UNITED NATIONS
DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

United Nations Division for Sustainable Development

Expert Group Meeting on
Integrating Climate Change into National Sustainable Development Strategies
New York, 12-13 November 2007

Addressing climate change in national sustainable development strategies – common practices

Background paper

* This paper was prepared by the United Nations Division for Sustainable Development. This paper has been issued without formal editing.

Content

I. Introduction

Countries across the world have recognized that a national sustainable development strategy (NSDS) can be an effective tool to allow countries to achieve their sustainable development goals. Consequently, many countries are implementing their NSDSs as recommended in Agenda 21, the action programme adopted at the United Nations Conference on Environment and Development in Rio de Janeiro (1992). In doing so, countries are also fulfilling their commitment made in 2002 in the Johannesburg Plan of Implementation, adopted at the World Summit on Sustainable Development, to take immediate steps to make progress in the formulation and elaboration of national strategies for sustainable development as well as to begin their implementation by 2005.

Attention to climate change as a global challenge to sustainable development has reemerged in recent years. The debate has reached the highest political levels, as evidenced by the participation of 80 heads of State or government at the High-Level Event on Climate Change convened by the Secretary-General of the United Nations on 24 September 2007. According to the Intergovernmental Panel on Climate Change (ICCP), the warming of the global climate system is unequivocal, and human activities are contributing to it. Both mitigation and adaptation measures are needed to diminish the risks associated with climate change.

It is also increasingly recognized that climate change is a sustainable development issue and not just an environmental problem. Climate change impacts pose threats to the economic, social and environmental dimensions of sustainable development in almost all countries, climate change mitigation and adaptation polices have an impact on other sustainable development goals, and progress towards achieving other sustainable development goals can contribute to both climate change mitigation and adaptation. In this light, discussions at the recent 15th session of the Commission on Sustainable Development (CSD) highlighted the need to integrate climate change plans and policies into NSDSs.

This short paper provides an overview on current country practices in addressing climate change in NSDS. The following chapter briefly describes common features of NSDS and discusses alternatives to further incorporate climate change considerations in them. Sections 3 and 4 then present the methodology and key findings of an analysis of practices to address climate change in the NSDSs of 46 countries. The concluding Section 5 includes a brief outline of potential avenues for further analysis. More detailed findings of the analysis are contained in the annex.

II. Climate Change and National Sustainable Development Strategies

NSDS are comprehensive strategies that help countries achieve their economic, environmental and social objectives in an integrative manner. They are typically the outcome of an iterative and participatory process, and their development involves consultations with a broad set of stakeholders. Addressing climate change in an NSDS is not only a reflection of the importance of climate change for sustainable development, it also provides a framework to design effective climate change mitigation and adaptation measures.

The integrative nature of an NSDS facilitates the recognition and adequate valuation of co-benefits. Whereas 'stand-alone' climate change strategies are in principle equally able to take into account the co-benefits of actions and policies aimed at mitigating or adapting to climate change, an NSDS provides a framework for using national sustainable development priorities as basis for assessing the importance of these co-benefits, thereby determining to which extent these co-benefits affect policy choices. This observation also underscores the significance of linking specific climate change action plans and strategies to an overarching NSDS.

Moreover, an NSDS facilitates the understanding and thus the harnessing of co-benefits from actions and policies driven by non-climate objectives that strengthen the climate change mitigation and adaptation regime. Since economic and social objectives are often given precedence, especially in developing countries, these co-benefits have in many cases significant impacts on policies related to climate change.

In addition, the integrative nature of an NSDS enables countries to identify and appropriately solve trade-offs between climate change and other sustainable development objectives. Outside an NSDS, it may be difficult to address partially conflicting objectives, for example, between employment generation in energy intensive sectors and carbon dioxide emission reductions. Potentially, such difficulties may lead to policy paralysis, because policies that are beneficial for one objective may lead to regress on another one. Whereas trade-offs between sustainable development objectives always constitute a challenge, an NSDS provides a framework for finding a balanced solution.

The fact that sustainable development involves both intra- and intergenerational equity considerations, further underscores the potential of an NSDS to provide a framework to address climate change. Given the very long time span over which greenhouse gases remain in the atmosphere, most benefits from current mitigation actions will accrue to future generations, whereas avoiding mitigation will increase negative climate change impacts as well as the need for future generations to implement adaptation measures. Hence, the concept of inter-generational equity, which typically is applied in an NSDS, is critical for making optimal political decisions related to climate change.

Due to the global nature of climate change challenges, international agreements provide the basis for finding global responses. The United Nations Framework Convention on Climate Change (UNFCCC) is the key instrument in this regard. An NSDS provides a framework for countries to place the national implementation of their international commitments under the UNFCCC or other fora in their national sustainable development context. Moreover, since global partnership forms an integral part of the sustainable development agenda as defined at the global summits in Rio de Janeiro and Johannesburg, an NSDS enables countries to incorporate climate change concerns of other countries, especially developing countries and LDCs, into their own strategies.

There are no blueprints for NSDSs. They vary across countries in terms of structure and content, and are deeply embedded in the national institutional structure regarding policy planning and implementation. Consequently, the variations in the treatment of climate change in NSDS across countries do not only reflect variations in the significance that each country gives to climate change for achieving their sustainable development goals, but also variations in the relevant national institutional structures.

Despite this heterogeneity, most NSDSs can be broadly described as following a three level structure. At the first level, countries typically identify three to six main strategic policy areas or dimensions of sustainable development. Examples include “Managing natural resources”, “Sustainable consumption and production”, “Living spaces”, “Global responsibility” or “Sustainable economic development”.

At the second level, countries typically list more concrete objectives. The total number of entries at this level varies greatly across countries, although most fall within the range of 15 to 40 substantive objectives. Examples with direct reference to climate change include “Establish a climate change mitigation programme”, “Limiting climate change and increasing the use of clean energy” or “Adapting to the adverse effects of climate change”. Some countries do not formulate objectives at this level, but rather state an issue such as “Atmosphere”. It should be noted that some countries do not follow the distinction between a first and a second level. This is usually the case of countries which identify a small set of relatively concrete priorities in their NSDS.

The third level includes a more disaggregated and specific list of aims and concrete actions. Whereas some countries include a comprehensive set of actions in their NSDS, others defer the description and development of concrete measures to action plans, often at the sectoral level. Some countries follow an intermediate approach and include a few selected actions in their NSDS, but refer to other plans for more complete sets.

Climate change mitigation and adaptation can be addressed at all of the three levels. Countries may declare climate change to be a policy area or priority goal at the first level and/or introduce specific climate change objectives at the second level. The strategy can also include specific aims and actions at the third level directly targeted at climate change mitigation and adaptation, even if the corresponding higher level objectives do not directly refer to climate change.

Moreover, countries can address climate change indirectly through inter-linkages to other sustainable development priorities. Prominent examples in the field of mitigation include energy supply, as fossil fuel combustion is the major source of greenhouse gas emissions in most countries, and forests, which often constitute a major sink of greenhouse gases. Countries can explicitly state climate change mitigation or adaptation as supporting arguments for pursuing other objectives. Furthermore, even if such inter-linkages are only implicitly contained in an NSDS, it may still be regarded as addressing climate change.

In most cases, countries will introduce or plan to introduce policies that are more stringent with regard to climate change if the linkages are addressed explicitly than if they are addressed indirectly.[1] But it is important to note that this, in general, only holds for comparing the NSDS of a country with a hypothetical alternative NSDS of the same country. It does not hold for comparing the NSDSs of two different countries, even if the structure of their NSDSs and institutional frameworks were similar. As a hypothetical example, consider two countries (A and B) that share the objective of improving energy security and, therefore, aim to increase the share of electricity from domestically available sources. Country A explicitly recognizes climate change as supporting argument for energy security and, therefore, promotes both renewables as well domestic coal, even though the latter entails lower costs for electricity production. Country B, however, does not consider climate change mitigation in conjunction with energy

[1] To be more precise, it is implausible that explicitly recognizing climate change will bring about less stringent policies, but there may be cases where recognizing climate change does not change the policy choice. Given that the impact of policies may not be known with certainty, stringency in the statement refers to intended or expected rather than realized impacts.

security, but does promote renewables only as it is its only economically viable alternative to imported fossil fuels. Hence, country B's policy would have a stronger impact on climate change mitigation than country A's, even though country A gives more importance to climate change mitigation.

There are a number of policy objectives commonly found in NSDSs that most certainly contribute to climate change mitigation efforts. These include improvement and promotion of energy savings, energy efficiency, cleaner energy production, biofuels, fuel efficient vehicles, or mass transportation systems. In the area of climate change adaptation, the list would include climate observation and forecasting and integrated water resource management (IWRM). IWRM increases the capacity of water management systems to address changes in the level and in the variability of water availability caused by climate change impacts such as droughts, floods and changed precipitation patterns.

Other NSDS objectives also have climate change co-benefits under fairly straight-forward and common conditions. For mitigation, these include sustainable forest management, as it typically includes reforestation, afforestation and/or reduced deforestation, as well as, where applicable, mangrove restoration or preservation; sustainable land management, if it includes an expansion or preservation of 'green spaces'; sustainable agriculture, if it includes promotion of no till or low till farming methods; waste management, if it addresses methane emissions from landfills; tax reforms, if they include increased taxation of greenhouse gases (either direct or indirect); and phasing-out of ozone depleting substances (ODS), if it addresses ODS that are also greenhouse gases such as HCFCs and methyl bromides. A further objective is energy security, if it includes an expansion of renewable energy, nuclear energy or shift from high carbon imported fuels (such as coal or oil) to low-carbon fossil fuels such as gas. Disaster reduction and management objectives have important co-benefits for climate change adaptation, unless they are limited to disasters caused by hazards unrelated to climate change impacts (such as earthquakes, volcanoes or tsunamis). Sustainable coastal management objectives also contribute to adaptation, unless the expected impacts of

climate change are ignored. For many countries, public health objectives that include malaria or dengue prevention and treatment also fall into the adaptation category, as climate change is contributing to an expansion of areas in which these diseases are endemic.

Some policy objectives contained in NSDSs have clear linkages to climate change adaptation, although their co-benefits are not by-products. In such cases, climate change impact and responses would have to be explicitly addressed in order to contribute to climate change adaptation. Examples include agricultural diversification, infrastructure development and biodiversity. Finally, there are a wide range of objectives that improve the adaptive capacity of countries in general, such as strengthening health systems, improving education or sustained economic development.

III. Methodology

This paper is based on a brief review of relevant NSDS documents in 46 countries. It covers only those NSDSs that have been reported to the CSD or that have been officially communicated to the United Nations Department of Economic and Social Affairs in another format. Only strategies that are currently under implementation are included. Consequently, strategies that are not yet adopted or that may have expired are not considered. Those NSDSs for which main documents were either unavailable or available only in a language other than English, French or Spanish had to be excluded. The analysis is based on the NSDS documents only, and does not include the analysis of internal or external reviews. Consequently, the note does not address whether approaches pursued in the context of addressing climate change in NSDSs have been effective. Whereas the analysis of further documents would certainly lead to additional insights, it should be taken into account that documentation on NSDS review is available only for very few countries. Moreover, a far more in-depth analysis would be required in order to make any solid statements on the effectiveness of strategies.

The review identified all instances in an NSDS which explicitly address climate change either directly or indirectly at any of the three levels (goals/areas; objective/issue

and aim/action) discussed above. Due to time constraints, instances that implicitly address climate change are not identified on a country-by country basis. However, some general remarks on this issue are included in the following section.

Due to the level of heterogeneity found in NSDS formats, the analysis unavoidably entails some judgments by the author of this article. First, deciding whether an NSDS does indeed distinguish between a first and second level and which NSDS components belong to which level is not always obvious. For most European countries, information contained in a recent study commissioned by EUROSTAT[2] was used as a secondary source in order to validate the classification to alleviate the problem. Some countries include a comprehensive system of goals and objectives as well as a selected list of priority fields of action in their NSDS. In these cases, both formats were analyzed separately. Second, some countries include separate chapters on the current situation and challenges for sustainable development, whereas others integrate these aspects into the description of objectives or specific issues. References to climate change in the former cases are not part of the analysis, as it is not evident what parts of the strategy constitute a response to climate change. In the latter cases, on the other hand, references to climate change are included in the analysis as they relate climate change to strategy objectives. However, the possibility that these differences are entirely structural and have no effect on policy responses cannot be rules out.

The Annex contains tables for all countries that specifically address climate change in their NSDSs. These tables list all references to climate change in the strategies (in bold) and the corresponding goals/areas, objectives/issues and aims/actions. Whereas the entries related to the two higher levels generally quote the NSDS, the entries at the third level are typically summaries of more elaborate discussions in the NSDS. When climate change is listed among other motives for certain goals, objectives or actions, the table lists these motives in brackets in order to reveal the inter-linkages as reflected in the NSDS.

[2] Ewald Rametsteiner et al. *Project: Improvement of the quality of the Structural and Sustainable Development Indicators. Lot 2: Analysis of national sets of indicators. Report prepared for EUROSTAT.* (Vienna, 2007)

IV. Key Findings

Almost all countries address climate change in their NSDS to some extent. Although eight of the 46 countries included in this study did not make any specific reference to climate change in their strategy,[3] most nevertheless address climate change implicitly by incorporating policies with significant co-benefits for climate change mitigation and/or adaptation.

The principle of common but differentiated responsibilities seems to be an important factor for addressing climate change in NSDSs, as overall, climate change mitigation features more prominently in developed countries' NSDSs than in the strategies of developing countries.

Most countries directly refer to their existing commitments under the UNFCCC and the Kyoto Protocol in their NSDS. This shows the importance of global solutions for climate change challenges as well as the crucial role that NSDSs can play in their implementation at the national level. Many developed countries note the importance of the flexible mechanisms under the Kyoto Protocol for fulfilling their commitments as well as for enhancing global partnership on climate change issues. Some of them, such as Finland, explicitly stress that projects under these mechanisms must contribute to sustainable development in developing countries. In a few cases, developed countries make concrete and specific offers for climate change related technology transfer, as does Iceland with regard to geothermal energy. Some developing countries countries, such as China or Viet Nam, identify explicitly sectors and technologies for which international collaboration is sought. Some countries, such as Bhutan or Brazil, note their interest to participate in international financial mechanisms based on carbon sequestration by forests.

In addition to including climate change considerations in the substantive areas, a number of countries, for example Austria, Germany and Luxembourg, include advancing climate change considerations in international and regional bodies as part of their

[3] Burkina Faso, Estonia, Moldova, Nauru, Niue, Philippines, Tonga.

mitigation efforts. Some developing countries, such as the Marshall Islands, include advancing climate change considerations as major objective of their foreign policy. These cases exemplify that countries do not only react to the outcomes of international and regional negotiations on climate change, but try to actively influence these negotiations.

A number of countries address climate change at the first level, primarily those that have a limited list of priority areas at their highest level, such as Belgium, France or the United Kingdom. Among countries organizing their strategies along dimensions of sustainable development, the Republic of Korea has climate change at the highest level within its strategic policy area “Dealing with climate change and global environmental issues”.

Most countries, especially developed ones, include climate change mitigation as a specific objective at the second level. The placement of the climate change objective within the overall structure varies. It appears mostly within areas focusing on managing natural resources and the environment. However, some countries such as Republic of Korea or Iceland place it in the area dealing with global issues.

Most countries address climate change both directly and indirectly. Objectives that commonly include explicit links to climate change mitigation are renewable energy, energy efficiency and energy savings, forests, transport, eco-efficiency, waste management, housing, and agriculture. However, there are many countries who chose not refer to climate change in the discussion of objectives with likely co-benefits for climate change. Countries vary significantly in both the coverage of issues discussed in section II and in the number of references to climate change in these issues.

Countries also vary in the extent of cross-references in their NSDS. Many countries include specific objectives on climate change mitigation, on energy and, less often, on forestry. In these cases, many aims and specific actions simultaneously achieve both objectives, as described in section II. Consequently, countries typically list these aims and actions under both objectives. However, only some countries do refer to climate

change also in the description of their energy or forest related actions. Whereas those countries may appear as addressing climate change more comprehensively, the differences to those countries that do not cross-reference climate change may be related to their expression rather than to substantive differences in addressing climate change.

In general, climate change adaptation features less often in NSDSs than climate change mitigation. Most developed countries do not directly address climate change adaptation in their strategies. Finland and Slovakia are notable exceptions in this regard. Moreover, many countries identify a need to conduct further research to define adaptation needs. China, Colombia and Cook Islands are among the countries that include adaptation to climate change within disaster prevention and risk management. Ghana, Viet Nam and Zambia, for example, include strengthening climate observation and forecasting in response to climate change in their NSDS. Countries such as Tuvalu, Slovakia or Namibia include sector-specific objectives for adaptation to climate change in agriculture, fisheries, water management and/or forestry.

Many countries address the co-benefits of achieving specific objectives for climate change mitigation, especially with regard to energy policies. However, few countries discuss potential trade-offs between climate change mitigation and other objectives. For example, Germany explicitly points out that in the decision to phase-out nuclear energy, the negative impacts nuclear energy in terms of waste and potential health hazards were perceived as more than outweighing the benefits of nuclear energy for climate change mitigation. It also discusses conflicts between reducing CO_2 emissions and energy security for a coal producing country such as Germany as well as between energy security and fluctuation in supply of renewable sources such as wind and sun. Bhutan includes climate change mitigation in their elaborate discussion on the need to balance trade-offs with regard to forest conservation between hydropower expansion and sectoral economic needs. Brazil, for example, has a separate chapter on how to find solutions to trade-offs between environmental, social and economic objectives.

V. Conclusion

This paper has demonstrated that most countries address climate change mitigation and, less often, adaptation in their NSDS. Countries differ substantially in the form and the extent in which climate change is addressed. Therefore, countries may benefit from taking other countries' practices into account when formulating or revising their existing NSDS with regard to climate change. These differences not only reflect the significance that different countries assign to climate change, but also the different NSDS structures.

Future analytical work in this area could expand the analysis to implicit forms of addressing climate change though policies and objectives that have considerable co-benefits for climate change mitigation and adaptation. A preliminary look indicates that countries cover climate change mitigation and adaptation more broadly than it may appear. A large discrepancy between explicitly recognized and implicitly addressed co-benefits for climate change could be seen as sign that countries still have to find ways to effectively and comprehensively integrate climate change considerations into their NSDS. However, such discrepancy also shows that most countries may be in a position to strengthen their existing strategies and may not require drastic overhauls if they wish to increase the focus on climate change in their NSDS.

Annex: References to climate change in National Sustainable Development Strategies

Australia: National Strategy for Ecologically Sustainable Development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
	Energy Use, Energy Production and Transport	**Limit harmful emissions arising from energy production and distribution wherever economically efficient, and to promote alternative energy sources** (Measures: Improve competition and management processes in the electricity sector; study options to incorporate external costs into energy prices; strengthen research in renewable energy and energy efficiency; develop programs for and monitor the use of renewable energy)
	Energy Use, Energy Production and Transport	**Improve the energy efficiency of residential buildings and domestic appliances; and to influence householders to become more economical in their use of energy, and to switch to energy sources with lower greenhouse gas emissions** (Measures: Develop and implement schemes for energy performance standards and mandatory labeling of non-residential buildings and commercial and industrial equipment; major appliances; develop a house energy rating scheme; encourage use of renewable energy)
	Energy Use, Energy Production and Transport	**Influence industries and businesses to adopt behaviour, practices, technology and equipment that make them minimise their energy use; or lead them to switch to energy sources with lower greenhouse gas emissions** (Measures: Develop and implement schemes for energy performance standards and mandatory labelling of major appliances; develop a house energy rating scheme; encourage use of renewable energy
	Energy Use, Energy Production and Transport	Improve the technical and economic efficiency of urban and non-urban transportation**; encourage switching to alternative transport technologies or modes where this reduces greenhouse gas emissions per passenger or unit of freight and to optimise the modal mix of transport to achieve greater economic,**

		environmental and social benefits (Measures: Improve fuel efficiency of motor vehicles through consumption targets, labeling and driver education; optimize modal split; improve public transport management; improve fuel consumption of government vehicles; maintain link with urban and transport planning strategy)
	Natural Resource and Environment Information	Enhance the quality, accessibility and relevance of data related to ecologically sustainable development **(Measures: Introduce regular national state of the environment reporting, including taking into consideration the impact of climatic variability on environmental indicators)**
	Australia's Overseas Aid Policy	Integrate ecologically sustainable development in all aspects of Australia's official development assistance program **(Measures: Revise Interim Policy Statement on Ecologically Sustainable Development in International Development to take account of the goal, objectives and principles outlined in the NSDS and the National Greenhouse Response Strategy; continue to encourage climate related training and infrastructure support to neighbouring developing countries)**
	Research, Development and Demonstration	Address broader intersectoral issues of environmentally sustainable development through research, development and demonstration **(Measures: continue to support RD& D directed at improving understanding of the natural variability of climate, the possible impacts of climate change, and to identify cost-effective mitigation options to encourage the integration of technical, economic and social research in this context)**

Austria: The Austrian Strategy for Sustainable Development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness	Decouple economic growth from traffic growth (Measures: Increase transport efficiency, re-zoning, awareness building, internalization of external costs)

	of business)	
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness of business)	Increase energy efficiency and promote renewable energy (Measures: Investment support and improves market conditions for eco-energy; slowdown growth in power demand; decouple production growth and energy consumption
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness of business)	Sustainable waste management **(Measures: Nationwide waste treatment with reduced greenhouse gas emissions;** Promote thermal treatment plans for residual waste with concurrent power generation and heat production; Increase knowledge of overall material flows; Promote integrated product policy; Introduce electronic data management with constant data collection)
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness of business)	Improve energy efficiency in the building sector (Measures: Stricter specifications in the construction code and housing promotion, Promote renovation of old buildings; Promote innovative financing)
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness of business)	Expand production of renewable raw materials in agriculture and forestry (Measures: Increase use of wood as energy source and raw material)
Austria as a Dynamic Business Location	Successful management through Eco-Efficiency (Reduction of raw material and energy consumption; **greenhouse gas emissions**; improve quality of jobs and competitiveness of business)	Create better information on the 'ecological rucksack' of products, raw materials and energy carriers; Develop appropriate indicator systems to evaluate sustainability of companies
Living Spaces in Austria	**Protection of Environmental Media and Climate** (Protection of soil, air and water;	**Implement Austrian Climate Strategy; Reduce traffic emissions; Appropriate funds in budget and from current housing funds**

	achievement of commitment under the Kyoto Protocol)	
Living Spaces in Austria	Shaping Sustainable Mobility	**Implement transport and research relevant agreements in the Austrian Climate Strategy and in relevant international frameworks** **(Measures: Apply polluter pay principle to address external costs; Reduce motorized travel needs; Integrate transport, urban and regional planning, e.g. buy anchoring environmental and climate targets in regional planning concepts and laws**
Living Spaces in Austria	Shaping Sustainable Mobility	Enhance awareness of broad population to increase acceptance of environmentally friendly transport and influence mobility choices **(Measures: For example, mandatory labeling of new cars with regard to mileage specific CO_2 emissions.**
Living Spaces in Austria	Optimizing the transport systems (**Achieve goals of climate protection**; reduce road accidents and premature deaths due to air pollution; Reduce noise pollution)	Improve technology of conventional drive and exhaust treatment systems (Measures: Promote alternative and energy-efficient vehicles through pilot actions; Promote bio-fuels based on their eco-balance; Make emission standards more stringent and improve fuel quality; Promote research and technology grants in the transport sector and focus them on sustainability-relevant objectives)
Living Spaces in Austria	Optimizing the transport systems (**Achieve goals of climate protection**; reduce road accidents and premature deaths due to air pollution; Reduce noise pollution)	**Shape transport flows more efficiently with the widespread use of transport telematics and integrated transport management**
Living Spaces in Austria	Optimizing the transport systems (**Achieve goals of climate protection**; reduce road accidents and premature deaths due to air pollution; Reduce noise pollution)	Shift to public transport (Measures: More investment in adaptation of roads; better traffic organization; re-orientation in housing planning; expand parking space management; guarantee rail investment and local transport funds; coordinate customer-friendly train and bus systems; apply new transport technologies; reduce tax allowances for individual motorized traffic)
Austria's Responsibility	Our world as a living space (Promote balanced equilibrium between economic, social and ecological dimensions of development processes in the South and	Continue to apply environmental impact assessment in public and publicly-guaranteed projects; show more commitment at the private sector level for technology and know-how transfer in the environmental field; use project-related Kyoto mechanism (joint

	the East; **Protect global environmental goods soil, water and atmosphere in the long-term**)	implementation, CDM) as planned in the Austrian Climate Strategy)
Austria's Responsibility	Sustainability Union Europe	Rapidly and consistently implement EU Strategy for Sustainable Development and treat and discuss priority issues of climate protection, transport, energy, natural and resources and public health within the EU Council; **Support development and implementation of concrete sustainability targets and action programmes as part of a sustainable EU transport policy, with a focus on sensitive regions and EU enlargement**; In the field of climate change and environmentally friendly energy, create favorable framework conditions for the use of renewable energy and increased efficiency of energy consumption

Barbados: National Strategic Plan of Barbados 2006-2025

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Building a green economy – Strengthening the physical environment and preserving the environment	Promote and Facilitate the Sustainable Use of our Renewable Resources and the Wise Management of our Non-renewable Natural resources	**Ensure that appropriate development standards are used to build resilience against the increasing intensity of natural hazards, including the effects of climate change**
Building a green economy – Strengthening the physical environment and preserving the environment	Promote and Facilitate the Sustainable Use of our Renewable Resources and the Wise Management of our Non-renewable Natural resources	**Enhance international advocacy to highlight our concerns with global environmental developments, particularly global warming**

Belgium: Federal Plan for Sustainable Development 2004-2008

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Limiting climate change and increasing the use of clean energy	Decent and affordable housing	Improve energy efficiency of homes through financial and tax support
Limiting climate change and increasing the use of clean energy	Restricting use of natural resources	Dematerialize the economy (Measures: Shift tax burden from labour to use natural resources and energy; support technological innovation and its transfer to

		developing countries, especially in vehicles, building materials, electric and electronic devices)
Limiting climate change and increasing the use of clean energy	The Government's exemplary role	Promote third party financing system to make buildings more energy efficient
Limiting climate change and increasing the use of clean energy	A sustainable energy policy (reduce energy consumption; **reduce greenhouse gas emissions**; reduce dependency on non-renwable and imported energy sources)	Support R&D of renewable energy sources, co-generation, fuel cell technologies and energy efficient technologies; **Include specific actions for renewable energy and rational energy use in national climate plan**; Set medium and long-term goals with regard to the hare of renewable energy in energy production; Implement EU directive on use of renewable fuels for road transportation
Limiting climate change and increasing the use of clean energy	The right price	Develop strategy and scientifically accepted method for the internalization of external costs, with special attention to energy, transport and sustainable water use
Limiting climate change and increasing the use of clean energy	Energy conserving buildings (**Decrease CO_2 emissions**; Decrease energy costs)	Further develop and encourage third party financing for investing in energy efficient buildings through publicly-funded company; Set up task force to make proposals for eliminating legal and economic obstacles to investing in energy-efficient buildings
Limiting climate change and increasing the use of clean energy	**More solidarity: the use of flexibility mechanisms (Implement commitments under the Kyoto Protocol, the UNFCCC and the EU; Support developing countries to limit greenhouse gas emissions through CDM, technology transfer and capacity building**	**Establish framework for the implementation of the flexibility mechanisms under the Kyoto Protocol; Re-orientate existing policy tools aimed at boosting foreign trade, investment, international cooperation as well as scientific and technological research to incorporate international climate policy**
Limiting climate change and increasing the use of clean energy	A global approach to the energy issue	Support developing countries, especially in Africa, in developing renewable energy and energy efficiency; Support strict energy standards in international standardization institutions; advocate investment in renewable energy by international financial institutions
Limiting climate change and increasing the use of clean energy	Alternative ways of traveling	Introduce emission and energy labeling for vehicles; request companies to examine their vehicle fleets; encourage tele-working and car-pooling

Limiting climate change and increasing the use of clean energy	Less polluting engines (**Decrease CO_2 emissions**; reduce noise and air pollution; control waste of discarded or exported vehicles)	Encourage acquisition of less polluting vehicles; encourage R&D in engines running on alternative energy sources;

Belarus: National Strategy for the Period to 2020 of the Republic of Belarus

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Wise environment management and nature conservation for future generations	Conservation and wise management of natural resources (**Air protection**; conservation and wise management of water and mineral resources; more efficient land use and soil conservation; sustainable forestry; conservation of biodiversity)	**Reduce cross-border pollution and greenhouse gas emissions (Measures: Establish a national system for assessment of emissions and sinks of greenhouse gases and their precursors; building the capacity of greenhouse gas sinks)**

Bhutan: The Middle Path. National Environment Strategy for Bhutan

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Development of hydropower	Expand rural electrification (Encourage cottage industries; **reduce fuelwood for domestic heating, lighting and cooking, thereby preserving forests and their role as carbon sinks;** improve education, medical facilities and cultural identities)	Maintain watersheds, including through limiting forest incursions; conduct coordinated and integrated planning process to balance conflicts between hydropower development and needs of major economic sectors
Resource-based mechanisms for financing sustainability –	**Participate in potential international carbon trading arrangements**	**'Lock-up' of a portion of forests, plant forests in degraded or barren areas or harvest mature forests by reforesting in exchange for selling 'polluting rights' to other countries**

Brazil: The Brazilian Agenda 21 – Priority Actions[4]

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
The economy of savings in the society of knowledge	Renewable energy and biomass (**Further reduce importance of fossil fuels such as coal and oil that are polluting, non-renewable and largely responsible for the greenhouse effect)**	Create incentives for the efficient use and conservation of energy;
The economy of savings in the society of knowledge	Renewable energy and biomass (**Further reduce importance of fossil fuels such as coal and oil that are polluting, non-renewable and largely responsible for the greenhouse effect)**	Increase transparency and participation in energy planning;
The economy of savings in the society of knowledge	Renewable energy and biomass (**Further reduce importance of fossil fuels such as coal and oil that are polluting, non-renewable and largely responsible for the greenhouse effect)**	Develop and incorporate technologies of renewable sources of energy, taking into consideration the regional availability and necessity.
The economy of savings in the society of knowledge	Renewable energy and biomass (**Further reduce importance of fossil fuels such as coal and oil that are polluting, non-renewable and largely responsible for the greenhouse effect)**	Further develop the pro-alcohol programme for fuel substitution
The economy of savings in the society of knowledge	Renewable energy and biomass (**Further reduce importance of fossil fuels such as coal and oil that are polluting, non-renewable and largely responsible for the greenhouse effect)**	Provide human and financial resources to enable the research and development of options for the production of renewable
Strategic natural resources: water, biodiversity and forests	Forest Policy, Deforestation Control and Biodiversity Corridors	**Improve economic exploration of standing forests, such as** eco-tourism, extraction of fruits and seeds **and participation in an regime for CO_2 emission (by gaining dividends for carbon sequestration through the maintenance of tropical forests)**

[4] The Brazilian Agenda is implemented in the medium term through the multi-annual plan "Programa Agenda 21 – Programa de Plano Plurianual 2004-2007", which is available in Portuguese only.

China: China's Agenda 21

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Sustainable energy production and consumption	Improving energy efficiency and energy conservation (Energy security, reduction of pollution, **lessen greenhouse effect**)	Formulate and implement laws, regulations, standards for energy conservation and efficiency; develop and disseminate advanced conservation technologies; use economic measures, including tax policies and phasing-out of irrational subsidies, to promote energy conservation; improve awareness and information on energy conservation; strengthen international collaboration on energy conservation
Sustainable energy production and consumption	Disseminating less polluting coal mining and clean coal technologies (Reduce environmental problems, **fulfill international commitments under the UNFCCC**)	**Develop and import technologies for cleaner coal extraction and utilization; actively participate in international exchanges and cooperation related to the UNFCCC**
Conservation and sustainable use of natural resources	Protection and utilization of water resources	**Adapt to impact of climatic changes on water availability (Measures: Survey, with the help of new technologies, effects of climatic changes on water resources, such as urban flood concentration and flood prevention; adopt projects and other measures in areas exposed to the climatic influence; participate in international cooperation to study climatic changes and their influence over water resources; train professionals in this field**
Conservation and sustainable use of natural resources	Cultivation, protection, management and sustainable development of forest resources **(Maintain ecological value of forests, including role as carbon sink, is one of the forest specific objective)**	Promote forest management activities to prevent forest destruction and degradation; afforestation; take measures to improve maintenance of ecological values of forests, including research and education
Disaster mitigation	Improving natural disaster management; promoting the establishment of disaster prevention and mitigation systems, reducing losses caused by natural disasters; reducing natural disasters caused or aggravated by human factors **(climatic warming is identified as contributing to increase in natural hazards)**	Enhance planning information and research on disaster management prevention, mitigation, and impacts

Protection of the atmosphere	**Controlling greenhouse gas emissions**	**Formulate national programme for controlling greenhouse gases, including an afforestation plan, an energy development plan and setting of emission targets**
Protection of the atmosphere	**Controlling greenhouse gas emissions**	**Study and identify the impact of greenhouse gases on global and regional climates; the impact of climate change on economic and social sectors; measurement methods for emissions; methods for reducing greenhouse gases, for example in agriculture; countermeasures to climate change challenges**
Protection of the atmosphere	**Controlling greenhouse gas emissions**	**Reduce energy consumption; increase energy efficiency in energy production, industry and agriculture**
Protection of the atmosphere	**Controlling greenhouse gas emissions**	**Plant trees over wide areas to enhance absorption of carbon dioxide**
Protection of the atmosphere	**Controlling greenhouse gas emissions**	**Participate in follow-up activities associated with UNFCCC and IPCC**
Protection of the atmosphere	**Controlling greenhouse gas emissions**	**See investment from the international community for projects on mitigating climate change (clean coal technologies, hydropower, tree planting)**
Protection of the atmosphere	**Construction of climate change monitoring, forecasting, and service systems**	**Establish and improve climate observation stations, climate satellite remote sensing, greenhouse monitoring, climate data processing and management systems**
Protection of the atmosphere	**Construction of climate change monitoring, forecasting, and service systems**	**Study historic climate changes, patterns of natural disaster, impact of anthropogenic and natural impacts on climate changes; Improve climate forecasting**
Protection of the atmosphere	**Construction of climate change monitoring, forecasting, and service systems**	**Study impact of climate change on social and economic sectors, especially agriculture and forestry; on climatically fragile areas, especially with regard to water supply, desertification and deterioration of grassland in drought areas; and on meteorology, water conservation and resources, oceanography, energy, agriculture and forestry**
Protection of the atmosphere	**Construction of climate change monitoring, forecasting, and service systems**	**Strengthen international cooperation in climate research; participate actively in activities undertaken by international organizations; develop human resources**

Cook Islands: National Sustainable Development Plan (2007-2010)

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Sustainable use and management of our environment and natural resources	Marine resources	Produce and implement the Cook Islands offshore fisheries management plans including management objectives, fishing strategies, research, monitoring and compliance **(Climate change and associated weather patterns are identified as having major impact on offshore fishing)**
Sustainable use and management of our environment and natural resources	Environment	Implement National Environment Strategic Action Framework **(Measures: Implement immediate and short term priorities in the areas of** biodiversity, waste and **climate change)**
A strong basic infrastructure base to support national development	Energy	**Develop Energy Strategic Plan consistent with Pacific Islands Framework for Regional Action on Climate Change, Climate Variability and Sea-level Rise (Measures: Decrease per capita energy consumption by 20 % through increasing energy efficiency and energy conservation; reduce the reliance on high GHG based fuels by identifying and adopting technically feasible and financial viable alternative energy sources; increase by 30 % the use of renewable energy by 2010)**
A safe, secure and resilient community	All hazard risk management **(To enhance resilience in the presence of an increased frequency of extreme climate events)**	Establish a coordinated and effective national disaster risk reduction and disaster management system (Measures: Enact and implement legislation, frameworks and action plans on disaster risk reduction and disaster management; strengthen the response to national disasters and the meteorological warning system for all islands; improve community cyclone shelters and disaster management facilities on all islands)

Czech Republic: The Czech Republic Strategy for Sustainable Development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Environmental pillar: protecting nature, the environment, natural resources and the landscape, environmental limits	Make a contribution, commensurate to the possibilities and significance of the Czech Republic, towards the solution of European and global environmental issues **(especially the threat of climate changes and depletion of the Earth's ozone layer, as well as the los of biodiversity**)	**Continuously reduce emissions from greenhouse gases (especially by savings of energy, including fuel consumption by vehicles, and by the utilization of renewable sources), in particular carbon dioxide from the combustion of fossil fuels and methane from waste dump sites; special attention to be paid to reducing emissions from fluorinated greenhouse gases)**

Colombia: Pan Nacional de Desarrollo 2006-2010

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Una gestión ambiental y del riesgo que promueva el desarrollo sostenible	Una gestión ambiental que promueva el desarrollo sostenible	Planificación ambiental en la gestión territorial **(Measures: Establish strategic options to reduce greenhouse gas emissions, define mitigation and adaptation measures; study vulnerability; define me; formulate national climate change policy and action plan)**
Una gestión ambiental y del riesgo que promueva el desarrollo sostenible	Gestión del riesgo para la prevención y atención de desastres	Vulnerabilidad fiscal y transferencia del riesgo **(Measures: Develop and evaluate insurance mechanisms to manage risk in the agriculture sector due to climate-related natural disasters)**

Denmark: A shared future- balanced development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
There must be a safe and healthy environment for everyone, and we must maintain a high level of protection	Stabilize concentration of greenhouse gases to prevent harmful, man-made effects on the climate system	**Reduce greenhouse gas emissions from 2008-2012 in accordance with commitments under the Kyoto Protocol**
Resources must be used more efficiently	Develop more sustainable methods of production through the wider use of existing technologies and technological breakthroughs	**Provide framework and strong platform for the development and dissemination of environmental technologies, such as fuel cells which significantly reduce CO_2 emissions**

Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Extend CO_2 quota scheme for energy production, which should lead to an increase in renewable energy and natural gas for electricity generation**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Consider measures for reducing CO_2 emissions in the transport sector**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Reduce climate-gas emissions from agriculture through expanded biogas plants and the action plan for ammonia**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Increase woodland areas within one tree generation**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Reduce emissions of strong industrial greenhouse gases such as HFCs, PFCs and SF6**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Make use of the flexible mechanisms of the Kyoto protocol**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Support the GEF and UNEP's Collaboration Centre on Energy and the Environment**
Climate change	**Reduce CO_2 emissions from energy consumption by 20 % in 2005 compared to 1988 and by 21 % in 2008/12 compared to 1990**	**Conduct analysis of possible climate effects in Denmark**
Denmark's international activities	Support the overall objective of global sustainable development (lack of access to water and sanitation,	Lift EU candidate countries to the environmental level of current members; work for sustainable development under the OECD; Enhance possibilities to create sustainable development for

	climate change impact on developing countries, loss of biodiversity, unsustainable use of natural resources, hazardous chemicals)	developing countries through development assistance; Focus on cleaner energy in environmental assistance; work actively to ensure that regional and global environmental conventions are effective; work for effective global efforts to support sustainable development in the Doha trade negotiations round under the WTO; Ensure that the WSSD leas to a *global deal* on sustainable development
Agriculture	**Reduce agricultural emissions of ammonia and greenhouse gases**	**Implement climate strategy, Climate 2012, and initiatives to reduce ammonia evaporation**
Forestry	Increase forest areas to 20-25 % within 80-100 years (Give opportunities for outdoor recreation, create framework for biodiversity; **promote and better exploit abilities of forests to protect the environment, especially groundwater protection and CO_2 storage**	**Implement program to provide data on nature content in forests, CO_2 absorption and environmental and social services**
Transport	**Reduce transport sector CO_2 emissions by 25 % in 2030, compared with 1988**	**Consider possible measures as a basis for benchmarks for the transport sector's CO_2 emissions**
Energy	**Increase energy efficiency in order to reduce energy consumption and CO_2 emissions**	**Investigate cost-effective and flexible regulation of the electricity sector's CO_2 emissions; Take initiatives to fulfill commitments under the Kyoto protocol; Utilize flexible mechanisms under the Kyoto-protocol; Continue to expand renewable energy supply (Measures: Promote R&D into renewable energy through tax incentives, Consider longer-term benchmarks for share of renewable energy; Incorporate Danish renewable energy into future European CO_2 market; Convert from coal to natural-gas-based electricity production)**

Finland: Toward Sustainable Choices: A Nationally and Globally Sustainable Finland

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Implement obligations under the Kyoto Protocol (Measures: Implement energy and climate strategy focusing on utilization of renewable energy sources, energy savings and reduction of greenhouse gas emissions; acquire emission units internationally by means of flexible-mechanisms under the**

		Kyoto Protocol
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Develop strategy for decreasing emissions in the medium and long-term**
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Develop new technologies and use existing strategies more efficiently; use market-based mechanisms such as emission trading markets based on global principles**
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Raise citizen's awareness of greenhouse gas emissions**
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Promote global cooperation on climate change mitigation and adaptation within the European Union and internationally under the UN climate regime**
Balance between the use and protection of natural resources	**Limiting greenhouse gas emissions**	**Ensure that emission reduction projects implemented with Finnish financing in developing countries reduce poverty and promote sustainable development**
Balance between the use and protection of natural resources	Increasing energy efficiency and the use of renewable energy (increase economic efficiency, improve self-sufficiency, **reduce greenhouse gases**, improve economic competitiveness)	Increase energy saving and reduce in the long-term overall primary energy consumption
Balance between the use and protection of natural resources	Increasing energy efficiency and the use of renewable energy (increase economic efficiency, improve self-sufficiency, **reduce greenhouse gases**, improve economic competitiveness)	Increase renewable sources of energy and biofuels, especially through investments in research and development; achieve targets on the share of renewables in electricity consumption and on the share of wood chips in primary energy consumption
Balance between the use and protection of natural resources	Increasing energy efficiency and the use of renewable energy (increase economic efficiency, improve self-sufficiency, **reduce greenhouse gases**, improve economic competitiveness)	Increase energy efficiency in building constructions

Balance between the use and protection of natural resources	Increasing energy efficiency and the use of renewable energy (increase economic efficiency, improve self-sufficiency, **reduce greenhouse gases**, improve economic competitiveness)	Increase citizen's awareness by means of energy efficiency labels and markets offering eco-efficient alternatives
Balance between the use and protection of natural resources	**Adapting to the adverse effects of climate change**	**Consider climate change impacts in land planning, biodiversity conservation, agriculture**
Balance between the use and protection of natural resources	**Adapting to the adverse effects of climate change**	**Implement research program on climate change adaptation**
Balance between the use and protection of natural resources	**Adapting to the adverse effects of climate change**	**Monitor and prepare for social and health impacts of climate change**
Balance between the use and protection of natural resources	**Adapting to the adverse effects of climate change**	**Consider global climate change impacts in all policy areas, including foreign and security policy, migration and development co-operation**
Balance between the use and protection of natural resources	Ensuring biodiversity	**Prepare to changes to nature due to climate change through long-term adaptation strategy**
Balance between the use and protection of natural resources	Promoting sustainable production patterns (**Decouple economic growth from** the consumption of natural resources, **emissions, including carbon dioxide emissions**, and waste)	**Reduce coal intensity and examine how to end the use of environmentally burdening fossil fuels in the long term**
Balance between the use and protection of natural resources	Promoting sustainable production patterns (**Decouple economic growth from** the consumption of natural resources, **emissions, including carbon dioxide emissions**, and waste)	Increase eco-efficiency of non-renewable natural resource utilization, taking into account and monitoring the entire life cycle of products and including hidden material flows
Balance between the use and protection of natural resources	Promoting sustainable production patterns (**Decouple economic growth from** the consumption of natural resources, **emissions, including carbon dioxide**	**Integrate nature protection objectives with use of natural resources for nutrition, bioenergy, forest industry products and carbon sinks, such as to favor renewable natural resources over non-renewable resources, but to keep within the limits of the**

	emissions, and waste)	**carrying capacities**
Balance between the use and protection of natural resources	Promoting sustainable production patterns (**Decouple economic growth from** the consumption of natural resources, **emissions, including carbon dioxide emissions**, and waste)	Direct public research and development funds towards a technology oriented environmental policy on the national, European and international level, combining environmental benefits with creating new business and export opportunities
Sustainable communities in a sustainable regional structure	Functionally diverse and structurally sound communities and a good living environment	**Decentralize community structure, minimize transport needs and reduce adverse effects of traffic in order to, inter alia, mitigate climate change**
Citizens – well-being throughout the entire life cycle	Promoting healthy life styles and functional capacity and preventing health threats	**Prepare for health threats resulting from climate change impacts such as storms, floods and heat waves**
Supporting sustainable choices	Research and development, know-how and innovations (**promote new technologies for preventing climate change**, reducing the use of hazardous substances and waste, sustainable transport solutions and availability of clean water)	Integrate principles of sustainable development into research; increase investments in accordance with sustainable development; promote innovations and their diffusion (Measures: training; education, creation of networks of administration, scientific community and civil organization; regulation; inclusion of end users in research process; improved skills in risk financing, business competence, commercialization, internalization)

France**:** La Stratégie Nationale de Développement Durable[5]

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Changement climatique et énergie propre	**Poursuivre une politique volontariste de diminution des émissions de gaz à effet de serre**	**Implement commitments under the Kyoto Protocol; Promote international negotiations for post-2012 climate regime; Implement law to reduce CO_2 emissions by 75 % until 2050; Engage local communities to conduct local climate policies**
Changement climatique et énergie propre	Conduire une politique énergétique durable, qui anticipe les incertitudes face au renchérissement prévisible du cout de l'énergie	**Utilize non GHG emitting energy sources, especially for heating, transport and electricity; Develop new energy technologies: clean coal, hydrogen; ITER, 4th generation nuclear reactor; 2nd generation biofuels; Plan to apply carbon**

[5] The issues, objectives and aims listed in the table below are derived from the "Objectifs stratégiques et instruments". In addition, the French NSDS also contains a detailed programme of action.

		capture and storage technologies; prepare sector scenarios for climate change and energy price increases; Aim at carbon neutral investments within the budget and the regional plan contract
Changement climatique et énergie propre	**Mettre en œuvre la Stratégie nationale d'adaptation aux conséquences du changement climatique**	**Define action plan for each Ministry ; identify climate change risks ; amplify policies for flood and drought prevention; Support regulatory evaluations in sensitive sectors**
Changement climatique et énergie propre	**Promouvoir l'utilisation des énergies sans gaz à effet de serre, dont les énergies renouvelables**	**Achieve targets to reduce energy consumption, electricity consumption, biofuels and renewable energy; maintain policies to support renewable energies (tax incentives, price regulation); increase efforts to develop geothermal energy**
Changement climatique et énergie propre	Atteindre un objectif d'incorporation de 5,75 % de biocarburant dès 2008 et anticiper ainsi de deux ans ce que prévoit l'objectif européen	Implement the national biofuel plan ; main fiscal and regulatory framework; introduce fuel with 85 % ethanol; create two pilot projects
Changement climatique et énergie propre	Poursuivre les efforts entrepris en matière d'efficacité énergétique de manière à réaliser une économie d'énergie d'au moins 9% au terme d'une période de 9 ans	Reduce energy intensity ; **implement action plan on energy efficiency in the building sector, which is part of the revised climate plan; develop and use information technologies to reduce transport, energy consumption and greenhouse gas emissions**; increase energy efficiency of electronic device; improve quality of transport services; develop fuel efficient vehicles
Transport durable	Confirmer et amplifier la decorrélation de la croissance globale de celle des transports en agissant sure les conditions économique et sociales	Encourage firms and administration to evaluate impact of transport; **implement policy for increased transparency and information on pollution and greenhouse gas emission in the transport sector** ; reduce impact of large infrastructure projects on biodiversity
Transport durable	**Réduire les émissions de gaz à effet de serre en orientant les comportements vers une mobilité durable**	Promote economical driving through training and enforcement of regulations ; Incorporate pollution costs in infrastructure pricing
Transport durable	**Améliorer l'efficacité énergétique dès véhicules et réduire la dépendance au pétrole pour limiter les émissions de GES**	Develop innovations in the transport and energy sectors ; reduce fuel consumption per vehicle, by moving from voluntary commitments to a market of CO2 quotas; facilitate use of natural gas and electricity in the transport sector; implement biofuel plan; advance research in hydrogen and fuel cell technologies;

Germany: Perspectives for Germany. Our Strategy for Sustainable Development[6]

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Intragenerational equity	**Climate protection. Reducing greenhouse gases**	**Reduce GHG emissions in accordance with Kyoto Protocol; reduce CO_2 emissions by 25 % in 2005 compared with 1990; lobby in the European Union for ambitious targets for the post-2012 framework**
Intragenerational equity	Renewable energies- extending sustainable systems of energy provision (Finiteness of major energy sources; **greenhouse gas emissions**)	Double share of renewable energy sources; reduce energy consumption
Use energy efficiently – protect the climate effectively	**Resource conservation and climate protection**	**Reduce GHG emissions in accordance with Kyoto Protocol; reduce CO_2 emissions by 25 % in 2005 compared with 1990; double; Double share of renewable energy sources; maintain, modernize and develop the heat-power cogeneration cycle; energy saving and increased energy efficiency in households, transport, industry and energy sector; international alignment of framework conditions for climate protection and energy provision, particularly within the EU**
Use energy efficiently – protect the climate effectively	Energy efficiency	Modernize power plants; promote CHP plants and fuel cells; increase energy efficiency in household, transport and building sector
Use energy efficiently – protect the climate effectively	Renewable forms of energy	Implement pilot project on renewable forms of energy and efficient use of energy in fuel cells; conduct awareness campaign on efficient use of electricity in private households; implement renewable energy strategy, including investment incentives and guaranteed prices
Use energy efficiently – protect the climate effectively	Reduce energy consumption in the area of buildings	Promote energy saving in buildings through incentives, using new financial mechanisms, awareness campaigns, standards;
Use energy efficiently – protect the climate effectively	Strengthening the market economy framework	Liberalizing European energy markets**; Implement climate agreement with industry; experimental introduction of European mission trading;** promote innovation

[6] Germany's NSDS contains both a list of objectives based on a model of sustainable development as well as seven key focus points. The table contains relevant information for both the model and key focus points in parallel.

Guaranteeing mobility – protecting the environment	**Further reduction of emissions of CO_2 and pollutants**	**Reduce, by 2005, transport-related CO_2 emissions by 15-20 million tones compared to 1998; take measures with EU partners to limit GHG emissions from cross-border air and maritime traffic** **(Wide range of measures, climate specific measures include: pledge by German automobile industry to reduce average fuel consumption; CO_2 and fuel consumption classification of new vehicles)**
Producing healthily – eating healthily	Development of rural areas	**Sustainable cultivation of woodlands in order preserve functions of woodlands** for soil conservation, water conservation, **climate**, biodiversity, recreation and human well-being (Measure: Establish near-natural system of woodland cultivation)
Producing healthily – eating healthily	Development of rural areas	**Promote electricity production from biomass as renewable forms of energy, in order to protect climate and environment**, to generate income in rural areas and to create security for investment planning (Measure Biomass regulation act)
Taking global responsibility	Progressing the protection of the environment and resources worldwide	**Continue to fastidiously develop the Kyoto Protocol, with developed counties to reduce GHG to target levels, developing and newly industrialized countries to gradually accept specific restrictions, and testing of effective reduction of emissions in international air and sea transport**
Taking global responsibility	Promoting sustainable use of resources (**Need to include developing countries in the fight against climate change mentioned as example**)	In the course of development collaboration, pursue, among other the central themes of protection and sustainable use of forests; efficient and environmentally friendly energy systems; improvement of water supply and integrated water management, improve urban living conditions, develop sustainable agriculture and other forms of rural income

Ghana: Growth and Poverty Reduction Strategy II (2206-2009)

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Priorities for private sector competitiveness	Restoration of degraded environment and natural resource management	**Initiate measures toward minimizing the impact of climate change/ variability**
Priorities for private sector competitiveness	Develop additional sectors to support growth	**Enhance the institutional capacity of the meteorological agency to meet the minimum global requirement for monitoring the**

		climate and the environment
Priorities for private sector competitiveness	Environment oriented factors in vulnerability and exclusion	**Deal with the effect of climate change especially drought and desertification** (Measures: Promote small-scale irrigation dams and dug-outs as well as rain water harvesting; review, disseminate and enforce reforestation policy; develop policy on alternative livelihood opportunities; promote the development and use of alternative energy sources (biogas); **Adopt policy framework on climate change and mainstream the national action program to combat drought and desertification;** Intensify public education on floods; Develop strategies to protect life, property and identify flood prone areas; provision of drainage facilities in flood prone areas, enforce existing laws on building and sanitation.

Greece: National Strategy for Sustainable Development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Sectors of action and measures for the reduction of environmental pressures	**Climate change abatement**	**Achieve Kyoto-target of keeping increase of GHG emissions below 25 % through: reform and diversification of energy supply; rational use and conservation of energy; measures for the reduction of other GHG; institutional measures**
The sustainable development dimension in sectoral policies	Transport sector (Contribution to energy consumption , **GHG emissions** and noise)	Develop and extend public transport; upgrade road network; promote environmentally friendly fuels; promote rail and sea transport; enhance traffic flow management; regulate private car use; change driving patters; awareness campaigns
Horizontal actions	Economic instruments	**Set up a emission trading system in the context of implementing the Kyoto Protocol**

Honduras: Estrategia para la reducción de la pobreza. Versión actualizada

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Acelerando el crecimiento económico equitativo y sostenible	Desarrollo de sectores de alto potencial productivo y de empleo	Impulsar el desarrollo del cluster forestal (Measures: approve law on forest management, defining ; establish technical and financial assistance programmes; develop 'green' certificates for forest management **)**

		(Negative impact of forest degradation and forest fires on climate change, environment, economy and population health **are described as major problem in the forestry sector)**

Iceland: Welfare for the future. Iceland's National Strategy for Sustainable Development 2002-2020.

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Sustainable use of resources	Increased utilization of renewable energy (Reduce imports; **reduce CO_2 emissions**)	Continue work on master plan on hydro an geothermal energy
Global issues	**Limitation of climate change**	Reduce GHG emissions from transport (Measures: Modify fuel and car taxes, modify duty structure for cars; improve traffic control; decrease need for private car use through town planning; promote public transport)
Global issues	**Limitation of climate change**	**Ensure that aluminum industries take measures to keep PFC emissions at minimum (Measures: Make agreement with aluminum producers; establish cooperation between Ministry of Environment, Ministry of Industry and aluminum industry on measures to minimize GHG intensity of aluminum production**
Global issues	**Limitation of climate change**	**Decrease energy use and the use of refrigerants in the fishing fleet (Measures: education on energy efficiency; equip new and renovated vessels registered in Iceland with best available technology for energy efficiency; reduce use HCFCs for refrigeration where possible)**
Global issues	**Limitation of climate change**	**Enhance carbon sinks through afforestation and revegetation,** taking biodiversity conservation and strengthening local communities into account
Global issues	**Limitation of climate change**	Participate in international climate change cooperation **(Measures: participate actively within the UNFCCC and the Kyoto-Protocol; strengthen institution to transfer geothermal expertise to developing countries; consider climate change in development aid and cooperation policies)**

Ireland: Sustainable Development. A Strategy for Ireland

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Achieving integration: bringing environment to the heart of sectoral performance	Agriculture	**Give attention to the control of methane, nitrous oxide and** ammonia **emissions from agricultural sector**
Achieving integration: bringing environment to the heart of sectoral performance	Forestry	Increase significantly the land area under afforestation, taking both positive and negative impacts into account **(Role of forestry as carbon sink mentioned as major positive affect from afforestation)**
Achieving integration: bringing environment to the heart of sectoral performance	Energy	**Limit growth in total emissions of carbon dioxide, methane and nitrous oxide up to 2010 to 15 % compared to their 1990 levels (Measures: Review, update and implement CO_2 abatement strategy; limit growth in energy consumption through increased energy efficiency; consider to increase share of low-emission fuels, including natural gas; increase share of renewable energy; examine internalization of external costs through energy pricing and taxation;**
Achieving integration: bringing environment to the heart of sectoral performance	Transport	**Support completion of EU proposals to reduce CO_2 emissions from motor vehicles; support initiation of action by the EU to address pollution from air transport in a wider international context**
A quality environment: an investment in the future	Air quality	**Ensure that Ireland is active in support of international action in relation to climate change,** ozone depletion and transboundary air pollution.

Kazakhstan: Concept of the transition of the Republic of Kazakhstan to sustainable development for the period 2007-2024

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Environmental sustainability	**Conservation and rehabilitation of the habitats**	Decrease anthropogenic impact on climate and ozone layer of the Earth

Latvia: Strategy for Sustainable Development of Latvia

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
	Climate changes and protection of the ozone layer	**Ensure that the contribution of Latvia in the prevention of global climate changes in such a manner that does not hinder the economic development of the country (Measures: Minimize use of imported energy sources by increasing energy efficiency; enhance use of renewable energy sources, including biogas recycling, use of bio-fuels, use of wind, solar and hydro energy, use of low-graded and waste wood for heating; reduce GHG emissions from household waste; promote carbon sequestration through afforestation and increased productivity of forest plantations; public awareness raising on cc impacts; ensure that from 2008 GHG emissions do not exceed 92 % of their 1990 levels**
	Housing policy	**Saving and efficient utilization of energy in the housing sector** (Measures: encourage the development of modern energy metering systems; construction of good quality housing by encouraging the use of up-to-date environmental friendly thermo-technology and construction materials; energy auditing and certification of apartment blocks; heat insulation of newly erected buildings) **(Direct GHG emissions used to measure achievement of objective)**

Lithuania

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Environmental quality	Air quality **(Long-term objective: Improve air quality management system in order to achieve EU standards and to decouple pollutant and GHG emissions from economic growth)**	**Reduce pollutant and GHG emissions per GDP unit by 50 % (Measures: Promote environmentally friendly technologies; provide investment support for alternative and modern energy sources; encourage renewal and modernization of vehicle fleet, public transport, production of clean fuels; environmental regulations in the transport sector)**
Environmental quality	Air quality (Mid-term objective: Use internal and external financing more effectively to meet	**Apply EU requirements for power plants, fuel storage and transport; Enforce control of emissions from vehicles (Measure: Revise national climate strategy)**

	emission reduction objectives)	
Environmental quality	Air quality (Short-term objective: Finalize legal and information base and strengthen institutional capacity in the area of air quality)	**Improve pollution emission inventory and reporting; develop legal and economic measures to participate in joint implementation and emission trading mechanisms under the Kyoto Protocol; improve order of issuing integrated pollution and prevention and control permits** **(Measures: introduce new GHG assessment methodology; prepare order of emission inventory and reporting in accordance with EU requirements; supplement integrated pollution and prevention and control permits with GHG emission requirements; prepare national strategy to apply joint implementation mechanism)**
Environmental quality	Waste management (Long-term objective: Establish waste management system)	**Reduce input from waste landfills to global climate warming** **(Measures: Introduce advanced technologies to prevent waste generation and increase recycling; implement modern biodegradable waste management methods based on composting, biogas production and use for energy purposes)**
Economic development	Transport **(Long-term objective: reduce input from transport sector into the global climate system)**	**Increase economic and ecological efficiency of transport sector and decouple GHG emissions from growth in the transport sector** **(Measures: Implement legal and economic measures to give priority to transport modes which consume less fuel and pollute less; promote network of petrol stations selling biofuels; implement and improve transport infrastructure development measures)**

Luxembourg: Plan National pour un Développement Durable

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
La contribution du Luxembourg au développement durable au niveau international		**Spend 0.15 % of BIP for the integration of environmental dimension, especially with regard to the fight against climate change, in development processes of developing countries**
La contribution du Luxembourg au		**Double resource productivity by 2020, in order to contribute to climate change mitigation in accordance with the principle of**

développement durable au niveau international		**common but differentiated responsibilities**
La contribution du Luxembourg au développement durable au niveau international		**Reduce GHG emission by 28 % for the 2008-2012 period in accordance with the Kyoto Protocol**
La contribution du Luxembourg au développement durable au niveau international		**Support European initiative to reduce car emissions, including through voluntary agreements with the car industry**
Pilier I: L'économie performante et durable	L'industrie et l'artisanat	**Contribute to the reduction of GHG emissions by 28 % by 2010 (Methods: Support R&D in eco-friendly technologies; promote voluntary agreements; raise environmental awareness within industry and trade)**
Pilier I: L'économie performante et durable	L'énergie **(CO_2 emissions identified as major problem)**	Decrease energy intensity by 20 % by 2010 compared with 1993 **; contribute to the reduction of GHG emissions by 28 % by 2008-2012**; promote energy efficiency in the building sector; promote combined heat power (CHP) plants; promote renewable energy; increase autonomous energy production **(Measures: Exploit all possibilities for increasing energy efficiency and reducing energy consumption; favor energy from renewable sources, including from biomass; create energy fund; introduce energy taxes)**
Pilier I: L'économie performante et durable	Le transport **(CO_2 emissions identified as major problem)**	**Contribute to reduction of CO_2 emissions** **(Measures: Implement projects and use financial incentives to promote public transport; incorporate ecological concerns in car taxation; prepare sectoral plan for the transport sector; improve international railway connections)**
Pilier II: La protection de l'environnement naturel et humain ainsi que des ressources naturelles	La protection et la gestion durable des forêts	**Encourage afforestation in order to increase area covered by forests and increase carbon sequestration**
Pilier II: La protection de l'environnement naturel et humain ainsi que des	**La protection de l'atmosphère et du climat**	**Reduce GHG emissions by 28 % over the period 1990-2010 (Measures: Prepare and implement a national CO_2 reduction programme)**

ressources naturelles		

Marshall Islands: Vision 2018. The Strategic Development Plan Framework 2003-2018

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Operating in an interdependent world	Strengthening the capacity and ability to successfully manage our external economic and political relations and **face the challenges** arising from global integration, **climate change** and to benefit from technological advances	**Participate effectively in all relevant international efforts aimed at minimizing the impact from global warming, climate change and globalization**
Environmental sustainability	**Develop and have in place a contingency/adaptation plan to counter the emerging threats resulting from the adverse impacts of climate change including a national disaster plan**	**Increase public awareness on threat to the existence of the nation from sea level rise; secure international support to reduce climate change impact; lobby the international community to call on all industrialized countries to ratify and fulfill their obligations under the Kyoto Protocol; implement strategies to have in place a contingency/adaptation plan to counter the emerging threats of climate change; secure the involvement of elected and traditional leaders in Climate Change Country Team**

Montenegro: National Strategy of Sustainable Development of Montenegro

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Environment and natural resources	Forest (Maintain and, if need be, increase forests in line with sustainable forest stewardship to achieve economic and environmental benefits**, including positive impact on climate)**	Obtain sustainable forestry certificate; renewal and restoration of degraded forests. (Measures: adopt the National Forestry Policy for Montenegro and relevant legislation; preparation of national forest inventory; introduction of geographic information system (GIS), improvement of planning, establishment of reliable monitoring and control system for the implementation of plans and management practices in forestry and hunting; enhancement of seed and seedling production from autochthonous genetic resources; revitalization of nurseries for the production of fast-growing species; monitoring the health of forests

Environment and natural resources	Climate change and protection of the ozone layer	**Ratify Kyoto Protocol;** Develop the National Communication on Climate Changes

Namibia: Vision 2030

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Production systems and natural resources	Land and agricultural production (Objective: Ensure that all Namibians have equitable access to land and other natural resources, that these resources are sustainable and efficiently used, while maximizing Namibia's comparative advantages)	**Implement policies that discourage the use of wood fuel and help combat climate change; develop effective and sustainable uses of land and natural resources by, inter alia, encouraging research development and testing of new CO_2 responsive heat and drought resistant crop cultivars (in preparation for future climates that could become hotter and drier; Identify cost-effective, flexible and adaptable management approaches and national disaster response strategies to the potential impacts of climate change, that could affect the livelihoods of Namibia's poor.**
Production systems and natural resources	Forestry (Objective: Ensure equitable access to and appropriate tenure over land, woodland and forest resources, as well as their sustainable utilization). (Increased rainfall run-off, soil erosion, declining soil fertility, changes in the local water cycle, loss of biodiversity and **increased rates of global warming are listed as consequences of unsustainable deforestation**)	Improve management practices, including through incentives for sustainable forest management; raise awareness; support forest rehabilitation; combat deforestation; promote indigenous over exotic species; extend protected areas.
Production systems and natural resources	Fisheries and marine resources (Objective: Achieve increasing and sustainable yields of fisheries and marine resources for the development of the economy and the benefit of the people of Namibia)	**Identify cost-effective, flexible and adaptable management approaches and national disaster response strategies to the potential impact of sea-level rise and other impacts linked to climate change, that could affect the marine resource sector; Incorporate such impact into national development plans.**
Production systems and natural resources	Biodiversity (Objective: Achieve diminished rates of	Implement measures to improve the policy environment regarding land-use management; introduce economic instruments , which can

	biodiversity loss and ensure equitable access of all Namibians to and appropriate tenure over all natural resources) (**Increased vulnerability to drought, floods and other extreme events like global climate change identified as consequence of biodiversity loss**)	be used to help finance sustainable development options and/or discourage environmentally unfriendly practices; improve knowledge base regarding natural resources and biodiversity; develop and implement initiatives aimed at the transboundary management of deserts
The urban environment	Achieve integrated urban and rural development in which there are opportunities for innovative and sustainable employment, with well planned, well managed, clean, safe and aesthetically pleasing urban areas	**Make Windhoek and all of Namibia's large towns 'cyclist-friendly', thereby reducing traffic congestion and contributing to climate change mitigation.**

New Zealand: Sustainable Development for New Zealand. Programme of Action

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Energy	Continue the transition to renewable sources of energy (energy security, **mitigate climate change**)	Develop and implement mechanisms to lift share of renewable energy in total energy use from 29 to 31 percent by2012; Establish timetable and targets to renewable energy beyond 2012; support research and innovation in renewable energy technology; foster internationally competitive renewable energy industries for the world market)

Republic of Korea: National Strategy for Sustainable Development of the Republic of Korea 2006-2010.

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Sustainable Management of Natural Resources	Sustainable Forest Management	**Expand carbon sinks in conformance with the UNFCCC (Measures: Set master plan on carbon sink expansion in forestry; improve understanding of global trends and consolidate negotiation capacity with regard to carbon sinks; expand carbon sinks through afforestation and forest-tending**
Dealing with climate change and global environmental issues	**Establish a climate change mitigation programme**	**Build a foundation for implementing agreements (Measures: Set up national statistical system of greenhouse gases; carry out R&D in technologies related to hydrogen, new**

		and alternative energy; co2 reduction and treatment; conduct projects to include climate change into school curricula and training in industries; establish foundation for using CDM and participate in the carbon market under the Kyoto-Protocol
Dealing with climate change and global environmental issues	**Establish a climate change mitigation programme**	**Carry out sectoral greenhouse gas reduction projects (Measures: conduct energy demand project, including tax and financial support for energy savings and voluntary agreements with business sector; conduct energy supply project, including renewable energy and support to investment in energy savings; improve energy efficiency through labeling; formulate energy management policy for buildings; implement transportation and energy policy, including tax incentives for hybrid and low-pollution cars; drive forward project in the areas of environment waste, including use of waste landfill gas, food waste recovery, biofuel supply; implement project to GHG reduction in the agriculture and forestry sector, including reduction of methane emission through livestock waste treatment, and the expansion of carbon sinks through forest conservation**
Dealing with climate change and global environmental issues	**Establish a climate change mitigation programme**	**Establish foundation for adaptation to climate change (Measures: build infrastructure for information on climate change and an advanced system to prevent large scale natural disasters caused by climate change; carry out R&D projects related to climate change impact assessment on ecosystems, public sanitation and health**

Slovakia: National Strategy for Sustainable Development for the Slovak Republic

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
	Alleviation of consequences of the global climate change, depletion of the ozone layer and natural disasters	**Permanent monitoring and evaluation of the main macroclimatic and hydrological parameters in relation to global climate change**
	Alleviation of consequences of the global climate change, depletion of the ozone layer and natural disasters	**Projection of expected results of global climate change and their hydrological consequences to sectoral policies (in particular water management, agriculture and forestry, but also other**

		sectors and social area); practical application of measures to eliminate negative impacts
	Alleviation of consequences of the global climate change, depletion of the ozone layer and natural disasters	Creation of an integrated system of prevention and liquidation of consequences of natural disasters

Slovenia: Slovenia's Development Strategy

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Integration of measures to achieve sustainable development	Integrating environmental standards with sectoral policies and consumption patterns	**Reduce industry's contribution to climate changes and adjust the economy and settlements to the anticipated climate changes (Measures: Fulfill the obligations under the Kyoto Protocol concerning the reduction of greenhouse gas emissions; launch a greenhouse gas emissions trading scheme; analyze the environment's vulnerability to climate change and adapt to them)**

Sweden: Strategic Challenges. A further elaboration of the Swedish Strategy for Sustainable Development

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Building sustainable communities	Transport, communication and infrastructure	More sustainable planning of energy supplies, infrastructures, air routes, railways, road systems, public transport, harbours, telephony and IT networks **(**Energy consumption, air pollution, noise pollution and **climate change identified as problems caused by travel for private and professional reasons)**
Environment and natural resources	Decent residential and urban environments	Limit use of fossil fuels in order to reduce environmental impact of energy consumption from new building constructions and renovations **(Measure: Transfer experience acquired from implementation of Local Investment Programmes and Climate Investment Programmes to other municipalities in Sweden and abroad)**
Encouraging sustainable growth	Energy	**Ensure access to energy that has as little negative impact on climate and the environment (Measures: Appoint Commission on Oil Independence to**

		discuss and analyze strategic question to ensure that Sweden is independent of fossil fuels for transport and heating by 2020; coordinate wind power construction in Sweden; promote biofuels and energy efficiency within the EU)
Encouraging sustainable growth	Innovation and renewal	**Propose national strategy for IT and sustainable development to promote IT solutions that are cost-effective, energy efficient, designed to reduce CO_2 emissions**
Tools for successful efforts	Economic instruments and tax policy	**Reinforce Climate Investment Programme (a government investments grant programme)**

Switzerland: Sustainable Development Strategy 2002

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Financial policy	Fiscal incentives for the economical use of resources	**Prepare report considering increased environmental incentives in the tax system with the aim to achieve a revenue-neutral shift in taxation from labour to energy, taking into account the possible introduction of a CO_2 tax and developments in energy tax abroad**
Environment and natural resources	**Refinement of energy and climate protection policy**	**Effective implementation of measures contained in the "EnergieSchweiz" programme and the energy and CO_2acts; work towards an international agreement on limiting emissions from aviation; submit proposals to general assembly CO_2 reduction targets for the post 2010 period.**

Tunisia: Agenda 21 National

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Questions sectorielles du développement durable	Maitrise des nuisances et développement durable	Reduce negative effects from energy consumption on the atmosphere (Measures: Improve energy planning, study possibilities for new and renewable energy**; increase rural afforestation to increase carbon absorption**; awareness raising)

Gestion durable des ressources naturelles	Gestion et utilisation durables des terres	Attain sustainable management of forests Measures: protection of forests; regeneration and reforestation; reinforce national forest action plan; integrate environmental and socio-economic in forest management; promote energy from gas in rural areas to substitute fuelwood) **(Environmental benefits of forests for biodiversity and carbon absorption are noted)**
Gestion durable des ressources naturelles	Développement durable et gestion des mers et des ressources biologiques marines	**Study climate change impact on marine resources and water quality**

Tuvalu: Te Kakeega II. National Strategy for Sustainable Development 2005-2015.

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Natural resources	Agriculture (Objectives: Reverse the decline in subsistence agricultural production; Increase availability of land for agricultural production; Increase production and consumption of local produce; **Mitigate climate change-related agricultural impacts**)	Improve and expand agricultural extension services; Create more opportunities to educate and train agriculturalists; expand availability of basic agricultural tools and equipment; assist private entrepreneurs to produce and market local produce; assist with access to land and credit; incorporate more agricultural subjects into school curricula
Natural resources	Environment (Objectives: Stop unregulated development and degradation of the environment – especially on Funafuti; Increase number of marine and terrestrial conservation areas; **minimize climate change impacts**)	Develop and implement an urban and waste management plan for Funafuti; **Establish national climate change adaptation and mitigation policies; Encourage international adoption of Multilateral Environmental Agreements, including the Kyoto Protocol**; Increase the number of conservation areas and ensure regulatory compliance

United Kingdom: Securing the future

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Helping people to make better choices	Community Action 2020- together we can	**Implement new approach to climate change communications in order to raise awareness and translate into action at the community level (Measures: Use new toolkit for climate change communications)**
Helping people to make better choices	Using incentives	**Give advance notice of new environmental taxes and hold intensive consultations on their design, for example with the Climate Change Levy; Undertake evaluations of the Climate Change Levy and Aggregates Levy**
"One planet economy": sustainable consumption and production	Sustainable production – greater efficiency and value with less resource use, pollution and waste	**Promote energy efficiency through the climate change levy and agreements, and emissions trading**
Confronting the greatest threat: Climate change and energy	International framework	**Continue to work with other countries to establish both a consensus on the need for change and firm commitments to reduce carbon emissions, using the UNFCCC**
Confronting the greatest threat: Climate change and energy	International framework	**Continue to work with developing countries in tackling climate change, and to facilitate transfer of technology and improve access to relevant financial assistance**
Confronting the greatest threat: Climate change and energy	International framework	**Support Renewable Energy and Energy Efficiency Partnership for accelerating and expanding the global market for renewable energy and energy efficiency systems/technologies**
Confronting the greatest threat: Climate change and energy	Energy supply	**Achieve targets for share of renewables in electricity of 10 % by 2010/11, with an aspiration to double this by 2020 through obligations for electricity suppliers; support growth of combined heat and power (CHP) capacity; launch consultations on a strategy to promote micro-generation technologies for electricity supply; launch carbon abatement technology strategy, covering,, among others, carbon capture and storage technologies**
Confronting the greatest threat: Climate change and energy	Business	**Extend climate change agreements covering energy use and emission reductions to more sectors, to allow sectors to reduce climate change levy; Examine potential to continue and extend UK emissions trading scheme; assesses trading schemes for energy efficiency; introduce landfill allowances trading scheme**

Confronting the greatest threat: Climate change and energy	Transport	**Implement strategy for clean, low-carbon vehicles and fuels through grant and duty incentives and R&D; introduce mandatory energy efficiency label for cars; press European Commission to finalize new round of voluntary agreements with car industry; achieve target of 10 % low-carbon vehicles by 2012; press for an inclusion of intra-EU air services in EU emissions trading scheme**
Confronting the greatest threat: Climate change and energy	Households and energy efficiency	**Raise average efficiency of domestic homes by 20 %; achieve carbon savings through Building Regulations; develop voluntary Code for Sustainable Building and ensure its application in public-private partnerships to develop new housing sites; reduce VAT on micro CHP and ground source heat pumps**
Confronting the greatest threat: Climate change and energy	Land use, agriculture and forestry	**Analyze barriers to the development of energy crops and make recommendations on the contribution of biomass; Implement incentive schemes for planting trees, for example on land currently in productive agriculture**
Confronting the greatest threat: Climate change and energy	Public sector	**Achieve targets related to carbon emissions, energy efficiency of buildings and renewable energy under the Framework for Sustainable Development on the Government Estates; develop environmental assessment method for all schools; implement Climate Change Communications Initiative**
Confronting the greatest threat: Climate change and energy	**Adaptation to climate change**	**Revise and expand climate change scenario information; integrate research on climate change impacts in national report; launch adaptation framework; mainstream climate change risks and impacts within development assistance and national development plans**
A future without regrets: protecting our resources and enhancing the environment	European policy	**Maintain EU's international leadership on climate change, specifically take forward discussions towards extension of EU emissions trading scheme to aviation and on EU mandate for UN negotiations on post-Kyoto action; promote sustainable consumption and production, and climate change objectives, through progress on green public procurement**

Viet Nam: Strategic Orientation for Sustainable Development in Vietnam (Vietnam Agenda 21)

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
Priority economic areas for sustainable development	Transform production and consumption patterns towards environmentally friendly direction (Energy is one of the priority sectors for achieving this objective)	**Actively participate in international cooperation under the UNFCCC; use foreign capital for and import and apply advanced foreign technology in the coal industry.**
Priority areas in natural resource utilization, environmental protection and pollution control for sustainable development	**Implement measures for mitigating climate change, limiting its negative impact, preventing and controlling natural disasters**	**Awareness raising for effective implementation of the National Programmes to phase-out ozone depleting substances and the national Plan to implement the UNFCCC**
Priority areas in natural resource utilization, environmental protection and pollution control for sustainable development	**Implement measures for mitigating climate change, limiting its negative impact, preventing and controlling natural disasters**	**Strengthen an improve capacity of hydrometeorology, especially for climate forecasts**
Priority areas in natural resource utilization, environmental protection and pollution control for sustainable development	**Implement measures for mitigating climate change, limiting its negative impact, preventing and controlling natural disasters**	Improve quality of hydrometeorology forecasts to meet socio-economic and environmental requirements, especially for preventing and controlling natural disasters

Zambia: Vision 2030 and Fifth National Development Plan 2006-2010

Level 1: Goals/Areas	Level 2: Objectives/Issues	Level 3: Aims/Actions
	Communications and meteorology (Objective: To attain developed meteorological and ICT systems in order to enhance the contribution of the two sub-sectors to sustainable national economic growth and improved quality of life) **(NSDS notes increased demand for weather and climate data for tracking climate change and global warming)**	Develop and monitor the implementation of appropriate policies, legal and institutional frameworks to foster the development of sustainable meteorology and ICT sub-sectors; develop and implement meteorological station rehabilitation, maintenance and expansion; develop and upgrade local meteorology training; improve reporting and analysis of data in the sector; ensure protection of lives through appropriate safety systems; develop databases and GIS to support land, water resource management and environmental monitoring

	Natural resources	**Support project to take stock of capacities and determine capacity needs of government, NGOs, community based organizations and the private sector for implementation of the Convention on Biological Diversity, UN Convention on to Combat Desertification, and UNFCCC; complete national adaptation programme to climate change**