

UNDESA Questionnaire D on Green economy in the context of sustainable development and poverty eradication (GESDPE)

National answers to the theme

Member States are invited to provide contributions and inputs on experiences, success factors, challenges and risks pertaining to the UNCSO theme “*Green economy in the context of sustainable development and poverty eradication*” in response to the following questions which have been developed based on the discussions which took place at the first Prepcom.

Experiences

- 1. Q: Is there a consensus among policy makers in your country on the meaning of the term “green economy in the context of sustainable development and poverty eradication”? If so, how is it defined? [If relevant, please provide any official publications or analytical studies on the concept of green economy or its operational or social implications, together with a short abstract]**

See answers of the EU.

Q: What are the main examples of green economy policies that are currently in place in your country? (e.g., government expenditures on green infrastructure, incentives for private investment in green sectors, subsidy reform, pricing of pollution, public procurement, other)

ANSWER:

A) National strategies and programmes relevant to Green Economy

- **National strategy for sustainable development (2006)**
In addition, and in contrast to many other countries, economy has been a crucial element in the national strategies for sustainable development in Finland. For instance, in the current strategy "Towards sustainable choices – A nationally and globally sustainable Finland" (2006), economy was defined as a safeguard for sustainable development, an important means to achieve the ultimate objective: a good life in a sustainable society. It is stated in the strategy that renewable natural resources are used for economic activity and increasing human well-being so that they are not depleted but are renewed from one generation to another. Non-renewable natural resources will be utilised as eco-efficiently as possible. When operating in such a manner, the present generation will not endanger the possibilities of future generations to live a good life in a sustainable society. More information:
<http://www.ymparisto.fi/download.asp?contentid=119228&lan=fi>
- **Programme on Sustainable consumption and production (2005)**
One attempt to look into greening the economy or how to create wealth with smaller footprint was the national process on sustainable consumption and production (SCP). Preparation was led by the Ministry of the Environment and the Ministry of Trade and

Industry. A broadly based committee of some 40 people worked for a year and a half to arrive at a consensual proposal. The SCP programme was approved by the government as an integrated part of the National Sustainable Development Strategy in 2006. Actions that have been carried out on the basis of the national SCP programme are e.g. establishing a material efficiency service centre; defining long-term policy guidelines to reshape the taxation system; initiating material- and energy efficiency dialogues; assessing the environmental impact of material flows related to consumption and production, and greening public administration. More information: <http://www.ymparisto.fi/default.asp?node=6051&lan=en>.

- **National foresight report on long-term climate and energy policy (2009)** The Government adopted in October 2009 the Foresight Report on Long-term Climate and Energy Policy (Towards a thriving low-carbon Finland). Setting a target to reduce Finland's greenhouse gas emissions by at least 80 per cent from the 1990 level by 2050 as part of an international effort, the report marks out the road to a low-carbon Finland in 2050. In practice, the achievement of emission reductions in Finland requires virtually zero-emission energy and road transport sectors in the long term. The report puts forward a number of specific policy lines covering targets, actions and areas requiring further study. For example, the energy standards for new buildings will be revised in order to improve energy efficiency, and efficiency improvements will be required in renovations of existing buildings. Ecological tax reform will be continued, and information concerning the climate impacts of choices in everyday life will be made easily available to citizens. Four example scenarios, marking out and illustrating possible paths towards a low-carbon society, were commissioned from consultants for the purpose of the foresight report. The work on the scenarios indicates that the shift to a low-carbon society requires a marked improvement in energy efficiency in all sectors. Similarly, in all cases there is a need for the development, deployment and diffusion of low-carbon technology, and the use of renewable energy needs to be increased significantly. It is recommended that the foresight report be read in parallel with the Longterm Climate and Energy Strategy, released in the autumn of 2008, in which the Government outlines its policy mainly up to the year 2020. The foresight report supplements the work done within the strategy by marking out paths towards a sustainable emission level in the long term. More information: <http://www.government.fi/toiminta/tulevaisuusselonteko/en.jsp>
- **National Strategy and Action Plan for the Conservation and Sustainable Use of Biodiversity (2006)**
In December 2006 the Finnish Government made the Decision-in-Principle on the National Strategy for the Conservation and Sustainable Use of Biodiversity 2006-2016. The decision contains long-term outlines for the conservation and sustainable use of biodiversity in Finland. The strategy aims to ensure the ecologically, economically and socially sustainable use and development of Finland's biodiversity and natural resources. The National Strategy accompanied by an Action Plan for the conservation of biodiversity represents Finland's vision of and commitment for conservation and sustainable use of biodiversity. The NBSAP 2006-2016 in Finland has been drafted in line with article 6 of the CBD. The goals are to halt the decline in biodiversity in Finland by 2010, to establish favourable trends in the state of the natural environment in Finland over the period 2010-2016, to prepare by 2016 for global environmental changes that may threaten the natural environment in Finland,

particularly climate change, and to strengthen Finland's role in the preservation of biodiversity globally through international co-operation.

More information: <http://www.ymparisto.fi/download.asp?contentid=75624&lan=en>

- **Natural Resource Strategy for Finland (2009)**

As a country that is relatively rich in natural resources and blessed with high levels of know-how, Finland has particular strengths and interests in the context of promoting the sustainable and innovative use of natural resources. The wealth we can obtain from natural resources obliges us to use them intelligently. "Using Natural Resources Intelligently – A Natural Resource Strategy for Finland" promotes both sustainable development and competitive businesses. It looks at Finland as part of the global community. It brings together the worlds and perspectives of politics, government, business, research, NGOs and the media to collaborate on setting common goals on issues pertaining to all natural resources. The natural resource strategy examines natural resources and their inter-linkages across sectoral boundaries, and covers the perspectives of both use and protection and over a sufficiently long period. The strategy was compiled by a comprehensive group of experts and managed by the Finnish Innovation Fund Sitra. The strategy was submitted to Prime Minister and published on April 8, 2009. More information:

http://www.sitra.fi/en/Innovations/natural_resources_strategy/natural_resources_strategy.htm

- **National bio-economy strategy (ongoing, to be completed by December 2010)**

In December 2009 the Government of Finland decided to prepare a Council of State Natural Resources Strategy and, as a part of it, a specific National bio-economy strategy. In the bio-economy strategy it is intended to define and make an assessment on the concept and development of bio-economy by 2050 in Finland. Bio-economy is considered to provide answers and new working methods to the global challenges that decreasing natural resources and climate change bring about. The objective is to create successful bio-based economy where knowledge in bio-processes in production is highly valued and investments in sustainable production and know-how is facilitated. Various forms of use for biomass are examined by research and innovation.

- **National mineral strategy (ongoing, to be completed by December 2010)**

As follow-up of Natural Resources strategy (2009) the Ministry of Employment and the Economy launched a mineral strategy project in March 2010. As part of the mineral strategy, both the domestic and international development prospects of the mineral sector will be assessed. The matter will be examined on a medium-term and long-term basis (until 2050). The mineral strategy is expected to contain proposals on how to develop the sector and how to make it more competitive, taking into account sustainable development, material efficiency and reduction of overall environmental impacts. The strategy covers mining, rock material and natural stone sectors and the adjacent equipment manufacturing and services. It is envisaged that the strategy will be based on 1) promoting Finnish-based production, growth and prosperity through the mineral sector; 2) applying Finnish innovations to the challenges of global raw-material chains; and 3) reducing the environmental impacts of the mineral sector.

B) Economic instruments

In the beginning of the 1990s, a number of economic instruments were introduced for environmental purposes in Finland. Since then the emphasis of the taxation has gradually been shifted from taxation of labour to taxation of activities polluting the environment. The main instruments for creating economic incentives to reduce pollution are some taxes and charges imposed on emissions directly - or indirectly, on products closely related to harmful emissions.

The most important taxes for environmental purposes are the tax on waste, excise taxes on fossil fuels and electricity, and the registration tax on passenger cars.

Municipalities are responsible for the collection, treatment and reuse of household waste. Municipal waste charges cover costs related to the establishment, maintenance, decommissioning and clean-up of waste treatment facilities, and the transportation of wastes. Waste charges are also intended to reduce the amounts of waste generated and the consequent risks, and to encourage waste recovery. Many municipalities set lower charges for sorted wastes and for wastes that can be recovered than for unrecoverable mixed wastes.

Tax on waste (landfill tax), introduced in 1996, is the most important emission tax (budgeted revenues in 2010 €2 million). Waste taxes aim to promote waste recovery and reduce the amounts of waste ending up in landfills. Waste taxes are paid by the owner of the landfill, who passes on the cost through fees charged for the reception of waste. It is proposed by the current Government to extend the tax base beyond municipal landfills and include all waste which could be reutilised on the basis of technical, economical or environmental premises. It is anticipated that with this review the tax rate will be increased from €30 per tonne of waste to €40/tonne.

Tax on disposable beverage containers is applied since 1976. The tax has been very successful as a complement to the deposit-refund system (stemming from the 1950's). The tax rate is €0.51 per litre on beverage containers outside deposit-based return and recycling systems. Budgeted tax revenue in 2010 is €12 million. Finland's beverage packaging taxation system has effectively encouraged consumers to return used drinks packages. The current rate of return of glass bottles for beer and soft drinks is 97 percent.

Water supply and sewerage policies in Finland are designed to guarantee the availability of good quality drinking water, and to ensure that waste water is efficiently collected and suitably treated to acceptable standards. Municipalities have the primary responsibility for providing water supply and wastewater treatment. These services are financed by charges to the user based on a full-cost principle, which means that the total cost of providing the water services should be paid by the users. However, the situation may differ to some extent due to state subsidies for water management⁹. In addition, water and waste water tariffs are decided by each municipality. The charges for water supply and wastewater service both vary from one municipality to another, however, the average total price for blocks, including the volume component and fixed components in 2008 was 1.27 EUR per m³ for water supply and 1.90 EUR per m³ for wastewater treatment.

In addition to waste charges levied per tonne of waste, in 2008 approximately 188 municipalities out of approximately 450 had introduced an “**eco-charge**” which applies to households at an average of 30 EUR per year per household. The purpose of the charge is to promote waste sorting by covering costs associated with a network of recycling and collection

stations where households can deliver card and paper, glass, metal, untreated wood and electronic waste and batteries free of charge.

Producer responsibility obliges producers to organise the reuse, recovery or suitable treatment or disposal of their products and the wastes derived from them, and to cover the related costs. The producer means the manufacturers and importers of the products; or where packaging is concerned, packagers and the importers of packaged products. Producer responsibility covers electronic and electrical appliances, batteries and accumulators, tires from motor vehicles, other vehicles and equipment, cars, vans and comparable vehicles, newspapers, magazines, copy paper, and other comparable paper products and packaging.

The Finnish authorities make widespread use of various economic instruments in order to **regulate energy consumption** in Finland. However, the general structure of energy taxation in Finland has remained unchanged since 1997. The present energy tax system consists of taxes on traffic fuels and heating fuels, and on electricity. The major change as regards economic instruments has been the introduction of the European emissions trading scheme from the beginning of 2005.

Finland introduced a **carbon tax** (or CO₂ tax) based on the carbon content of fossil fuels in January 1990 as an instrument for climate change mitigation. The tax rate evolved from €1.12/t CO₂ in 1990 to €20/t CO₂ in 2010. Some deviations existed: natural gas met a reduced rate, and peat was exempted in 2005-2010. In 1994-1996 a combined tax base of carbon+energy content was applied. Since 1997 the carbon tax was imposed only on traffic fuels and heating fuels; electricity was taxed per kWh and the fuels were exempted. CO₂ tax revenues in 2010 were approximately €500 million (some 15% of total energy taxes).

The next major revision of the fuel taxation is expected to be introduced in January 2011. Structural changes is planned to be carried out to **energy taxes including transport fuels**. Taxation again takes account of both the energy content and carbon dioxide emissions and, in a more refined way, emissions into the local environment that have adverse health effects. The revised fuel tax has an energy component and a CO₂ component, while the old tax had a "faceless" fiscal main component (for transport fuels) and a CO₂ component.

Total tax rates for other than traffic fuels will be raised considerably. Also CO₂ tax rate will be raised but at the same time the weight of CO₂ in the total tax for coal, natural gas and fuel oils is going to be reduced, due to the introduction of the energy component. Tax adjustments for natural gas will take place in stages up to 2015, after which levies on natural gas would be lower than those for coal. A low, ascending energy tax for peat is being introduced in stages by 2015. Carbon dioxide reductions obtained using biofuels compared with fossil fuels is taken into account in the carbon dioxide duties, providing an advantage for CO₂ efficient biofuels (previously taxed like fossil fuel). Biogas used for transport and heating remains tax-exempt. Micro power stations are fully exempt from levies on electricity.

The aim in raising the taxes is to encourage more energy saving and better energy efficiency. The tax increase in fossil fuels and peat will improve the competitive stance of renewable energy and promote its use. The tax structure is objective, neutral in technical terms and would foster fuels and technological solutions that create fewer emissions. Competitiveness motivated tax subsidies, however, remain. (Several of the changes will require approval from the EU Commission in connection with State aid before they can be applied.)

Motor vehicles in Finland are charged with both a one-time registration tax and an annual tax. **The registration tax (also called car tax)** is levied on passenger cars, delivery vans and motorcycles when the vehicles are registered for the first time in Finland. This tax was introduced in the 1950s to raise state revenue. The registration tax was changed from 1 January 2008 to guide consumers towards choosing car models which use less fuel while speeding up the renewal of the vehicle stock to introduce cars with the latest technology. The car tax levied on passenger cars upon registration is differentiated now in proportion to the carbon dioxide emissions resulting from the vehicle's specific consumption of fuel. At the same time, the car tax was generally cut by an average of one sixth. The new taxation applies to all passenger cars. The positive impact of this CO₂ differentiation is already visible in the average emissions of the new cars. Budgeted car tax revenue in 2010 is €850 million.

Besides the registration tax motor vehicles in Finland are also subject to an **annual tax (i.e. the motor vehicle tax)**. Passenger cars and vans using methane fuel, including biogas, are exempted from the annual tax. Since March 2011 vehicle tax will be partly based on CO₂ emissions resulting from the car's and van's specific consumption of fuel. Budgeted vehicle tax revenue in 2010 is €668 million.

C) Sustainable public procurement

The Government set in April 2009 targets (a government resolution) that encourage all public actors to adopt sustainable procurement – the central government, regional governments and the municipal sector. The target for central government is to have 70 % procurement sustainable by 2010 and 100 % by 2015. For the municipalities and local state government the targets are 25 % by 2010 and 50 % by 2015.

Sustainable procurement responds to demand by selecting the best ecological and economical alternative. The Government expects measures from those responsible for public procurement, particularly in the areas of energy, construction and housing, transport, food services, energy-using equipment and services.

Electricity from renewable sources. The Government supports the use of renewable forms of energy through its resolution. The central government will switch to green electricity. At least 30% of purchased electricity will be produced from renewable energy sources by 2010 and at least 60% by 2015.

Low energy and passive buildings. New government buildings or new leased properties must meet the requirements of energy efficiency class A and existing buildings under renovation must meet the requirements of at least energy efficiency class C by 2010. All buildings that are new, under renovation or leased must be passive by 2015.

Transport on rails. The need for transport and mobility will be reduced by 10% by 2015. State officials will take into consideration the fuel consumption and emissions of vehicles purchased for mass transport. In 2020, at least half of all new purchased or leased passenger cars will have carbon dioxide emissions of less than 120 g/km and at least 25% will be under 110 g/km.

Sustainable eating. The amount of organic, vegetable-based or seasonal food will be increased in foodstuff procurement for food services. These foods will be available in

Government kitchens and provided by food services at least once a week in 2010 and at least twice a week by 2015.

Criteria for energy- and eco-labels. Criteria equivalent to the requirements for energy- and eco-labels will be used as comparative principles in the procurement and leasing of energy-using equipment. Furthermore, public actors will switch to energy-efficient lighting. Life-cycle environmental impacts will be reduced in service procurement by, for example, taking the criteria set for Nordic or EU eco-labels into consideration.

More information:

<http://www.ymparisto.fi/default.asp?contentid=323695&lan=en&clan=en>).

D) Cooperation platforms

Panel on Environment Innovation (2009)

Ministry of the Environment of Finland launched a new national cooperation forum, Panel on Environment Innovation, for the term 2009-2011. The Panel was established in order to search for methods to better support environment policies in developing and implementing environment innovations. The objective was to improve cost-efficiency in environmental protection and create green business opportunities. The Panel aims also at increasing a dialogue between environmental administration and environment technology agents, as well as improving the possibilities of the agents working in the field to follow-up the progress in environmental legislation. The ultimate aim is to find areas of operation where innovations may contribute significantly to environmental protection. The work focuses on climate change

Q: Which policies, or types of policy, do you consider to be most effective in promoting a green economy and why?

ANSWER:

Sustainable development, and green economy alike, requires citizens and companies to make choices to support it. This process is influenced by people's values and the opportunities people have to actually make these choices. Strict regulation does not necessarily lead to the desired result anymore, because it does not provide sufficient room for new, creative solutions. Although legislative control is still effective and necessary in many cases, new tools, such as economic policy instruments, to encourage more sustainable choices and spontaneous activity are needed to an increasing degree. However, internationally agreed rules must be observed. The policy instruments must also be acceptable to citizens.

Public procurement has a huge potential, because the volume of public expenditure is big. Being a pioneer and setting an example sends also a message to private actors and consumers and encourages enterprises to produce more sustainable solutions.

Transition (covering the chains and systems of production and consumption from global to local and household levels) **policies** in different sectors would be beneficial, because independent tools and actions don't necessarily create sustainable solutions.

Q: Are poverty and other possible social impacts explicitly considered in the design of green economy policies? If so, how?

ANSWER:

Quite weakly. However, it is a practice in Finland that prior to official proposals on strategies, legislation or new initiatives ministries usually assess the potential economic, social and environmental consequences of the particular policy document. The ecological perspective has somewhat cast a shadow on the social sustainability - at least in case of preparing for environmental policies.

Finland has taken a decision to develop an ex-ante assessment tool for sustainable development. The intention is to search for an approach and develop an assessment tool with which the environmental, social and economic impacts of certain strategy, policy or measure could be assessed in an integrative way before decision-making. The purpose of the assessment tool is to give guidance to policy-planning - how to manage the long-term goals and complexity of the societal challenges - and help the politicians in making justified and sound decisions.

2. Q: Are these policies being implemented as part of a coherent green economy, or green growth, strategy?

ANSWER:

Finland does not have a coherent integrated green economy/growth strategy, but rather a set of policies and tools which all together are expected to contribute to a more sustainable economy.

Various measures and initiatives can, however, be part of the more comprehensive strategies described above. For example, public procurement policies are being implemented as part of our national strategy on SCP. Many policies described above are included in the National Strategy for Sustainable Development (2006).

3. What are the main perceived benefits of implementing a national green economy strategy?

ANSWER:

The benefits are presumed to be the same as in implementing any horizontal governmental strategy: strengthening the tradition of cooperation between the sectors and stakeholders, building consensus and common understanding between the various approaches and objectives, learning from each others' standpoints, and increasing coherence and predictability in national policy-making.

4. What economic sectors do you consider to be most important to building a green economy in the context of sustainable development and poverty eradication?

ANSWER:

All sectors in Finland are interested in building a greener economy, but especially energy- and material intensive sectors are important to engage in the work. Also enterprises and "gatekeepers" who provide services and fulfil our basic needs in housing, transport and food services would be the key players in greening the economy. Support of the actors with a strong influence on technology and innovation policies is also of utmost importance.

As an example of an important sector, water plays an important role contributing into the green economy in the framework of sustainable development and poverty reduction. Access to clean water is fundamental for human well being and for social and economic development. It contributes to the achievement of most Millennium Development Goals. Sufficiency of water resources is already a critical concern in large parts of the world. One third of the world population live in areas under severe water stress. Climate change will further increase the pressures on water resources and deterioration of water quality decreases the availability of clean water. Sustainable use of limited water resources emphasises the need to improve the efficiency of water use particularly in agriculture. Introducing water saving technologies and innovations can create new markets to export products which contribute to green economy.

Success Factors

5. What green economy policies would you rate to be most effective?

ANSWER:

Economic incentives, sustainable public procurement

Setting the prices right would mean a big step towards a Green Economy. The removing environmentally harmful subsidies would be essential. There is a need to assess the impacts of various sectoral economic support schemes on the environment. This would contribute to making policies and measures that follow the principles of sustainable development.

In many countries public procurement accounts for a significant share of the GDP which offers a great potential for reducing the national ecological footprint. Being a pioneer and setting an example the public sector can send a message to private actors and consumers that an increase in the sustainability of the natural economy is absolutely essential.

6. How have those policies contributed to poverty eradication, other specific sustainable development goals?

ANSWER:

No evaluations or studies on their impact on poverty eradication have been conducted in Finland.

7. What in your view are the principal reasons for their success? (e.g., availability of relevant institutional or technical capacity, strong political support, broad engagement of business and civil society, international support, other)

ANSWER:

Government leadership, pressure from international and EU –processes (Quantitative targets for national governments with timetables) and multi-stakeholder participation during the national strategy processes. In terms of a broad societal commitment the strategy processes are considered to be as important and effective as the final outcome. In legislative initiatives good governance and transparency are essential.

8. What steps and actions have proven effective in building political and popular ownership for green economy measures?

ANSWER:

Government leadership and multi-stakeholder participation seem to be essential. It is important that the green economy measures are consistent with other policy measures. Measures must comply with the sense of justice, and the logic behind the measures needs to be transparent and comprehensible.

There is also a need for incentives, which award or re-compensate sustainable solutions and choices.

Challenges

9. Are there studies for your country that identify success factors, challenges or risks associated with green economy policies identified under Question 1? For each, kindly provide the original article or web link, and a short abstract.

ANSWER:

Nordic Council of Ministers:

The use of economic instruments in Nordic Environmental policy 2006-2009:

The report consists of two parts. Part I presents an overview of the use of economic instruments in the environmental policies of the Nordic countries with the main focus on changes during the years 2006–2009. Part II gives a brief overview of the various policy instruments (i.e. also other than economic instruments) used in the countries towards the different environmental problems, and present two case studies assessing areas where a mix of instruments are used towards an environmental problem.

<http://www.norden.org/en/publications/publications/2009-578>

The researchers have focused on small-scale attempts to introduce the transition management model in a small country. They conclude that the model has raised some interest and been adopted by a certain constituency, yet it has—at least as of yet—failed to gain sufficient legitimacy among the ‘core’ policy makers. (Heiskanen E., S. Kivisaari, R. Lovio and P. Mickwitz 2009. Designed to Travel? Transition Management Encounters Environmental and Innovation Policy Histories in Finland, *Policy Sciences*, 42(4) 409-427.)

<http://www.springerlink.com/content/v0q6047r89501731/fulltext.pdf>

Finland has made much progress in terms of eco-efficiency as a result of environmental regulation, R&D programmes and initiatives by branches of the industries themselves. (Niestroy, I., 2005. Sustaining Sustainability: a benchmark study on national strategies towards sustainable development and the impact of councils in nine EU member states. Utrecht: Lemma.)

<http://www.eeac-net.org/> > Publications

10. Based on all of the above, what is (are) the key outcome(s) you think could emerge from the UN Conference on Sustainable Development in 2012 with respect to a ‘green economy in the context of sustainable development and poverty eradication’?

See answers of the EU.

Risks

11. What is the relationship of green economy policies to other policies and policy domains (e.g., poverty, growth, employment, trade, etc.)? Are there cases of conflict and, if so, how have these been addressed?

See answers of the EU.