Sustainable Consumption and Production

Finland's programme to promote sustainable consumption and production was initiated in 2005.

The programme includes the objective that eco-efficiency should be increased throughout production chains to make Finland one of the world's most eco-efficient societies. To make this vision a reality, the programme calls for long-term, yet flexible, policy-making and introduces an array of 73 policy measures. The main areas of focus were material-efficiency, sustainable procurement, environmental incentives and a transition towards a material- and energy efficient economy.

A working group has been appointed by the Ministry of the Environment to evaluate the implementation of the programme's main measures. The working group will also compile a monitoring report and propose further measures. The programme will be revised in 2010 on the basis of the monitoring report.

As part of the programme for example following steps have been taken:

More information: http://www.ymparisto.fi/download.asp?contentid=47329&lan=EN

Material efficiency centre for Finland

The Ministry of the Environment and the Ministry of Employment and the Economy have set up a material efficiency centre, which will provide services for businesses and advice for consumers and public sector organisations on various ways to improve material efficiency.

The centre is connected to Motiva Oy, a company run as an agency of the Ministry of Employment and the Economy, which already provides many expert services promoting energy-efficiency and the use of renewable energy.

The aim of the centre is to promote material efficiency by developing tools for analysts and for auditing as well as business models related to material efficiency. One goal is to launch agreements on material efficiency between ministries and key sectors in order to optimize and reduce raw material use.

The centre has also launched a help desk for public sector purchasers. The help desk brings together purchasers who need a solution for large environmental technology investments and enterprises who can offer a sustainable and innovative solution.

The material efficiency centre will also focus on creating networks between key players to find more sustainable ways for housing, transport and food production and consumption.

More information: http://www.motiva.fi/en/areas of operation/material efficiency/

Sustainable public procurement

The Finnish Government passed in April 2009 a resolution that encourages all public actors to adopt sustainable procurement – the central government, regional governments and the municipal sector.

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.

The Government will support implementation of the targets by increasing information and advisory services. An advisory service for environmental technology procurement will be established in conjunction with Motiva Oy. Other plans include the establishment of an electronic information bank and increased advisory services in food services at public sector kitchens.

The Finnish Funding Agency for Technology and Innovation (Tekes) is currently preparing a funding model that could lower the threshold to invest in innovative environmental technology.

Sustainable procurement requires commitment from the entire organisation. This means that, among other things, public sector organisations will implement environmental systems or programmes during 2010. These will set concrete targets concerning, for example, energy, water and paper consumption, and reducing the environmental impacts of business travel.

More information:

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

Environmental impacts of material flows caused by the Finnish economy (ENVIMAT)

The three year research project created a so called hybrid model to assess the relationships between environmental impacts and economic effects caused by the use of natural resources in Finland.

The projected defined the life cycle environmental impacts of the material flows used for production and consumption in the Finnish economy allocated to different activity sectors and product groups. In the project, the focus was not restricted to domestic environmental loads. Impacts on the environment caused by imported raw materials and goods were also taken into account.

The results of the ENVIMAT model will be used as a basis for discussion on the environmental impacts of private consumption and possible means to reduce the impacts of consumption. Moreover, it can be used to calculate the effects of human activities on other variables, such as employment and surplus value. In the future it will be used for studies of chronological development, for monitoring of sustainable development, for planning of measures for controlling the climate change, and for identifying various change factors and estimating their impacts.

The SCP programme also proposed to create a platform of dialog between the relevant Ministries and stakeholders for setting sector specific targets for material efficiency. ENVIMAT model eventually provides also background and scenarios for this process.

More information: http://www.ymparisto.fi/default.asp?contentid=317660&lan=en

Economical incentives

The programme called for internalisation of environmental costs in prices and setting long-term political goals for ecological tax reform. Concrete steps were proposed in the area of transportation (differentiation of vehicle taxation and expanding public investments to ensure a shift from road to rail) and agriculture (additional 30 million of effectively targeted agri-environmental subsidies).

After the adoption of SCP programme the Government has introduced vehicle tax based on carbon dioxide emissions in 2007 and a 10 % raise in environmental and energy taxes. The Ministry of Transportation and Communication has also launched a study on fee systems based on ICT/GPS technologies to examine possibilities to channel mobility into more sustainable alternatives.

In 2006 the Government launched public transport travel cards as job perks. This means that employers provide commuting employees with public transport tickets.

SECTORS AND ISSUES	Current Government Priority	Expected Future Priority
Solid waste management	High (Riitta.levinen@ymparisto.fi)	
- Waste disposal		New legislation underway (waste reduction included)
- Reuse and recycling		see above
- Waste reduction,		see above
- Others	Towards a recycling society – The national Waste Plan for 2016 (approved by the Finnish Government on April 2008) http://www.ymparisto.fi/default.asp?node=22682&lan=en	
Transport	High (saara.jaaskelainen@mintc.fi)	Public Transport Action Plan 2009– 2015 "Better everyday mobility through improved public transport"
- Clean fuels and vehicles	Removing subsidies on fuel and encouraging energy efficiency, The Vehicle Tax Act: taxation will vary between EUR 20 (66 g/km) and EUR 605 (400 g/km)	Vehicle efficiency and emissions policies (in 2020 emissions of new cars 95 g/km and entire fleet 137.9 g/km, vehicle fleet renewal

		would be around 7% a year.
- Public and alternative transportation	public transport subsidised by around EUR 80–85 million a year, increase the popularity of public transport in densely populated areas (aid EUR 5 million).	government subsidies, Integration of regional and local transport systems
- Urban and regional transportation planning		Accessibility, development of an integrated comprehensive public transport service
- Others		
Cleaner production		
- Resource efficiency	High (taina.nikula@ymparisto.fi)	
- Pollution prevention		
- Technology strategies	High (merja.saarnilehto@ymparisto.fi)	
- Others		
Energy efficiency and renewable energy	High (sirkka.vilkamo@tem.fi)	
- Industrial energy efficiency	New, more challenging agreements on energy efficiency with municipalities and key sectors in industry.	Laws on energy- efficiency in the public sector and in the energy distribution are in the pipeline.
- Household energy efficiency		Strengthening of the face-to-face advice activities for consumers is underway
- Renewable energy markets - Others		Working group for feed in tariff for renewable electricity has submitted a report – the system for wind and bio gas is planned to be implemented year 2010.

	High	
Housing and construction	(harri.hakaste@ymparisto.fi)	
220 40 222 4 20 20 20 20 20 20 20 20 20 20 20 20 20	(Marrinalaste C ymparistorir)	
- Energy efficiency	Energy labels for houses	Renewed regulations for new buildings and renovation of buildings
- Building materials	Life Cycle Analysis for buildings (http://www.ymparisto.fi/download.asp?cont entid=33441&lan=en)	
- Construction standards		
- Building operations		
- Others	Strategy on renovation of buildings (one priority is material-efficiency) – resolution of the government in 2008	Marrakech task force on Sustainable Building and Construction (led by Finland) http://www.ymparisto.fi/default.asp?contentid=23 0599&lan=en&clan=en
Food and clothing		
- Organic products		
Chemical management	High (Pirkko.kivela@ymparisto.fi)	National Programme on Dangerous Chemicals (2006) following by an interim assessment in 2011
Hazardous waste		New legislation
B. POLICY INSTRUMENTS	Current Government Activities	Expected Future Priorities
General policy instruments		
- Taxes, subsidies		Market-based guaranteed price for wind power
- Preferential tariffs and		
trade policies		
- Economic instruments	Differentiation of vehicle taxation based on CO2, public transport travel cards	Waste tax to be renewed
- Tax reform		
- Consumer protection policies		
- Polluter-pays principle		
- Integrated product policies		Updating the national SCP strategy in 2010

Feducation and public information Numau volunteered ## Material efficiency centre will also focus on "enabling consumers" in the future Material efficiency centre will also focus on "enabling consumers" in the future Scenario work on future S	Changing consumer behaviour		
centre will also focus on "enabling consumers" in the future - Consumer organizations - Public procurement policies Resolution of SPP [http://www.ymparisto.fidosonhoud.asp/krontentid=103507&hm=en] - Others Changing production patterns - Regulation of emissions and effluents - Charges or incentives for cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes - R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and apublic sector organisations on various ways	information	hannu.vainonen@minedu.fi	centre will also focus on "enabling consumers" in the future
- Consumer organizations - Public procurement policies Resolution of SPP (http://www.ymparisto.fi/download.asp/contentid=103507&lan=en) (http://www.ymparisto.fi/download.asp/contentid=103507&lan=en) (A database, guidelines on sustainable food, help desk on environmental technology procurement) - Others - Changing production patterns - Regulation of emissions and effluents - Charges or incentives for cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	- Consumer information		centre will also focus on "enabling consumers" in
- Public procurement policies Resolution of SPP (a database, guidelines) (a database, guidelines) (b database, guidelines) (a database, guidelines) (b database, guidelines) (a database, guidelines) (b database, guidelines) (c database, guideline	- Labeling, eco-labels		
- Public procurement policies Resolution of SPP (a database, guidelines) (a database, guidelines) (b database, guidelines) (a database, guidelines) (b database, guidelines) (a database, guidelines) (b database, guidelines) (c database, guideline	- Consumer organizations		
Changing production patterns Regulation of emissions and effluents Charges or incentives for cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	- Public procurement policies		(a database, guidelines on sustainable food, help desk on environmental
patterns - Regulation of emissions and effluents - Charges or incentives for cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	- Others		
effluents - Charges or incentives for cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	0 01		
cleaner production - Product standards (e.g. energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
energy efficiency) - Cleaner production programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning Panel on Environmental technology led by MoE (merja.saamilehto@ymparisto.fi) - Investment incentives - Voluntary initiatives and codes of conduct Pre-study underway on eventual material- efficiency agreements - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	cleaner production		
programmes (R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	energy efficiency)		
(R&D, training, technical assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	_		
assistance) - Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
- Pollutant reporting and registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
registers - Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	·		
- Strategic industrial and technology planning - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others - Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
technology planning technology led by MoE (merja.saarmilehto@ymparisto.fi) - Investment incentives - Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			Panel on Environmental
- Voluntary initiatives and codes of conduct - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			technology led by MoE
codes of conduct eventual material- efficiency agreements - Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	- Investment incentives		
- Corporate social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	- Voluntary initiatives and		Pre-study underway on
social/environmental responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	codes of conduct		
responsibility - Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
- Improved management accounting - Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
- Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
- Investment analysis - Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways	_		
- Others Material efficiency centre - provides services for businesses and advice for consumers and public sector organisations on various ways			
for businesses and advice for consumers and public sector organisations on various ways		Material efficiency centre - provides services	
	CHACIS	for businesses and advice for consumers and public sector organisations on various ways	

Analytical tools		
- Life-cycle analysis		
- Indicators of sustainability	Towards sustainable choices (http://www.ymparisto.fi/download.asp?contentid=92350&lan=en)	Updating the indicators, done by December 2009
	aino.inkinen@ymparisto.fi	
- Technology impact assessment		
- Policy impact assessment	sauli.rouhinen@ymparisto.fi	currently developing a tool-box for sustainability impact assessments
- Impacts of globalization and urbanization		
- Impacts of changes in international markets		
- Others	Envimat-model to assess the relationships between environmental impacts and economic effects caused by the use of natural resources in Finland. (http://www.ymparisto.fi/default.asp?contentid=317660&lan=en)	Developing the Envimat- tool further to be used in various strategies and scenario work
	jyri.seppala@ymparsito.fi	