental impacts of Kyoto commitments, energy policy aims and scenarios (secured energy supply, energy production efficiency, role of renewable energy and biofuels), energy use by buildings and societies, aims within transport, role of municipalities, the use of steering tools (environmental technology, taxes, emission trading, etc.). The assessment for these addresses several scenarios, steering tools, sectors and circumstances, mostly using a structure governed by a table format outlining:

- the main aims and operations
- The rationale for these
- The main environmental impacts

In cases where the topic area was also covered by the previous Climate Strategy 2001, the anticipated environmental impacts of the strategy were compared with what actually happened between 2001 and 2004.

The impact assessment is structured to focus on environmental impacts with only occasionally addressing social and economic impacts, such as potential economic gains

from environmental technology and the possible social aspects of directing spatial planning and housing towards more energy efficient solutions.

In separate chapters the report addresses the impacts the scenarios are likely to have on SO₂, NO_x and small particles as well as comparing the Finnish strategy with other national strategies implementing the Kyoto Protocol.

A questionnaire addressing greenhouse gas reductions and attitudes towards climate change formed an integral part of the assessment. The questionnaire was sent to the most relevant industry stakeholders and views from consumers were also invited. The assessment has covered comprehensively the different impacts on the environment. The level of detail is appropriate, reflecting the broadness and uncertainties inherent to this type of a strategy, which is looking far into the future. Baring this in mind it is also understandable and appropriate that impacts have not been quantified.

8.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁸⁴	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Good)</i> The trigger for the assessment is the Regulation transposing the SEA Directive and the focus is predominantly environmental, covering a wide range of scenarios, sectors and steering tools. The case study is a very good example of how to conduct environmental assessments of strategies, which are broad and look far into the future.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Good)</i> Environmental considerations are an integral part of the strategy.</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p><i>(Good)</i> Environmental considerations are considered in all options.</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - range of analysis: to what extent have environmental aspects been considered compared to other impacts? - depth of analysis: have environmental aspects been considered qualitatively or 	<p><i>(Good)</i> Social and economic aspects are only briefly discussed, more often addressing consequences of environmental impacts than any objectives of the strategy. Note that social and economic aspects have also been discussed in the National Climate</p>

⁸⁴ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

<p>quantitatively? (if quantified: monetarisation, physical quantification? Other forms?):</p> <ul style="list-style-type: none"> - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<p>Strategy itself.</p> <p><i>(Good)</i> The depth of the analysis is appropriate and reflects the uncertainties surrounding such long term strategies. An interesting aspect of the assessment is the questionnaires evaluating the attitudes towards climate change among industry stakeholders and consumers. As the policies of the strategy are far reaching and require a level of commitment and/or change of behaviour in the future, the inclusion of these opinions provide an extra dimension to the assessment.</p> <p><i>(Satisfactory)</i> No monetary estimations have been conducted on the strategy does use any formal tools apart from following the framework required by the regulation transposing the SEA Directive.</p>
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p><i>(Satisfactory)</i> Influenced some of the policies, but not in a radical way.</p>
<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p>Monitoring would be part of the more detailed programmes and not discussed in the strategy.</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p>The National Strategy itself has undergone several drafts, consultations and inputs from working groups. The impact assessment itself was commissioned by the Ministry of Trade and Industry from the Finnish Environment Institute. The Institute conducted a comprehensive survey of attitudes towards climate change and the reduction of greenhouse gases among stakeholders and consumers. These opinions formed a separate chapter in the impact assessment report. The findings of the impact assessment are summarised in the strategy.</p>

8.7 Influence on decision-making

The consideration of environmental impacts has been an integral part of the National Climate Strategy. The impact assessment focused predominantly on environmental impacts and was not part of an assessment of social and economic impacts. According to Mikael Hildén, who was one of the authors of the impact assessment report, the assessment influenced some issues in the strategy as well as the main findings being summarised in the strategy.

8.8 Lessons learned and Conclusions

The impact assessment was conducted on the policy approaches, scenarios, sectors and steering tools already identified in the National Climate Strategy. The assessment highlighted comprehensively the environmental impacts of these and contributed to some changes in the strategy itself. Many of the measures in the strategy were already environmentally friendly in themselves and it seems that the biggest influence of the assessment on the strategy was to further develop these.

The impact assessment is not a typical RIA, as it focused specifically on environmental impacts. That said, it is refreshing that types of RIA do exist that have a strong focus on the environment.

The assessment is also a very good example on how to conduct an environmental assessment on a broad strategy and would be easily transposed to other countries as well. An interesting aspect of the assessment is the survey of attitudes towards climate change among stakeholders and customers. This provides a very useful back drop to the possible hurdles or opportunities in the future implementation of the strategy, as many of the measures require support/commitment to be successful.

9 The Netherlands: Transport Policy

Name of the case study:

Transport policy

9.1 Why this case was chosen

The case was chosen because the Netherlands have a long-dating tradition of carrying out impact assessments for law projects and policies and the Dutch transport policy is a very recent and telling example of how these impact assessments work.

Transport policy is a key policy field, which has a variety of effects on the environment and is a main source of climate change. Contrary to industrial activity⁸⁵, the field of traffic has not yet been subjected to an integrated environmental legislation at the European level. An extensive impact assessment of the traffic policy can therefore be an effective tool to render transport more ecologically sound.

Hence, the fact that transport policy is concerned, was one reason for the choice of this case study. Dutch politics have traditionally been sensitive to environmental matters. Also in the field of regulatory impact assessments including impact assessments of policies which are a kind of self-binding obligation for the Dutch government is suited to set a best-practice example.

The example has been proposed by Mr. Kees Vijverberg, an official of the Dutch Ministry for the Environment.

9.2 Basic details of the Case

Country: The Dutch Transport Policy has been formulated in the Netherlands at the national level. Therefore also the impact assessment has been carried out at the national level.

Issue: The Dutch **transport policy** does not constitute a law but lays down the basic principles in this policy area to be respected by the national government. The policy was published in November 2004.

The impact assessment reports were commissioned by the Ministry of Transport and have been carried out by the Dutch National Environmental Assessment Agency and the Bureau of Economic Policy Analysis.

Subject and Basic details of the Dutch Transport Policy: In November 2004 the Minister of Transport, Public Works and Water Management presented a **Mobility Policy Document**

⁸⁵ For example Directive on Integrated Pollution Prevention and Control (IPPC Directive) and a series of sector directives laying down clear environmental requirements for the respective industrial activity.

(in Dutch “Nota Mobiliteit”) which outlines the traffic and transport policy until 2020. The policy aims to improve the fluency of traffic, even if this results in an increase of traffic. A free-flowing traffic system is regarded to be vital for a robust economy and a strong internationally competitive position of the Netherlands. The transport system should guarantee an acceptable and predictable travel time from place A to B, for both commercial and passenger transport. These objectives not only apply for road traffic, but also for the railways and the inland waterways.

The Mobility Policy Document is in line with the Spatial Planning Policy Document for traffic and transport, and has been drawn up in consultation with local and regional government. Similar to the Spatial Planning Policy Document, the central focus is on strengthening the economic structure.

Inter alia, there is an extensive chapter on **pricing policy**. Not all ambitions for the roadways as intended in the Policy Document can be achieved with public or private investment alone. A pricing policy is deemed to be inevitable to further the aims of the Policy. That is why a platform has been established to investigate the possibilities of paying for the use of a car, instead of for its ownership. A precondition for the introduction of a new pricing system is broad public support. The platform published its recommendations in mid-2005.

Date the impact assessment was released: The impact assessments were done in 2004 and 2005 by the Dutch National Environmental Assessment Agency and the Bureau of Economic Policy Analysis. The most extensive impact assessment report was rendered in November 2005. This report will be mainly referred to in this case study.

9.3 The framework for the analysis

Why the impact assessment was carried out. There is a mandatory procedure in the Netherlands to subject draft legislation to an impact assessment, more precisely to an economic and an environmental check (there is also an obligation to carry out an enforcement and feasibility test). These environmental, business and feasibility effects must be significant; if they are not significant, which needs to be proved, these tests are not mandatory. For this purpose, in March 2003 the so-called Helpdesk for Draft Legislation was founded. This Centre helps and checks the information on environmental, business and feasibility effects provided by the initiating departments. The Ministry that makes the legislation is responsible to give information on these effects. The Ministry for Economic Affairs and the Ministry for the Environment and the Ministry of Justice founded the former Joint Support Centre for Draft Legislation, now called the Helpdesk on Draft Legislation. These departments - within the helpdesk - carry out the check on data needed to assess any intended or unintended effects of proposed legislation.

While these checks are applied to draft legislation, it is not in every case applied for new broad and future-oriented policies.

Assessment of policies in the Netherlands. Policies are assessed in a more informal fashion. The department responsible for the policy decides if to carry out any kind of impact assessment or not. They know that if information related to the proposed legislation is not correct it could lead to problems in the Cabinet and there is the risk of delayed decision-

making or, even worse, no decision-making on the proposed policies which need a Cabinet's decision on it. The impact assessment, thus, is done on a voluntary basis.

The Ministry primarily responsible for the policy decides if an impact assessment is done. Some departments do it on their own, some departments contract consultants to do it, or studies are carried out by scientific organizations like the Dutch National Assessment Agency, the Bureau of Economic Policy Analyses or other bureaus with a standard and reputation in impact assessments.

Some policy impact assessments follow (elements of) the procedure and methodology of law assessments, as the E-test (Environmental Test) or Business Effects Test or follow (elements of) the EIA-procedure of the Environmental Act (based on the EU directives for EIA or SEA).

The focus of the IA procedure. As mentioned above, there is a formal IA procedure for laws (Recommendations for making legislation – Aanwijzingen voor de regelgeving), these are guidelines for the Departments. The impact assessment also serves the aim to prevent over-regulation for businesses etc. Broader policies, which do not constitute draft legislation are often assessed from an environmental and an economic point of view, in the case of the Dutch transport policy described in this study, the policy was assessed by the National Environmental Assessment Agency and the Dutch Bureau of Economic Policy Analysis. The former carried out the environmental impact assessment (but also looked at socio-economic matters such as growth of traffic, traffic security, etc.), the latter the economic impact assessment.

Integration of impact assessments. In the general Dutch impact assessment procedure, the impact assessment examines environmental, economic and social effects jointly. This is also the case with the Transport Policy.

The impacts of new policies on transport volumes (car kilometres, freight kilometres et cetera) were estimated by the Dutch Transport Research Centre. The conclusions on the impact on environmental indicators established by the Environmental Assessment Agency was furthermore used by the Dutch Bureau of Economic Analysis in their welfare analysis of new Dutch transport policies.

History of the IA of the Transport Policy: In November 2004, the Dutch Government released the Policy Note on Mobility (Nota Mobiliteit). In September 2005, the Dutch Ministry of Transport presented the outline of its policy for improving traffic flows and journey time reliability. Over the period between November 2004 and November 2005) the **National Environmental Assessment Agency** produced three studies dealing with the environmental dimension of the Dutch Transport Policy Note.

- November 2004: a quick scan of environmental impacts of the policy proposals in the Note on Mobility;

- May 2005: a statement on the Environmental Impacts of a proposed new system of Road Pricing⁸⁶;
- November 2005: an Environmental Impact Assessment of the Note on Mobility, particularly of the Extension of Infrastructure and Road Pricing proposals.

The **Dutch Bureau of Economic Policy Analysis** dealt with the economic dimension of the Policy Note on Mobility, especially the issue of road pricing, in November 2005.

The Impact Assessment was published after the Ministry published their note, but before Dutch Parliament decided to accept/reject/adapt the policy plans proposed in the note. In this way, the IA assessments could and have been used in the political debate.

Institutional ownership of the IA procedure. The impact assessments were commissioned by the Ministry of Transport. There was no authority “co-ordinating” the impact assessments.

9.4 Case Context

Environmental context. Transport is an issue which is to a large extent ecologically sensitive. The emissions caused by transport contribute importantly to global warming and can cause health problems. The problem of fine particles contained in traffic exhaust is a problem widely known in many large cities. Moreover, the noise caused by traffic might be a problem for both the population living alongside heavy traffic routes as well as for the fauna in woods or other spots next to much traffic.

Basically, there is a conflict of interest between the desire of the population and industry for unrestricted mobility and the environmentally and socially motivated aim to minimise traffic and the traffic-induced emissions. In order to reconcile those two counteracting objectives, the political actors will be well advised to optimise traffic flows and the mode of traffic including improvement of public transport offers, improvement of emissions abatement, etc.

As a result, the field of transport is highly ecologically relevant but at the same time conflicting interests exist and need to be reconciled. Given the fact that the transport sector has so far not been subjected to an integrated European regulation, a national impact assessment including the assessment of environmental effects is very important.

Political context. In the Netherlands, a general requirement exists to integrate environmental objectives in policy areas other than environmental policy areas.

But there is no requirement to align policy proposals with the national sustainable development strategy or an environmental policy plan but it might be smart to try to align such plans. For all sorts of plans with potential environmental impact a Strategic Environmental Assessment is mandatory. This is based on the Environmental Act and the EU SEA-directive for plans and programmes since July 2004

⁸⁶ It has not been decided yet if and how road pricing is going to be introduced in the Netherlands.

Another factor determining the consideration of the environmental dimension in impact assessments in this case context is the Cabinet itself. If a policy plan requires a Cabinet's decision, all effects should be taken into account. The decision making is up to the Cabinet and the ministers. If they attach more importance to economic effects instead of environmental issues they have to explain why to Parliament and society why they made this decision.

9.5 Aspects considered in the impact assessment

The impact assessment included four reports, three on environmental impacts, one on the economic impacts. So, the impact assessment evaluated both socio-economic and environmental impacts.

The Report "Effecten beleidsinstrumenten van de Nota Mobiliteit" (Effects of political measures of the Mobility Policy) of November 2005 is the most exhaustive report on the impacts of the Nota Mobiliteit dealing with socio-economic and environmental aspects and will be described in detail. It has been completed by the Environmental Assessment Agency and is deemed as the background document for the Policy. The following issues have been covered:

SOCIOECONOMIC ISSUES:

Effect on the amount of road-based traffic. The report projects that traffic would rise in the Netherlands without further political measures approximately by 35 %. The "Nota Mobiliteit" (Transport Policy) stipulates the extension of the main road net and the introduction of a traffic charge (kilometre charge of time/space-related charge). This latter measure will reduce the growth of traffic at least in the field of private traffic, however commercial traffic will increase due to the more fluent traffic induced by the extension of the main road net. In contrast to private traffic, the traffic charge will thus have almost no effect on commercial traffic. It is said that companies are not as sensitive to such charges as e.g. private commuters. As for the latter, the traffic-charge will reduce the kilometres attributed to commuters by 8% (p. 17).

A combination of a traffic charge based on consumed kilometers and based on space / time will reduce the growth of traffic even more.

Duration of journeys. The duration of the journeys would increase if the present transport policy were continued. Due to increased traffic, traffic jams would increase up to 30 % till 2020. Based on the policy measures in the "Nota Mobiliteit", i.e. the extension of the national road network, traffic jams would decrease up to 50 % and hand in hand with this also the duration of journeys, the average shortening would be 6 %.

Availability of roads. The improvement of the fluency of traffic and the "availability" of roads will be fostered by a combination of the extension of the road-net and the introduction of a traffic charge. A traffic charge based on the consumption of kilometres will improve the availability of roads but will be less effective than a traffic charge based on time and space, which will contribute to decharging much-used roads.

Public Transport. Public transport will increase by 10 % as compared to the situation in 2000. This is due to the generally increased traffic – to be expected also without the measures stipulated in the “Nota Mobiliteit” – and the instruments of the traffic charge, which induces especially commuters to consider other modes of transports than private cars.

Security of Traffic. The measures also contribute to the security of traffic. Especially the fact that the “Nota Mobiliteit” stipulates that the extension of the road network is likely to contribute to the fluency and the security of traffic.

ENVIRONMENTAL ISSUES:

Air quality. The report recognises that the **CO₂-emissions** will increase till 2020. I.a. the extension of the network of national roads will contribute to a slight increase in traffic and hence CO₂-emissions. On the other hand, the introduction of a traffic charge might restrain the growth of these emissions up to 5%. Another additional measure to limit the growth is the use of biofuels for transport.

Also **NO_x-emissions** will increase slightly with the extension of the national road network. New European legislation (Euro-5) for private and commercial vehicles will, however, contribute to a reduction of NO_x-emissions (up to 8% compared to the year 2000). The introduction of the traffic charge will further reduce NO_x-emissions.

The issue of **fine particles** is also treated in the report. It is recognised that the emissions of fine particles will increase till 2020 along with the increase of the amount of traffic. However, new European legislation setting limits to fine particles emissions, the introduction of new filters by car fabricants and the traffic charge will contribute to a decrease of fine particles after 2010. It is also said, however, that alongside roads boasting much traffic, the decrease of fine particles will be limited because the aforementioned European legislation concerns only private cars and not commercial cars (lorries, etc.)t and the concentration of fine particles is also determined by other sources in the Netherlands and abroad and.

Noise. The report also elaborates on the effects of the transport policy on people living near roads with much traffic. It is said that the number of flats devaluated by noise due to traffic will decrease. This is because the roads will all be provided with a certain kind of concrete that minimises noise. The noise will also decrease after 2010 if this kind of building is also used for the extension of the national road network.

The other documents draw similar conclusions.⁸⁷

⁸⁷ An overall check for the was done in the 2004 report “**Environmental Impacts of the Dutch National Transport Policy Document**”. In this document the environmental impacts of congestion and kilometre charges were examined. The report asserted that these charges would improve accessibility and reduce environmental impacts due to road traffic, however, could not elaborate on the extent of any environmental benefits. This would depend on the concrete design of the charges. Concerning the proposal of the policy to expand national roads financed by public funds the report found that would discharge the motorways. The assessment report recommended that more research be done in every single case to assess the local social and environmental impacts of such an expansion. Finally, further research on giving priority to infrastructure projects within the proposed infrastructure investment in

Level of Analysis. The most important environmental effects caused by traffic (emissions into air and noise) are analysed and concrete figures about the previewed increase or decrease of emissions are given.

9.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁸⁸	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Good)</i> As transport policy has many environmental effects, the Transport Policy has taken into account environmental measures, such as the traffic charge, measures against noise, etc. This does however not conceal the fact that the main motivation of the Transport Policy, however, is to meet economic and mobility needs.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Satisfactory)</i> Private and commercial traffic will be charged for the consumption of roads and emissions (Traffic charges).</p> <p>The debate is going on with regard to the question whether the traffic charge rather intended to burden car-users with the investments into road construction or whether it is rather an environmental measure. On the one hand, the objective of the road charge proposal is trying to decrease congesting levels by making car use more expensive and car</p>

combination with pricing policies is recommended. Combinations of pricing and expanding existing infrastructure may reduce the need to construct new motorway links, reduce negative impacts on nature conservation areas and rural landscapes, and result in higher net economic benefits.

The economic effects analysed in the report “**Enkele effecten van de Nota Mobiliteit deel III**” by the Dutch Central Planning Bureau examined the investment programme in national roads (not motorways). The report concluded for this matter that it would lead to a positive effect on private traffic and the transport of goods. Overall, the quickness of traffic would be accelerated 1,9% on all roads. However, the report also projects an overall increase of 2,9 % of all road-based traffic and warns about effects of environment and the effects of additional noise. The report also examines the effects of roadpricing. As the Dutch government has not yet made clear what the design of the roadpricing would be the Central Planning Bureau has abstained from assessing it in detail.

⁸⁸ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

	<p>ownership less expensive. However, in defining charge levels per kilometre driven environmental considerations can be taken into account (heavier cars higher charges, Euro 5 cars lower charges etcetera). In the current Dutch debate on the way the charges will be implemented these possibilities are indeed considered.</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p>(Good) The reports assess the different impacts always with regard to different options of transport policy.</p> <p>The assessment report basically opposes the effects of current policy to be continued and the effects of the implementation of the measures of the Transport Policy Note. Moreover, there are two options of implementation of the measures of the Transport Policy Note: there is the possibility of a more extensive or a less extensive extension.</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - Range of analysis: to what extent have environmental aspects been considered compared to other impacts? - Depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?): - Cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - Use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<ul style="list-style-type: none"> - (Good) The environmental aspects were considered as intently as the aspects concerning amount of traffic, accessibility of roads and traffic security. - (Satisfactory) The report analyses environmental effects quantitatively. However, there is no direct comparison between quantified economic and environmental effects. - In the reports of the Environmental Assessment Agency the environmental impacts of the policy proposals are considered. The Economic Policy Bureau (CPB) has carried out a Cost-Benefit-Analysis for the road charging scheme. In this CBA they have monetised the environmental impacts (based on Environmental Assessment Agency data). - There is no formal tool for

	environmental impact analysis of policy plans. There is a Dutch CBA guide since 2000.
Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?	<i>(Unsatisfactory)</i> Rather not considered Final choices of preferred policy proposals seem mainly based on congestion impacts.
Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?	Environmental impacts of transport are monitored closely each year by the MNP. In these yearly monitoring/evaluation reports impacts of new policies are taken into account.
Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?	Studies were commissioned by the Government but no formal stakeholder involvement.

9.7 Influence on decision-making

The final impact assessments reports have been used in the political debate (in Dutch Parliament). In this debate the Ministry had promised to speed up the research on implementation of kilometre charging (how to implement a scheme and what kind of scheme). This is mainly due (in my view) to lobbying of different groups in society (from environmental NGO's to business representatives, which discussed the advantages and disadvantages of kilometre charging in a special committee and finally decided to be in favour. So, they were disappointed that the original policy plan was somewhat vague on implementation of kilometre charging). However, the impact assessment reports which showed economic and environmental advantages of the kilometre charges might have helped this lobby.

The analysis of environmental impacts was considered alongside any analysis of economic impacts, as there is an integrated assessment of environmental and economic impacts in the impact assessment by the Economic Assessment Agency. Integration took place in a welfare analysis (CBA).

Given the fact that the Transport Policy is not an originally environmentally motivated policy, the environmental aspects did not have priority over the economic and social aspects. The main objective of the policy was to foster the fluency of the traffic. Still, environmental effects

were considered to a large extent because of the general Dutch policy of integrating environmental aspects into other policy fields.

All in all, the impression prevailed that the environmental impacts have not played a major role in the debate. However, the relatively favourable environmental impacts of the kilometre charging proposal have been used in the debate to support the importance of this proposal.

9.8 Lessons learned and Conclusions

The main public institutions for economic and environmental assessment have been consulted and contributed their knowledge to the development of the policy. The reports have been rendered public so that they can contribute to the public debate.

There is indeed evidence that analysis of environmental issues promotes better integration of environmental concerns into other policy areas, the Netherlands have a long tradition of taking into account environmental matters. Especially they are interested in introducing a traffic charge that aims at charging road users precisely.

One of the main factors that have motivated the impact assessments is the fact that the Netherlands have a very sophisticated system of policy assessment, which is applied for law projects as well as in some cases for policies. Hence, there is a tradition to examine policy proposals before they are enacted and implemented. Also there is a long-standing tradition in the Netherlands to integrate environmental concerns into other policy fields.

The assessment procedure has included the examination of environmental impacts of the policy proposals, however they have not played a major role (see above) in the final political debate.

Furthermore, no factual and procedural barriers in other policy areas have been reported.

10 Spain: Biofuels

Name of the case:

Biofuels

10.1 Why this case was chosen

Biofuels are a very topical issue in the European Union and in Spain. Spain intends to make itself more independent of energy imported from other countries. Therefore it strives to enlarge the proportion of renewable energy. The promotion of biofuels is not a purely environmental issue but has an important economic dimension, the production of energy. Yet, the production of energy from biofuels has important positive as negative environmental implications, ranging from curbing greenhouse gases to soil erosion and emissions from biofuels being transformed into energy.

Spain has carried out a series of impact assessments referring to the **socio-economic** and **environmental** impact of the enhanced use of biofuels. Some studies were independent of the EU biofuels Directive, some support the implementation of the objective of this Directive.

The EU-biofuel Directive requires that at least 2 % of all fuels used for transport purposes are biofuels. In Art. 3 No. 4 the Directive states that the Member States should consider the overall climate and environmental balance of the various types of biofuels and other renewable fuels and may give priority to the promotion of those fuels showing a very good cost-effective environmental balance while also taking into account competitiveness and security of supply.

Among the impact assessment studies in Spain, an important number have been carried out by the publicly owned “Centro de Investigaciones Energeticas, Medioambientales y Technologicas” (CIEMAT).⁸⁹

Some studies were done before the EU Biofuel Directive was enacted and dealt predominantly with economic factors of the extended growth plants to be used for the production of biofuels.⁹⁰

The following case study concentrates on the studies done after coming-into-effect of the EU Biofuel Directive carried out by CIEMAT.

⁸⁹ In this report not all activities with regard to biofuels can be enumerated and analysed. The report will concentrate on the reports done with close connection to the EU Biofuels Directive.

⁹⁰ For example: *NTB-NETT ALTENER Programme Study* both carried out by CIEMAT and *study of the characteristics, available resources, suitable methods for biomass production and harvesting, and of the biomass behaviour as fuel in order to improve the techno economic viability of its clean utilization in energy processes* and also the CIEMAT (2000) public research institute.

10.2 Basic details of the Case

Country: Spain

For which type of policy decision has the impact assessment been conducted:

The impact assessments have been conducted to support the Spanish Ministry of the Environment to implement the EU Biofuel Directive and to formulate its renewable energy policy/plan.

The purpose of this was to quantify the environmental impacts resulting from the production and use of certain biofuels in transportation, via an exhaustive analysis of emissions, energy and utilisation of natural resources throughout the production process.

A life cycle assessment has been done i.a. concerning:

- Biodiesel: Environmental benefits of production and use in Spain (2006);
- Bioethanol: Comparative life-cycle analysis between bioethanol and gasoline.

Subject area of legislative act / legislative area: energy policy, field of renewable energies. The area of interest is the implementation of the EU Biofuel Directive.

Basic contents of the law / ordinance / policy: The impact assessments with regard to the use of biofuels to produce energy, support the Spanish Ministry for the Environment to design a renewable energy policy which also aims at implementing the objectives of the EU Biofuel Directive.

The Biofuel Directive requires that at least 2 % of all fuels used for transport purposes be biofuels. In Art. 3 No. 4 the Directive states that the Member States should consider the overall climate and environmental balance of the various types of biofuels and other renewable fuels and may give priority to the promotion of those fuels showing a very good cost-effective environmental balance while also taking into account competitiveness and security of supply. The Member States are free to select the instruments by which they opt to further biofuels.

The Spanish Renewable Energy Plan covering the period between 2005 and 2010 was adopted in August 2005. The quantity of energy based on biofuels exceeds the requirements of the EU Biofuel Directive (Spanish Renewable Energy Association, 2006).

Date the impact assessments were released: 2005/06.

10.3 The framework for the analysis

Why the impact assessment was carried out. A general mandatory impact assessment procedure for laws/policies in general does not exist in Spain.

As regards the implementation of the EU Biofuel Directive, the directive states that the Member States should consider the overall climate and environmental balance of the various types of biofuels and other renewable fuels and may give priority to the promotion of those fuels showing a very good cost-effective environmental balance while also taking into account competitiveness and security of supply. Hence, the very detailed impact

assessments might – at least partially – be due to the requirements of the Directive but might also be intended to help Spanish policy identify best practice options for the use of biofuels.

It was expressly mentioned in the report of “Life Cycle environmental benefits of biodiesel production and use in Spain” that the assessment was carried out in order to support the Spanish Ministry of the Environment in its biofuels promotion policies. The report referred to the Spanish Renewable Energy Plan 2005-2010 and the EU Biofuels Directive.

Are environmental assessments integrated with economic assessments?

The CIEMAT-studies mentioned above only take the environmental effects of certain biofuels into consideration.⁹¹

The IA procedure. There is no formal procedure how to carry out impact assessments in Spain.

Life cycle analyses have been carried out with regard to Bioethanol and Biodiesel. The environmental impact assessment has been done according to the standardized methodology for Life Cycle Assessment, in accordance with the international standards series UNE-EN-ISO 14040-43.⁹²

⁹¹ There have been studies by CIEMAT and other institutions analysing the economic and social effects of an extended growth of biocrops even before the directive was passed. The aim of the NTB-NETT ALTENER Programme study (CIEMAT, 2000) was: ‘to provide an assessment of the possibilities and costs for the production of liquid biofuels in the EU, considering the profitable agricultural production of raw materials, and the effects on the final prize of the TPP (tax on carburant) and the externalities costs’ . In order to achieve the above objective, the following activities were developed:

- Determination of the production costs of agricultural raw materials for biofuels production, assessing the opportunities for its production in the EU countries.
- Definition and evaluation in economic terms, of the social costs (externalities) of liquid biofuels and the corresponding fossil fuels, defining the gap that may exist between the social costs of both type of fuels in particular utilization conditions. In this stage only the air emissions in the LCA of fossil and renewable biofuels has been considered
- Determination of the biofuels production costs, assessing the effects that the externalities and the TPP may have on their competitiveness with fossil fuels.

However, so far, there is no integrated study which takes into account all environmental, social and economic effects of the extended growth of biofuels.

⁹² These standards lay down certain formal and procedural standards for Life Cycle Assessments, which are intended to ensure that the LCA are all done in a comparable and transparent manner. The ISO norms 14040-14043 require i.a. the precise definition of the scope, the objective and the target group of the LCA, an inventory data analysis, and a life cycle impact assessment. The results of the LCA shall furthermore be submitted to a sensibility check. The purpose of this check is to assess the reliability of the final results and conclusions by determining whether they are affected by uncertainties in the data, allocation methods or calculation of category indicator results, etc. A critical examination of the assessment’s structure and the conclusions by a group of independent experts is required by ISO 14040 as well. Even though this report did not in detail examine the biofuel-LCA’s compliance with these ISO normes, the basic requirements are certainly fulfilled. The LCA study has two chapters that outline exhaustively the objective and the scope of the study (p. 7-9), it carries out an inventory analysis (p. 20ff.), a life cycle impact assessment (results p. 67ff.) and a sensibility test of the results (p. 77ff.) and includes the members of the “critical group”, which have examined the report (p. 18).

The purpose of this activity was to quantify the environmental impacts resulting from the production and use of biofuels and other clean fuels in transportation, via an exhaustive analysis of emissions, energy and utilisation of natural resources throughout the production process.

Spain plans to continue analysing the environmental impacts of the production and use of alternate fuels which are considered to have the greatest short and mid term potential in the European directive.

The impact assessments have been commissioned by the Ministry for Environment and carried out by CIEMAT, a public research body delegated to the Ministry of Education and Research.

10.4 Case Context

Environmental context. Energy policy is closely linked to the environment, energy production has significant environmental effects. Also the substitution of fossil fuels by biofuels might have some negative environmental effects (for example soil erosion and decrease of fertility due to extended growth of the same plants/monocultures etc.). Spain is the leading country in the EU to produce bioethanol in the energy sector. Hence, Spain has an interest in promoting biofuels.

As a consequence, there is no antagonism between energy policy and biofuel policy because Spain strives to increase its independence from energy fuels that have to be imported from other countries. However, there might be negative environmental effects triggered by the increased growth of biofuel plants.

Integration of impact assessments. So far, there has not been any requirement in Spain to integrate environmental concerns at government level for other policy areas. The OECD⁹³ has observed that the integration of environmental concerns into other policy areas has improved in Spain but proposes to

- further strengthen policy co-ordination and integration among all levels of government as an important component of achieving environmental objectives;
- develop strategic environmental assessment (SEA) of sectoral programmes and plans with appropriate public participation; in particular, integrate further environmental considerations in agricultural policies and physical planning;
- at project level, continue and further strengthen the use of environmental impact assessment (EIA);

⁹³ <http://www.oecd.org/dataoecd/39/31/33843571.pdf> (20 July 2006).

10.5 Aspects considered in the impact assessment

Study on bioethanol

The life cycle analysis of bioethanol compared the environmental benefits of the E85 mixture (85% ethanol and 15% gasoline) compared to the E5 mixture (5% ethanol and 95% gasoline) or 100% gasoline (95 octanos).

The impact assessment identified the E85 mixture as the best option with regard to

- **Energetical balance:** The type E85 saves 17% of primary energy in its production compared with the 100%-gasoline, the E 5 type only 0,28%. The type E 85 saves 36 % of fossil energy as compared with gasoline, the E 5 type 1,12%;
- **Climate change:** The type E 85 reduces 90 % of CO₂ emissions and 70% of green gases as compared to gasoline. The E5 type 4% and 3% respectively. A mixture of E 85 and E 5 in the transport system will result in a reduction of 5,63 % of CO₂ emissions if all cars use E 5 and 1,050,000 cars are produced that can be run with E 85. However, it is also noticed that NO_x-emissions can rise due to the massive growth of biocrops.

In the study of CO₂- balance in the production of electricity using energy crops, a methodology has been established for the evaluation of CO₂ and other green house effect gases.

Study on biodiesel

The life-cycle analysis has compared the environmental impacts of different **blends** of biodiesel from crude vegetable oil or waste vegetable oil with diesel EN-590 as opposed to EN-590 diesel alone.

- **Energy:**The study focused on the energy use and efficiency. One of the study's main results was that the higher the amount of biodiesel in the blend, the less fossil energy was needed to produce the fuel. The production of biodiesel from crude vegetable oil saves 1,42 MJ of fossil energy per km driven compared to the production of diesel EN-590, which amounts to a saving of 77 % fossil energy. Besides this fact, biodiesel production from waste vegetable oil saves 1,64 MJ per km driven (approx. 87%).
- **Climate change:** In terms of CO₂-equivalents, the production and the use of pure biodiesel from crude vegetable oil avoids the emission of 88g CO₂ per km driven compared to production and use of diesel EN-590. This fact implies a 55 %-saving. In the case of pure biodiesel from waste vegetable oils, its production and use avoid the emission of 128 g CO₂ equivalents per km driven. The blend of biodiesel from crude vegetable oil can lead to a 8g-decrease, the blend of biodiesel from waste vegetable oils can lead to a 12g-decrease per km driven.

Level of Analysis. Mainly the issue of energetic balance and the effects on climate change were covered in the studies.

10.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ⁹⁴	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Good)</i> Life cycle assessments have been carried out in order to detect environmental benefits or deficiencies of the different biofuels.</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Good)</i> It is the purpose of the Spanish Renewable Energy Policy to foster biofuel-based energy as a way of implementing the EU Biofuel Directive in Spain</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p>Yes. The studies considered in this report compare the use of biofuel-based energies with the use of purely fossil energies. .</p>
<p>Impact analysis:</p> <ul style="list-style-type: none"> - range of analysis: to what extent have environmental aspects been considered compared to other impacts? - depth of analysis: have environmental aspects been considered qualitatively or quantitatively?(if quantified: monetarisation, physical quantification? Other forms?): - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<p><i>(Good)</i> The studies only take into account environmental aspects. There have been other studies dedicated to the socio-economic aspects.</p> <p><i>(Good)</i> Quantitative Data has been given as regards the energetic balance and the biofuels' effects on climate change. .</p> <p><i>(Unsatisfactory)</i> in the environmental analyses no.</p> <p>A life cycle has been carried out.</p>
<p>Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p>There has not been any "final" choice yet.</p>

⁹⁴ See also: IEEP (2005): Workshop on Best Practice in Analysing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p>No.</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p>A critical review process of the Life Cycle Analysis (LCA) study has been done. A critical review group was created which included external LCA experts as well as representatives of the interested parties.</p>

10.7 Influence on decision-making

The studies on biofuels described in this report were commissioned by the Spanish Ministry for the Environment specifically to support the Ministry in formulating and pursuing its Renewable Energy Policy. The study about gasoline and biodiesel was carried out in the framework of the Action plan for transport (2005-2010) in order to assess the possible benefits that derive from the substitution of gasoline and diesel.

On the other hand, the studies described in this report were finalised after the Renewable Energy Plan 2005-2010 was published. So the studies will rather have an effect on the details of the Energy Policy put into practice and will to a lesser extent alter the basic guidelines of Energy Policy.

Furthermore, the analysis of environmental impacts were not considered alongside any analysis of economic impacts. So far there has not been any integrated study covering socio-economic and environmental aspects. However, the Renewable Energy Plan 2005-2010 includes basic environmental (e.g. reduction of CO₂-emissions) and economic aspects of each type of renewable energy.

So far, there is no evidence, whether the analysis of environmental impacts did influence the policy choice as the studies are of too recent date in order to assess their effects on public policy. However, it can be argued that since the impact assessments were funded by the Ministry of the Environment, they will be taken into account in the coming years.

10.8 Lessons learned and Conclusions

The Ministry of the Environment has commissioned studies in order to assess the environmental benefits of the different kinds of biofuels and energy resources derived from biofuels. By so doing, the Ministry intends to base its decisions with regard to Renewable Energy Policy on scientific reasoning.

The studies carried out by a publicly owned institute will certainly play a role in the further formulation and/or concrete implementation of a Renewable Energy Policy in Spain. The studies have compared different energy resources based on biofuels and presented conclusions as to which energy resource is the most environmentally sound. It can be assumed that the Ministry of Environment will take into account these conclusions in its further pursuit of Renewable Energy Policy.

The Ministry for the Environment wants to base its Renewable Energy Policy on scientific findings with regard to biofuels. Hence, the Ministry does not want to promote “renewable energies” as such but to identify those which are most environmentally friendly.

11 UK: Cross-Compliance in Agriculture

Name of the case:

United Kingdom: Establishment of cross-compliance conditions in agriculture

1. Final Regulatory Impact Assessment for Options for the Implementation of cross-compliance – Good agricultural and environmental condition – DEFRA 9 July 2004
2. Regulatory Impact Assessment: the Common Agricultural Policy Single Payment and Support Schemes (Cross- Compliance) (England) Regulations 2005 – SI 2005/3459

11.1 Why this case was chosen

This is an example of an impact assessment of an agricultural policy measure with obvious environmental impacts. As part of the implementation of cross-compliance in England – ie the establishment of environmental and other conditions attached to the receipt by farmers of their Single Farm Payments – standards need to be set for how farmers should maintain their farmland in ‘Good Agricultural and Environmental Condition’ (GAEC). The scope and stringency of these standards have clear implications for economic costs (on farmers and the administration); their distribution between different farm sectors; and the type and level of benefit to the environment.

Agriculture is a sector subject to a very high level of government regulation and supervision, with some consequent benefits in terms of data collection.

These are two related Regulatory Impact Assessments (RIAs). RIAs have been required in the UK since 1998 for any proposal which imposes or reduces costs on businesses, the public sector, charities and the voluntary sector. Originally RIAs were essentially an economic cost-benefit tool, but over time they have been required to incorporate other types of impacts – including, since April 2004, the consideration of environmental and various social impacts.

The case study is an interesting example of :

- The unequal emphasis given to environmental benefits as compared to economic costs;
- The technical difficulties in identifying and quantifying detailed environmental impacts;
- Undertaking separate RIAs for options, and for detailed implementing measures – and the relationship between them;
- The implications for impact assessments at Member State level of implementing EU regulations.

As such, the cased study represents interesting, rather than best, practice.

11.2 Basic details of the Case

United Kingdom – England

The two RIAs are concerned - in different levels of detail – with the future application in England of cross-compliance required under EU Council Regulation 1782/2003.

The first (2004) focuses on policy, and assesses a number of broad options for setting GAEC standards. This was published on 9 July 2004.

The second (2005) is an RIA of a detailed Regulation (known as a Statutory Instrument (SI). This was dated 14 December 2005.

The subject area is agriculture policy.

Cross-compliance involves two elements:

- Farmers need to meet Statutory Management Requirements (SMRs) arising from 19 separate EU Directives and Regulations. These relate to the environment, public health, plant and animal health and welfare;
- Farmers are required to maintain all agricultural land, especially land which is no longer wholly used for production, in good agricultural and environmental condition (GAEC).

These RIAs apply only to the second objective – (GAEC) - where Member States have some limited discretion for policy development.

The 2004 RIA assessed a number of possible requirements for GAEC, falling into three broad categories:

- Proposals for reinforcing *existing* legislation
Eg controls on over-grazing and the management of set-aside land and strips
- Specific proposals for *new* requirements on farmers
Eg protection and management of soils; undergrazing controls; protection of dry stone walls; management of hedgerows
- *Possible* new requirements
Eg a requirement for uncultivated 2m field margins adjoining sensitive habitats such as hedgerows and ditches; new requirements in relation to heather and grass burning on moorland; management of public rights of way.

The second (2005) RIA is of a more detailed Regulation which updates and replaces two existing Regulations relating to cross compliance – SI 2004/3196, as amended by SI(2005/918). On the basis of experience with cross-compliance in its first year, and consultations with stakeholders, it amends these previous Regulations by imposing additional GAEC requirements (eg requirement to undertake a Soil Protection Review); and widening the scope for exemptions in relation to the management of land not under cultivation, and restricting the use of fertilizers and pesticides on field margins adjacent to hedgerows and water courses. The RIA of SI (2005) 3459 was considerably shorter (10pp) than the ‘full’

2004 RIA of the GAEC options (84pp, plus 42pp of annexes), on the (questionable) grounds that many of the issues had already been dealt with.

It is also notable that there has been no UK RIA on the other component of cross-compliance – the Statutory Management Requirements based on the 19 EU Directives and Regulations. This is excused by DEFRA on the grounds that ‘It is our understanding that they will have been subject to their own assessment’ by the Commission through its own Impact Assessment procedure. This is in fact not the case – and even if it were, an EU-level IA cannot capture regional or farm-level environmental impacts.

11.3 The framework for the analysis

In the UK, RIAs have to be completed for all forms of government intervention which impose or reduce costs on businesses, charities, the public and voluntary sectors. This covers primary and secondary legislation (ie regulations or statutory instruments), as well as codes of practice or guidance. The system is overseen by the Better Regulation Executive (BRE), an agency reporting to the Cabinet Office. The BRE maintains that there is 100% compliance among Government departments with the requirement to undertake RIAs.

Cabinet Office guidance sets out a formal RIA procedure. An RIA should go through the three stages set out in Box 1.

Box 1. *Stages in the formal UK RIA procedure*

Initial RIA: This forms part of the submissions seeking Ministerial agreement to a proposal. It should be undertaken at the outset of a new policy. Initial RIAs are not usually published.

Partial RIA: This builds on the RIA through research and discussions with affected stakeholders. It must accompany the formal, public consultation for proposals. It should set out the alternative ways of meeting the policy objective, based on a consideration of options.

Full/Final RIA: The full RIA incorporates the results of the consultation process and further research. Cabinet Office guidance sets out the following detailed requirements for full RIAs. They should:

- ‘Compare the benefits and costs for each option considered in the partial RIA;
- Consider and record separately the other costs and benefits – ie not just those to the public sector, firms, charities and the voluntary sector, but also to consumers/individuals, and to the economy at large, taking account of the economic, social and environmental effects;
- Record these costs separately from the costs to business, charities and the voluntary sector;
- Summarise who or what sectors bear the costs and benefits of each option;
- Address any unintended consequences and indirect costs.’

The full RIA is submitted to the relevant Minister who is required to sign it to state that the benefits of the proposal justify the costs. The signed RIA then becomes the Final RIA.

In April 2004, the RIA system moved towards a more integrated approach by incorporating a sustainability appraisal tool called integrated policy appraisal, developed by DEFRA. RIAs should now consider economic, environmental and social costs and benefits, alongside business and administrative costs. However, a report by the National Audit Office (NAO) published in May 2006 found that most RIAs it analysed did not handle sustainable development concerns well. 'Few identified all social and environmental impacts they might have been expected to cover. Social and environmental impacts were often not analysed in sufficient depth'. The NAO questioned whether RIAs were the appropriate vehicle for considering sustainable development concerns – but in the absence of a viable alternative, it made a number of suggestions for incremental improvements.⁹⁵

Separately, the UK's Better Regulation Executive has launched a consultation on the possible revision of the RIA system⁹⁶. This includes the possibility of removing the assessment of SD impacts from RIAs, or at least ensuring that environmental and social costs are monetized or otherwise quantified.

It is apparent that neither of the two RIAs in question – particularly the 2005 RIA – included the level of detail on costs and benefits set out in the Cabinet Office Guidance.

11.4 Case Context

The reform of the CAP agreed in June 2003 was a significant step towards a more sustainable agriculture policy, in which farm subsidies were to be decoupled from production. The introduction of the Single Payments Scheme provided new opportunities explicitly to link payments to compliance with EU standards on the environment, public, plant and animal health and welfare. There are therefore obvious synergies between the EU's reformed agriculture policy and environmental objectives. And cross-compliance in general, and the establishment of minimum requirements for GAEC in particular, should necessarily involve an assessment of environmental impacts.

In the UK, there is a requirement to integrate environmental objectives into agriculture policy, set out in the Strategy for Sustainable Farming and Food *Facing the Future* (2003), and in a number of Public Service Agreements negotiated between HM Treasury and DEFRA during regular Public Spending Reviews. More generally, the revised UK Sustainable Development Strategy *Securing the Future* (March 2005) required all UK Government Departments to produce their own Sustainable Development Action Plans by December 2005, and a report on actions taken by December 2006. This will be monitored by the UK Sustainable Development Commission in its newly strengthened 'watchdog' role. DEFRA's SD Action Plan *Just Jump Straight In* (2005) includes a commitment to launch a system of Whole Farm Appraisal and introduce an on-line Farm Advisory system during 2006.

⁹⁵ *Regulatory Impact Assessments and Sustainable Development*, National Audit Office, May 2006 www.nao.org.uk/publications/nao_reports/05-06/ria_sustainable.pdf

⁹⁶ *The Tools to deliver Better Regulation: Revisioning the Regulatory Impact Assessment: A Consultation*. Better Regulation Executive July 2006.

In relation to the two RIAs in question, the quantification and monetisation of environmental benefits has been limited by two specific case context factors:

- a. the high-level of decentralization of decision making to a large number of (often small) farms, each with different biophysical characteristics, run by farmers whose behaviour in response to specific policy changes is unpredictable (cf motor manufacturers);
- b. the absence of much location-specific data (despite 27 case studies undertaken by the Rural Development Service to quantify the on-farm costs of cross compliance for different farm types and locations)..

This uncertainty is reflected in the attempt in the 2004 RIA (Annex 2) to calculate the benefits and costs of uncultivated 2m field margins adjoining sensitive habitats. The value of benefits in terms of reduced water pollution and soil erosion, and the protection of biodiversity and landscape, is estimated at between £141-285 million. Annex 2 accepts that these figures should be treated with caution, since

- it is unclear what proportion of field margins are actually adjacent to sensitive habitats (DEFRA estimates between 50-80%);
- fields of 2ha or less are anyway exempt to benefit small dairy and livestock farms;
- the valuation of benefits is based on a series of separate studies of total *national* costs of pollution and erosion;
- the share of the reduction in these costs potentially attributable to uncultivated 2m field margins is based only on expert advice.

This results in almost all environmental benefits in both RIAs being described only in qualitative terms. In the 2005 RIA, this lack of precision is reflected in the statement: 'There are potential environmental and economic benefits associated with this approach that we *believe* will balance, *if not outweigh*, any costs' (our italics).

11.5 Aspects considered in the Impact Assessments

The range of potential impacts referred to was considerably greater in the 2004 RIA (see Table 1 below). Indeed the limited coverage of impacts in the 2005 RIA was excused on the grounds that they had already been addressed in the earlier assessment.

In almost all cases, environmental impacts are only referred to, and not discussed in any detail. The only example of an attempt to monetise environmental benefits was in relation to the requirement for 2m uncultivated field margins adjacent to sensitive habitats (see above). Far greater attention was paid to the monetization of costs for particular types of farm. This is discussed more fully in the next section.

Table 1: Impacts identified in the two RIAs

Final Regulatory Impact Assessment for Options for the Implementation of cross-compliance – Good agricultural and environmental condition – DEFRA 9 July 2004	Regulatory Impact Assessment: the Common Agricultural Policy Single Payment and Support Schemes (Cross-Compliance) (England) Regulations 2005 – SI 2005/3459
Economic	Economic
Administrative costs Farm business costs Impacts on competition	Impact on Small firms Farm business costs Impacts on competition
Environmental	Environmental
Biodiversity Water quality Soils Landscape Geology	Biodiversity Water quality Soils landscape
Social	Social
Equity – regions, farm types	n.a.
Amenity, recreation, access	
Health and safety	
Compliance and enforcement	Compliance and enforcement
Crime	general

11.6 Evaluation of Environmental Policy Integration in the IA

Step in assessment process	Score and comments
Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?	Not mentioned. Cross compliance and GAEC required by EU Regulations
Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account	(Satisfactory) GAEC necessarily considers environment

environmental considerations?	
Identification of options: Are environmental concerns considered in all or only one option?	Environmental impacts referred to in respect of all options
<p>Impact analysis:</p> <ul style="list-style-type: none"> - Range of analysis: to what extent have environmental aspects been considered compared to other impacts? - Depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?): - cost benefit estimation: have environmental costs and benefits been considered? Have they been compared? - use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects? 	<ul style="list-style-type: none"> - (<i>Unsatisfactory</i>) Costs to farmers receive detailed attention whereas environmental benefits simply referred to in a general way In 2005 RIA, environmental impact of exemptions granted in relation to 2m field margins not referred to - (<i>Unsatisfactory</i>) Environmental benefits only identified, not described in detail, nor quantified. Attempt at monetisation only in respect of 2m field margins. - Environmental costs do not arise, so not addressed. In 2004 RIA, summary of benefits (of all types) merits 1 page, while summary of costs for different types of farm (quantified) merits 8 pages. However, the 2004 RIA highlights uncertainties over these costs@ ‘the costs of meeting the requirements will vary substantially due to the variability between farm types, the availability of spare farm labour at different times of the year, and the flexibility shown by farmers in responding to new circumstances.... Thus average figures do not provide a useful guide to typical costs....’ - For each option, ‘Advantages and Disadvantages’ (including all types of costs and benefits) described in tabular form. No use of formal tools.
Criteria to select options, procedural steps to select options: did the consideration of any environmental impacts contribute to the final choice of the preferred policy?	The 2004 RIA states that options were identified taking account of the five principles of the UK’s Better Regulation task Force – that regulations should be proportionate, accountable, consistent, transparent and targeted. However, it also states that ‘In each case the focus

	<p>of the options is to achieve a 'light touch' or 'do minimum' approach to regulation in accordance with the Council Regulation, and often represent no more than responsible good farming practice.' Thus the final choice of measures was dictated by the desire to minimise costs to farm businesses. For example, it was accepted that a requirement for a soil management plan (SMP) for each farm, based on a standard self-assessment form, would deliver most environmental benefit, but would incur high administrative and farm business costs. So SMPs were rejected in favour of a simpler Soil Protection Review.</p>
<p>Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?</p>	<p>For certain cross-compliance measures (eg set-aside and soil management) farmers are obliged to keep detailed records of farm practices, but not necessarily their environmental impacts. From 2007, DEFRA intends to monitor and evaluate the implementation of cross-compliance to feed into the 2008 EU review of CAP reform. This process will include examination of a number of case studies of particular farms – but the main emphasis is expected to be on impacts on farm costs.</p>
<p>Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?</p>	<p>For the 2004 RIA of options, 7 stakeholder workshops were held between Nov 2003-March 2004. These comprised: 2 Farmer workshops; 2 ADAS (Agricultural Development and Advisory Service) workshops; and three workshops on, respectively, Enforcement and Inspection; Climate Change; and Environment. Environmental NGOs (eg RSPB, National Trust, CPRE, Wildlife Trusts and/or UK statutory environment and/or countryside agencies) attended most of these workshops. In addition, there was substantial informal consultation with</p>

	<p>farmers' representatives.</p> <p>DEFRA itself is responsible for both agriculture and environmental policies. There was substantial consultation with English Nature.</p> <p>A study <i>The Potential Environmental Impacts of the CAP Reform agreement</i> was undertaken for DEFRA by GFA-RACE Partners, IEEP, and the Royal Agricultural College and issued in December 2003. This included a qualitative assessment of some of the environmental benefits of cross-compliance.</p>
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11.7 Influence on Decision-Making

The impact assessments had no influence on the definition of the problem to be addressed, nor on the policy objectives to be pursued, since these were already set out in EU legislation. They did have an influence on the selection of options – or rather the level of stringency of the options.

The consideration of environmental impacts had considerably less importance in the impact assessment in comparison with impacts on farm business costs. For example, the terms of reference for the survey by the Rural Development Service of 27 farms focused exclusively on assessing the costs of cross-compliance for specific farm-types, with no reference to the on-farm environmental benefits.

One explanation for this neglect is that cross-compliance measures by definition should deliver at least some environmental benefits, and impose no environmental costs. In these circumstances, attention could safely be focused on minimizing costs to farmers and the administration.

11.8 Lessons learned and Conclusions

There are a range of different influences on the quality of any individual IA:

- For some types of policy measure, it is technically almost impossible to assess ultimate environmental impacts in quantitative terms – regardless of the level of political commitment (see answer to last question).

- The *formal* incorporation of environmental and other non-economic considerations into RIA systems originally designed to assess business and administrative costs only, may not be sufficient in itself to shift long-term habits.
- High-level commitment and detailed central guidance will not be effective unless it is monitored and enforced. Neither of the two RIAs fully complied with Cabinet Office guidance, but both were signed off by the Minister, regardless.
- Costs on businesses are always easier to quantify and monetise than (often) intangible, long term environmental benefits. When those affected are also well represented (as are farmers), then the IA will be dominated by costs and not benefits.
- However, in this case, the benefits were considered to outweigh the costs mainly because they were supported by the need to comply with EU legislation. The risk of funding from the CAP being withheld was regarded as a major potential cost of inaction.
- If RIAs are staged (as in this example), later RIAs may have a very narrow scope or definition, on the grounds that wider issues have already been dealt with. In fact, this will rarely be the case, because even what appear to be small technical changes (eg the width of field margins) can have important environmental consequences, which will not be considered. This is a problem highlighted by the UK's National Audit Office in its report on RIAs and sustainable development cited above.
- One of the positive aspects of this case study was the research undertaken by the Rural Development Service specifically for the 2004 RIA. This took the form of structured interviews with 27 farmers selected on the basis of their geographical location and farm-type. This represents good practice, since it is unfortunately the case that existing research will rarely capture the detail of specific policy initiatives, and therefore bespoke research needs to be undertaken. What was unfortunate in this case, however, was that the interviews focused only on increases in farm business costs, rather than including likely changes to the state of the environment on those farms. However, such research is costly and takes time. It was only possible in this case because of the existence of the Rural Development Service.

As for evidence that analysis of environmental issues promotes better integration of environmental concerns into other policy areas, high-level commitment is not demonstrated by one ministerial statement, or by written guidance issued from the prime minister's office. It needs to be in evidence continually through effective monitoring and enforcement of IA procedures. Even when it is done, analysis of environmental impacts needs to be accompanied by political support to be influential.

Whether and which factors promote or hinder the consideration of environmental aspects depends on what aspect of the environment is targeted, and the extent of decentralization in the implementation of the policy. In the case of cross-compliance measures - even if all farmers behaved in exactly the same way - the ultimate impact on the bio-physical environment is determined by the highly variable geography, micro-climate and biodiversity of individual farms - and would be impossible to assess with any accuracy. Added to this, when farmers themselves have a number of options in relation to how they will respond to

cross-compliance requirements (ie a high level of decentralization), the uncertainty is compounded.

On the other hand, and by contrast, the impact of other types of environmental measures can be more easily assessed. For example, the impact on CO2 emissions of changes in the technical specifications of cars can be assessed relatively easily, since we know how car engines will respond to specific technical changes, and the decision-making chain is relatively short (there are few European motor manufacturers).

12 USA: Fuel Economy

Name of the case:

Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks

12.1 Basic details of the Case

The United States Department of Transportation completed an impact assessment on a proposed reform of a federal agency regulatory law on fuel economy standards for light trucks. The impact assessment is titled Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks (CAFE). The CAFE standard would increase the mandatory fuel economy and alter the vehicle classification system for light trucks.

The revised CAFE standards would take effect over a four-year period, 2008-2011. For the first three years, 2008-2010, compliance with the reformed CAFE rules would be optional. In 2011, all light truck manufacturers would be required to conform to the reformed CAFE standards. Light trucks would be bundled into categories based on the area of their footprint. The reformed CAFE standards classify light trucks based on the area of the truck's footprint (wheel-base times the average track width). The unreformed CAFE standard classifies light trucks by weight. The Department of Transportation changed the light truck categorization because of safety concerns from the increase in the number of larger and lighter trucks that could create an increased safety risk for drivers. Under the unreformed CAFE standard that classified light trucks by weight, auto manufacturers decreased weight but not size to meet the fuel economy standards. As a result, light trucks became increasingly unsafe. A footprint standard makes it more likely for manufacturers to keep a safe light truck weight to meet the CAFE standards.

There would be six different categories for light trucks based upon the footprint area, and all auto manufacturers would have to meet the fuel economy standards or face financial penalties. "Each manufacturer must achieve a harmonically averaged level of fuel economy for all specified vehicles manufactured by a manufacturer in a given model year."⁹⁷ The preliminary regulatory impact analysis (RIA) was released in August 2005. The preliminary RIA was submitted for public comment, and a final RIA was released in March of 2006.

12.2 The framework for the analysis

Executive Order 12866, issued by President Bill Clinton in 1996, requires that an economic analysis be conducted when implementing or changing federal regulations. *Executive Order*

⁹⁷ Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks, page III-1.

12866 requires “an economic analysis of proposed or existing regulations that should inform decision makers of the consequences of alternative actions.”⁹⁸ An RIA, as mandated by *Executive Order 12866*, was conducted for the change in CAFE standards. *Executive Order 12866* sets the guidelines for an RIA. The RIA should take into account the net benefits to society, including potential economic, environmental, public health and safety, and other advantages. *Executive Order 12866* does not establish a set format for RIA reports, and the structure of RIA reports is left to the “competent professional” judgement of the agencies.⁹⁹ The economic analyses however should contain three elements:

1. a statement of the need for the proposed action,
2. an examination of alternative approaches, and
3. an analysis of benefits and costs.

The guidelines offer detailed guidance on how to proceed with these issues.

RIAs also satisfy the requirements of the following legislative acts concerning small business impacts and are therefore usually an integral part of an RIA:¹⁰⁰

- *The Regulatory Flexibility Act of 1980* (5 U.S.C. §601 *et seq.*) (RFA) “Requires agencies to evaluate the potential effects of their proposed and final rules on small businesses, small organisations and small governmental jurisdictions.”¹⁰¹ The Reagan administration introduced the RFA in 1981 as part of its deregulation and better regulation agenda. The RFA uses a cost-benefit analysis of the regulation and examines if there are more cost effective alternative regulations.
- *The Unfunded Mandate Reform Act Analysis of 1995* (Public Law 104-4) “requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure of State, local, or tribal governments, in the aggregate, or by private sector, of more than \$100 million annually.”¹⁰² The cost of the reformed CAFE regulations is expected to exceed the \$100 million annual cost requirement.

Also, under the *National Environmental Policy Act* of 1969, 42 U.S.C. §4321-4370c, (NEPA), **environmental impact assessments (EIA)** are required for any major federal action that significantly affects the quality of the human environment.¹⁰³

⁹⁸ *Office of management and Budget: The Executive Office of the President*, page 2
<http://www.whitehouse.gov/omb/inforeg/riaguide.html>.

⁹⁹ *Office of management and Budget: The Executive Office of the President*, page 3
<http://www.whitehouse.gov/omb/inforeg/riaguide.html>.

¹⁰⁰ *Office of management and Budget: The Executive Office of the President*, page 3
<http://www.whitehouse.gov/omb/inforeg/riaguide.html>.

¹⁰¹ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page XI-1.

¹⁰² *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page XI-1.

¹⁰³ National Environmental Policy Act (NEPA) basic information,
<http://www.epa.com/compliance/basics/nea.html>.

Both a RIA and a EIA were undertaken for the reformed CAFE standards. The required assessment of small business impacts was incorporated into the RIA. The RIA reports incorporated environmental assessments into the EIA. The EIA, however, was completed in parallel to the RIA, and its results were fed into the RIA. The CAFE EIA examined the environmental impact, but did not quantify the effects into monetary terms for an economic cost-benefit analysis.

The United States Government's Executive Branch governs the RIAs for regulatory laws. The U.S. Federal Government has three equal branches of government that are supposed to function as checks and balances on each other. The three branches are the Executive Branch, the Legislative branch, and the Judicial branch. The Executive Branch is held by one individual, the President. The President uses federal agencies to enforce and regulate laws, and each agency falls under the authority of the President.

12.3 Case Context

Environmental context. Generally, the regulation of fuel economy in light trucks directly relates to the environment by affecting the emission of GHG and other pollutants through the burning of fossil fuels. Higher fuel economy in light trucks limits the emissions of GHG. This obvious link between transport and environmental policy, however, has not always been incorporated into the US transportation policy.

When the Department of Transportation was established in 1966, the Department's mission was mainly to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets vital national interests and enhances the quality of life of the American people, today and into the future. In the late eighties, it was recognised that the national transport system also needs to maintain the environment.

The most recent developments in the oil market has shed new light on the relationship between environmental and transportation issues in the US. As fuel has been comparatively cheap in the past, and cars in the US today often have a high fuel use, increasing oil prices pose an incentive to the automotive sector in the US to save fuel, which at the same time contributes to limiting environmentally harmful emissions. This relationship is also reflected in the CAFE regulation's development.

Economic context. The CAFE regulation for automobile fuel economy arose not as a response to environmental issues and concerns, but as a response to the Arab oil embargo in 1973 and the resulting economic turmoil. Congress instructed that CAFE standards should set fuel economy at the "maximum feasible level" considering technological feasibility, economic practicability, effect of other standards on fuel economy, and the need of the nation to conserve energy.¹⁰⁴ These factors consider the strategic importance of greater fuel

¹⁰⁴ Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks, page IV-1.

economy for cars and light trucks and do not expressly instruct consideration of specific environmental impacts.

The current U.S. Federal Government chose not to ratify the Kyoto Protocol or take measures to curb GHG emissions. As a result, policies, such as the CAFE fuel economy standards, reflect the current federal disinterest in dealing with environmental issues resulting from increasing fuel economy. At the regional level, states such as California have chosen to regulate automobiles for environmental reasons because of a perceived lack of federal regulation. The state regulation *California Law AB 1493*, therefore, directly addresses the emissions of carbon dioxide in motor vehicles.¹⁰⁵

Integration of impact assessments. In the US, there is no high-level requirement to integrate environmental issues into other policies at the government level. The NEPA, however, establishes a non-binding national objective to incorporate environmental concerns into the regulatory process. Section 102 “requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach”¹⁰⁶. The means to reach this goal is the requirement for environmental impact statements (EIS). All federal agencies are to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment.

Requirements. The US does not have a national sustainable development strategy to which the proposed law might be aligned to. The President's Council on Sustainable Development (PCSD) was established by President Clinton in June 1993 to advise him on sustainable development and to develop new approaches to achieve economic, environmental, and equity goals. Formally established by Executive Order 12852, the PCSD was administered as a federal advisory committee under the Federal Advisory Committee Act.¹⁰⁷ In the 1990s, the Council was asked to create a sustainable development program that grounded in the Brundtland commission definition.¹⁰⁸ Currently, however, the Council is no longer in use; therefore, there is no sustainable development strategy in the US.

Other case context factors. An RIA is also subject to public comment. Both the EIA and RIA reports were subject to public comment.¹⁰⁹ The CAFE RIA was revised after the preliminary report was issued in August 2005 in response to public comment. The changes did not affect the environmental aspects. Concerned citizens and environmental groups will

¹⁰⁵ California Law AB 1493, <http://www.arb.ca.gov/cc/ab1493.pdf>.

¹⁰⁶ <http://www.epa.gov/compliance/basics/nepa.html>, NEPA Website.

¹⁰⁷ <http://clinton2.nara.gov/PCSD/Overview/index.html>.

¹⁰⁸ <http://www.agiweb.org/legis105/pcsd.html>.

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100](http://www.nhtsa.dot.gov/portal/site/nhtsa/template.MAXIMIZE/menuitem.d0b5a45b55bfe582f57529cdba046a0/?jsessionid=Ekv114LlqVTzVZE5ruThV3jePSbat2gBLNBxus8vi3mLvWpaHY9!28012360?javax.portlet.tpst=f2d14277f710b755fc08d51090008a0c_ws_MX&javax.portlet.prp_f2d14277f710b755fc08d51090008a0c_viewID=detail_view&javax.portlet.begCacheToken=token&javax.portlet.endCacheToken=token&itemID=199b8facdcfa4010VgnVCM1000002c567798RCRD&viewType=standard, and Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks, page I-2.</p></div><div data-bbox=)

often stress environmental considerations during the public comment phase. In response to the final comments, the final CAFE regulations were modified. The revised CAFE standard included revisions with respect to at which the rate that new technology would be incorporated into the manufacturing of light trucks and a modification of the final rule to include large SUVs (sport utility vehicle) and passenger vans in the regulation.

12.4 Aspects considered in the impact assessment

Impacts examined. The CAFE RIA report focused on the economic effects of increasing mandatory fuel economy requirements for light trucks in the U.S.. The RIA examined the effects of increased fuel economy regulations in the U.S. on foreign oil dependency,¹¹⁰ car driver safety,¹¹¹ manufacturing feasibility,¹¹² environmental impact¹¹³, effect on product marketability¹¹⁴, economic impact¹¹⁵, military security¹¹⁶, society cost-benefit analysis¹¹⁷ and consumer cost-benefit analysis.¹¹⁸ Each factor was examined and given a monetary value used for the cost-benefit analysis.

A central concern to reforming the RIA was the United States' growing dependency on foreign oil imports for transportation and the resulting decrease of average fuel economy for automobiles. Along with these concerns, the RIA examined safety concerns that the current weight categorisation system posed. To combat this problem, the RIA examined the potential of a footprint area method for categorising the size and restrictions placed upon a specific model year car.¹¹⁹

Central to the RIA was an examination of the economic and technical feasibility for auto manufacturers in achieving the CAFE standards. The *Energy Policy and Conservation Act* (EPCA), which provides the authority for Department of Transportation to regulate automobile fuel economy, requires that all standards must be at a maximum feasible level.

¹¹⁰ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page II-4.

¹¹¹ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page III-9.

¹¹² *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page V-1.

¹¹³ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page IV-11, & VIII-29.

¹¹⁴ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page VI-1.

¹¹⁵ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page VIII-13.

¹¹⁶ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page VIII-20.

¹¹⁷ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page IX-1.

¹¹⁸ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page IX-5.

¹¹⁹ *Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks*, page III-5.

To conform to the EPCA, the CAFE RIA focused on the technical feasibility and economic cost on manufacturers of an increase in fuel economy standards. The RIA report examined a series of technically feasible changes to the light truck fleet that would increase fuel economy. These changes ranged from low drag breaks, cylinder deactivation and the use of hybrid technology. Each technical change was assigned a monetary value and a percentage change in fuel economy that would result from the implementation of the technology. The manufacturers also submitted information on their expected fuel economy improvements.

CAFE also considered, along with the financial costs of the technical changes, the reduction in sales of new vehicles resulting from the increased cost from the new regulations. These costs were considered in relation to the savings in fuel costs, but not in terms of the societal savings because it was assumed that consumers do not consider the wider social costs of fuel economy when purchasing a car.

The RIA did consider the societal economic benefits resulting from an increase in the CAFE standard. These benefits were the reduced cost of importing oil, a decreased risk of economic volatility resulting from supply uncertainty and disruptions and the costs of maintaining U.S. military presence to secure imported oil supplies.¹²⁰

Environmental aspects addressed. The CAFE RIA report addressed environmental concerns regarding the affects of average fuel economy on air pollution and GHG emissions. The CAFE RIA examined the environmental impact of reformed regulations along with other societal costs, which included the cost of increased noise pollution, lifetime fuel costs and the cost of additional driving. The CAFE RIA examined the benefit of decreased pollution and gave the benefit a monetary value based upon the Office of Management and Budget (OMB) values. The negative environmental impacts were assessed as not being severe.

Level of analysis. The environmental effects of a regulatory change were quantified in monetary terms, borrowing formulas from other agencies without full explanations of the methodology. The separate EIS conducted on the reformed CAFE standards could have affected the extent that the RIA discussed possible environmental impacts from a change in light truck fuel economy; however, only the RIA quantified into monetary terms the environmental impact of the change in regulation. The EIA did not make an economic analysis of the environmental impact. After the RIA quantified the environmental impact into monetary terms using OMB values, the environmental value of a CAFE standard change was added to the other non-environmental cost and benefits. Quantification and modelling plays a major role in US RIAs.

¹²⁰ Corporate Average Fuel Economy and CAFE Reform for MY 2008-2011 Light Trucks, page VIII-13.

12.5 Evaluation of Environmental Policy Integration in the IA

Step in assessment process ¹²¹	Score and comments
<p>Problem definition: to what extent has the consideration of the initial issue or problem in the policy area taken relevant environmental considerations into account?</p>	<p><i>(Satisfactory)</i> Initial reasoning for reforming the CAFE regulation was the incentive to install fuel saving technology in order to increase safety instead of making weaker, lighter vehicles. This of course will lead to energy savings and, in turn, to a decrease of GHG emissions, but this was not or only briefly mentioned in the respective sections of the IA (I and II).</p>
<p>Identification of policy objectives: although not being primarily environmental, does the objective of the policy take into account environmental considerations?</p>	<p><i>(Unsatisfactory)</i> see above</p>
<p>Identification of options: Are environmental concerns considered in all or only one option?</p>	<p>All</p>
<p>Impact analysis:</p> <p>range of analysis: to what extent have environmental aspects been considered compared to other impacts?</p> <p>depth of analysis: have environmental aspects been considered qualitatively or quantitatively? (if quantified: monetarisation, physical quantification? Other forms?):</p> <p>cost benefit estimation: have environmental costs and benefits been considered? Have they been compared?</p> <p>use of formal tools for impact analysis: Have tools been used especially suited to address environmental aspects?</p>	<p>Environmental impact secondary to the societal, consumer and manufacture economic impact.</p> <p>Quantified - monetarisation</p> <p>Yes in a cumulative cost-benefit analysis.</p> <p>Formulas based on other agencies' evaluations.</p>
<p>Criteria to select options, procedural steps to select options: Did the consideration of any environmental impacts contribute to the final choice of the preferred policy?</p>	<p>Yes, the environmental cost was considered in a larger cost-benefit analysis on the monetary value of fuel economy regulations, though not</p>

¹²¹ See also: IEEP (2005): Workshop on Best Practice in Analyzing and Developing Environmental Policies, 15 November 2005. Background Paper, p. 25.

	decision relevant. (VIII-35-43)
Monitoring: do the plans for monitoring the potential impacts of the policy include monitoring of any environmental impacts?	No monitoring plans, though monitoring takes place later in the policy cycle.
Stakeholder involvement: Were stakeholders consulted; e.g. environmental NGOs, how was the consultation between Ministries organised, were studies carried out by external consultants, etc.? Have Ministries of the Environment / DG ENV been consulted where this would be relevant? Were any views obtained taken into account in the policy proposal?	The RIA is open to public comment and was revised to reflect public concerns and comments.

12.6 Influence on decision-making

The analysis conducted in the RIA was part of the decision-making process, and the policy proposal was even revised as a result of the RIA. Environmental aspects, however, did not play a role in the changes because no severe negative impacts were identified. The final policy choice was not influenced by the analysis of environmental impacts.

The CAFE RIA did analyze the environmental impact of a change in the fuel economy regulation. The RIA's environmental impact assessment was conducted alongside other economic effects, and the impact was quantified in terms of the regulations monetary effect. The methodology for quantifying the environmental impact was not fully discussed. The OMB formula was used with no mention to environmental studies confirming the OMB's methodology. The environmental impact appeared to be given less weight in the final calculations because the formulas for deriving the economic cost of the environmental impact were not discussed or examined in the CAFE RIA. As with the other examined aspects of the regulation's impact, the environmental impact was given importance according to its calculated economic value.

The environmental impact did affect the final analysis but did not have a dramatic effect. The economic value of the environmental impact was considered much smaller than the other effects. The pollution costs were valued lower than the saved refueling time and the lifetime savings in fuel expenditures.

12.7 Lessons learned and Conclusions

The impact assessment on the reformed CAFE standards was successful in showing an economic analysis of the effects of regulatory reforms. The assigning of economic value in a cost-benefit analysis is an efficient and practical means of measuring the cost and benefits of

regulations and possible alternative methods. In addition, allowing a public comment period increases regulatory transparency, encourages public engagement in the regulatory process and provides an important check on the regulatory process.

The CAFE RIA, however, failed to reflect environmental concerns in their evaluations. The cost-benefit analysis is only as effective as the input values. The RIA would benefit from greater transparency in the values applied to societal costs, such as the environment. The analysis failed to explain the limited value given to environmental concerns. The increased cost and benefits to the consumer did not include the increased societal costs and benefits. Without a clear methodology for valuing the true societal costs, an economic analysis will fail to incorporate the full economic impact of regulations.

Examining the environmental effects of a change in regulatory law in terms of a monetary cost-benefit analysis is a useful economic method for impact assessments. Economic analysis of the effects of CAFE regulations created a useful, quantifiable value for the different costs and impacts of the regulation. The problem arises in the means of valuing the monetary effects on the environment. The CAFE RIA report used OMB formulas for calculating environmental costs without a clear discussion on the creation of this formula.

Public participation played a major role in the RIA process. Environmental aspects, however, were not changed due to public participation.

The determining factor for the consideration of environmental aspects was the requirement for doing an EIA, which helped to consider environmental aspects early on in decision-making.

Influence of environmental issues in the RIA strongly depends on the issue. RIAs are much more likely to influence the final policy decision if the issue of the RIA is, for example, a building project.

The economic analysis of the impact of regulations is a useful method in cost-benefit analysis of regulation. There is difficulty, however, in quantifying the exact monetary costs of environmental impacts. The accurate quantification of environmental impacts for impact assessments must both overcome political pressure to ignore or limit environmental concerns and scientific uncertainty as to the true short and long term environmental effects. The CAFE RIA suffered from a lack of transparency in borrowing from other agency formulas without a full discussion of the other agencies reasons, methods and science for determining their values.

There were no barriers perceived by the author of RIA.