

Time for action — towards sustainable consumption and production in Europe

Summary report of the conference held on 27–29 September 2007, Ljubljana, Slovenia

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REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING



UNEP/WUPPERTAL INSTITUTE COLLABORATING
CENTRE ON SUSTAINABLE
CONSUMPTION AND PRODUCTION

European Environment Agency



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 - the United Nations Environment Programme (UNEP)/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP) (Michael Kuhndt and Nadine Pratt); and
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 - Mohan Peck, UN Department for Economic and Social Affairs (UN DESA); and
 - Brigitte Monsou-Tantawy, World Business Council for Sustainable Development (WBCSD).

The Conference summary report was compiled and written by Jozsef Szlezak of the Regional Environmental Center for Central and Eastern Europe (REC) and the European Topic Centre on Resource and Waste Management (ETC/RWM) (Chapters 1–6) and Almut Reichel of the EEA (Chapters 2 and 7), under the guidance of and with contribution from the conference organisers. The summary is based on the Report on participants' contributions (by Prospex bvba, who facilitated the conference) and the notes of the conference rapporteurs, Sarah Resouly (UK Department for Environment, Food and Rural Affairs (Defra)), Jernej Stritih (on behalf of the Ministry of the Environment and Spatial Planning of the Republic of Slovenia) and Jozsef Szlezak (REC). The authors would like to thank Sarah Resouly (Defra) for proofreading.

Annex 1 was prepared by the CSCP with contributions from the other conference organisers. Annex 2 was prepared by the expert team of the ETC/RWM (mainly Jozsef Szlezak and Hubert Reisinger) with contributions from the EEA. Both papers were used as background papers for the conference. However, Annex 1 was updated with the conference outcomes.

The conference organisers gratefully acknowledge the contributions of the Conference Advisory Group, which consisted of:

More conference documents, including all presentations given at the event as well as the Report on participants' contributions, are available at the conference website at <http://www.mop.gov.si/en/> under 'Events'.

1 Executive summary

Recommendations towards sustainable consumption and production in Europe

The conference 'Time for action — Towards sustainable consumption and production in Europe' was held on 27–29 September 2007 in Ljubljana, Slovenia.

Three sets of three top-priority recommendations towards sustainable consumption and production (SCP) in Europe were developed at the conference:

To the European Commission: in the proposed Action Plan on SCP consider the following:

- **a directive on green public procurement (GPP)** to make responsible purchasing mandatory for all public authorities;
- **concrete steps to 'get the prices right'**: develop and implement a range of economic instruments to ensure that the ecological consequences of using natural resources and pollution are reflected in the prices; and
- **clear sustainability targets**, both at the European Union (EU) and national levels (for example, on resource use, emissions, green public procurement and products).

To national European governments, in cooperation with business and civil society:

- **develop long-term national visions and frameworks of SCP**, with due respect for available evidence, national context and the sense of urgency;
- **work out and implement national environmental fiscal reforms** that shift taxes from labour to pollution and resource use; and
- **identify and communicate to stakeholders the 'beacons of sustainability'**, i.e. models and examples of sustainable living that can be an inspiration.

To the United Nations within the Marrakech Process:

- **encourage national governments to integrate SCP objectives into ministries beyond environment**, particularly by means of national SCP programmes;
- **develop a worldwide campaign/communication strategy to promote the concept of SCP**, with due respect for regional, cultural and other differences and targeting all relevant stakeholder groups; and
- **engage the public and private financial community in the process**, the first step towards which could be the preparation of a marketing strategy targeted to these institutions.

2 Conference objectives and approach

Nearly one hundred experts, representing governments, research institutions, non-government organisations (NGOs), business and international organisations participated in the conference and worked together to formulate recommendations towards SCP, in line with the objectives of the conference.

The conference had the following three objectives:

1. formulate recommendations for the development and implementation of the **EU Action Plan on Sustainable Consumption and Production**, focusing specifically on production and consumption related to housing, food and drink, and mobility – the consumption areas that have the greatest impact on the environment;
2. formulate recommendations for action towards SCP in European **countries** and encourage related **collaboration** and partnerships between public authorities, business and civil society;
3. discuss European inputs and recommendations to the United Nations' **Marrakech Process** to develop a 10-year framework of programmes on SCP for the period 2012–2022.

The overall goal of the conference was to develop three top-priority recommendations for each of the above fields.

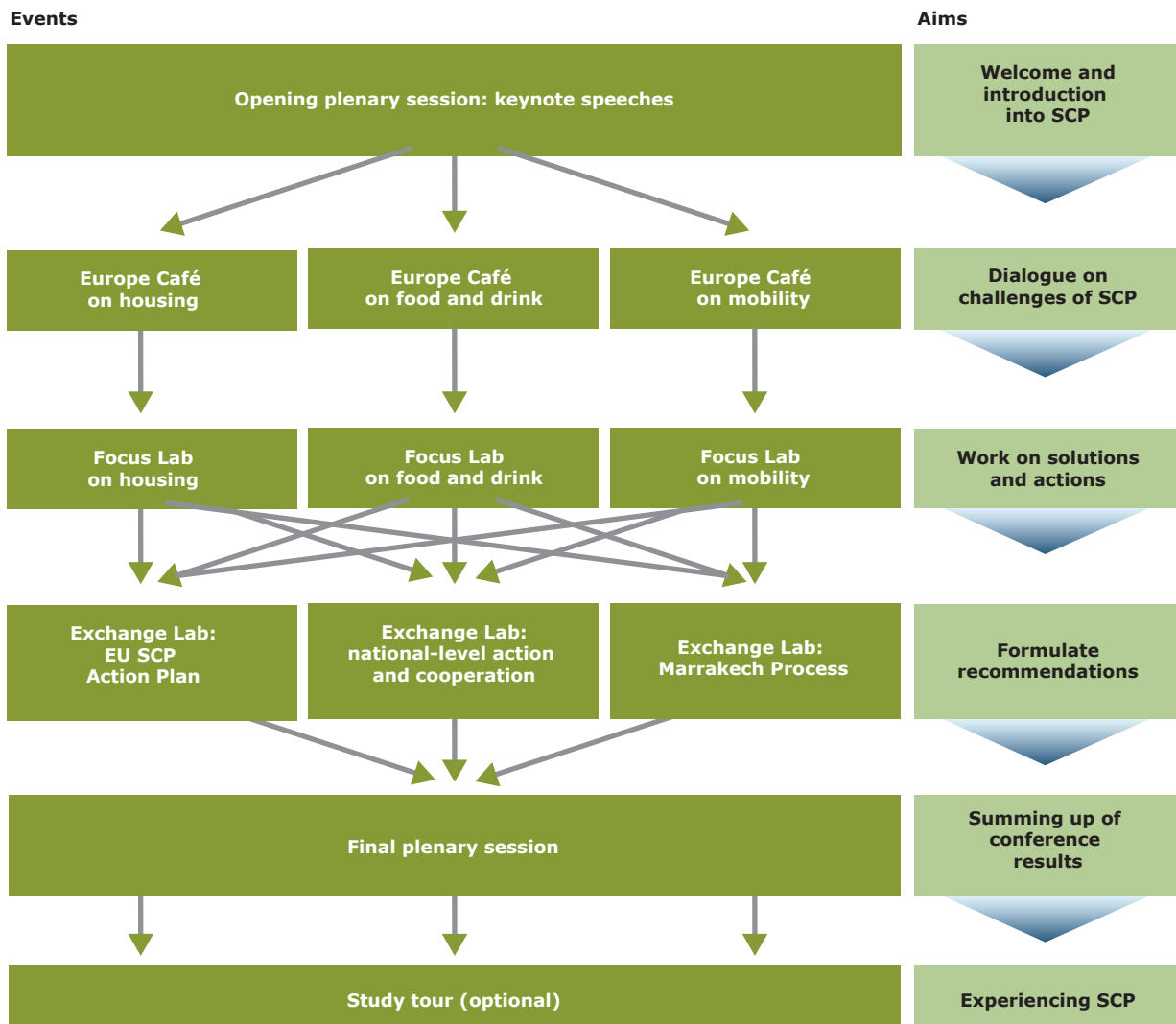
The conference was highly participative. After the keynote speeches, participants discussed and worked on challenges, actions and solutions towards SCP in the housing, food and drink, and mobility areas (in the 'Europe Cafés' and 'Focus Labs') and developed recommendations for the EU Action Plan on SCP, the Marrakech Process and for national governments in collaboration with business and civil society (in the 'Exchange Labs').

The conference papers *Action towards sustainable consumption and production in Europe* (Annex 1) and *National sustainable consumption and production (SCP) strategies in the EU – A comparative review of selected cases* (Annex 2) served as background information for the discussions during the conference. For an overview of the conference programme, please refer to Figure 1. More detailed information about the background, methodology etc. of the conference can

be found in Annex 1 and the conference programme (see the conference website at <http://www.mop.gov.si/en/>).

The objective of this summary report is to present the outcomes of the conference by focusing on the potential solutions and actions proposed and the recommendations developed in the Focus Labs and the Exchange Labs as well as the panel discussion of the final conference plenary session. The outcomes of the Europe Cafés are not included in this report because they mainly served as an input for the discussions on the actions, solutions and recommendations. A brief analysis of the conference outcomes is also provided. This focuses on a comparison of the types of recommendations made in the Focus Labs on the areas of housing, food and drink and mobility.

Figure 1 Conference overview



Source: EEA/CSCP.

3 Proposed solutions and actions in the three focus areas

In three parallel sessions (Focus Labs), solutions and actions for the focus areas of the conference – housing, food and drink, and mobility – were identified. All proposals were clustered into themes and participants then worked out concrete solutions and actions under some of the themes. The solutions and actions are presented using mind maps (Figures 3, 5 and 7). These were developed following the conference, based on material produced by the conference participants.

Housing

The potential solutions and actions proposed by the participants of this session ⁽¹⁾ are clustered into seven main themes (see box on the right).

The split of proposals in terms of the type of policy tools and instruments or other approaches towards SCP is shown in Figure 2.

Most ideas were listed under the category **Market interventions**. Central topics in this area were ecological tax reform and individual pieces of economic instruments in the housing sector (for

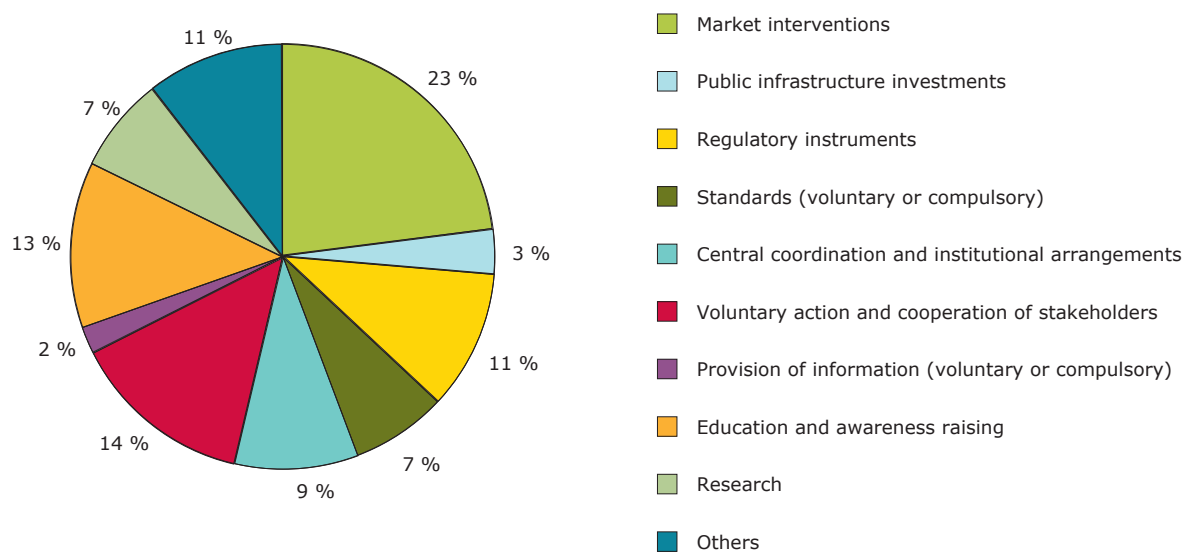
example, differentiated VAT rate for zero emission buildings and subsidy schemes for renewable energy) along with the greening of public infrastructure investment.

The second largest number of proposals fell into the **Voluntary action and the cooperation of stakeholders** category, and mainly featured voluntary green purchasing and building codes, the use of environmental declaration schemes, and the establishment of European networks for professional cooperation.

Clusters of proposed solutions and actions – Housing ⁽²⁾

- Financial instruments
- Standards and labelling
- Education
- Empowerment of inhabitants and bringing stakeholders into networks
- Procurement
- Spatial planning and land use
- Research

Figure 2 Split of participants' proposals in terms of the type of policy tools and instruments or other approaches towards SCP in the Housing Focus Lab



⁽¹⁾ For the individual solutions and actions, please refer to the *Report on Participant's Contributions*.

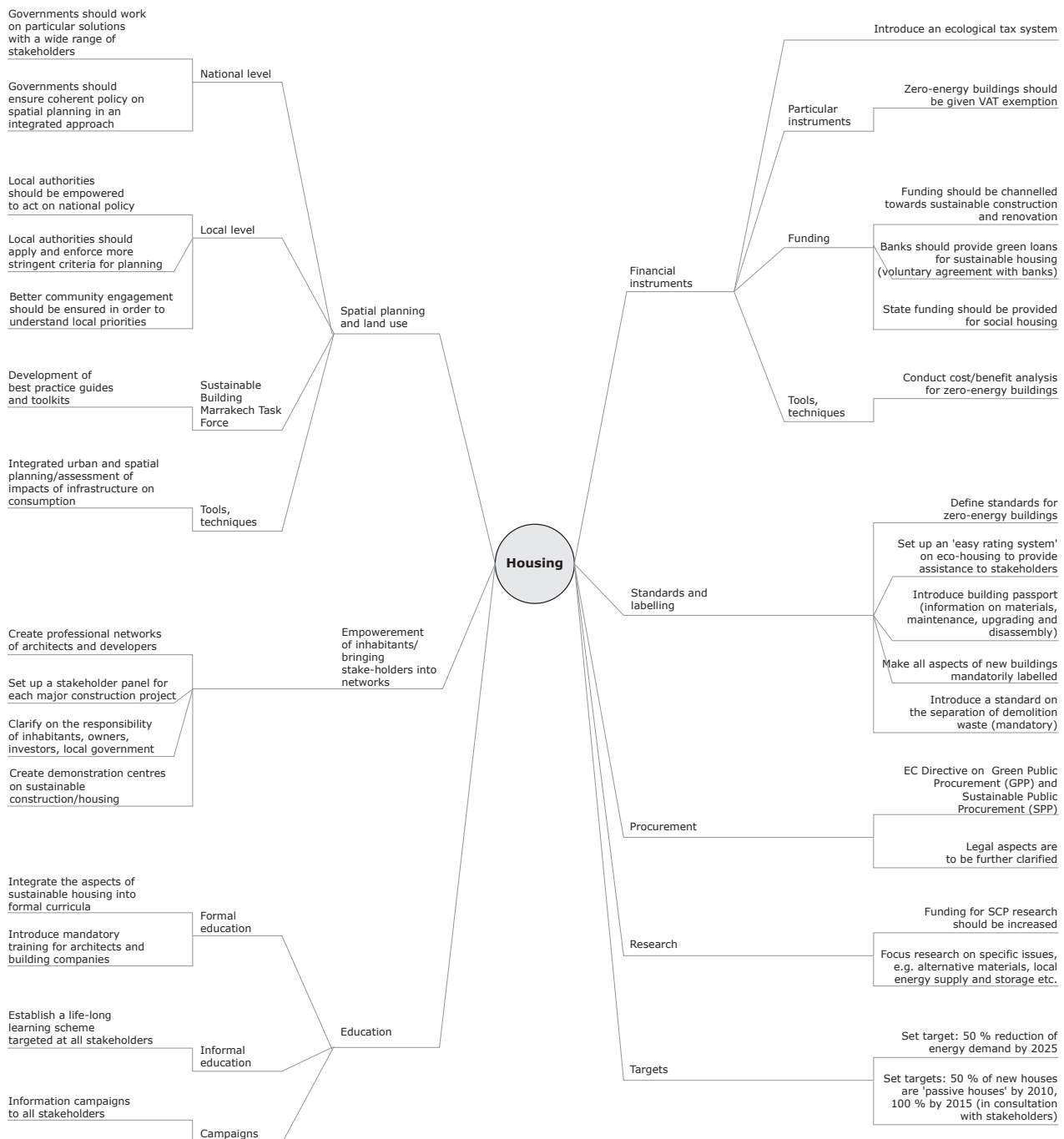
⁽²⁾ The themes are listed according to the number of proposals associated with them, from highest to lowest.

The most important examples of proposals in the **Education and awareness-raising, Regulatory instruments and Central coordination and institutional arrangements** categories included: the integration of housing-related sustainability aspects into formal curricula; establishment of training schemes for professionals in this area; mandatory implementation of the Eco-Management and Audit

Scheme (EMAS) and green public procurement for public authorities; and increased coordination amongst state agencies and the different levels of public administration for improved policy-making.

The conference participants then considered some of the proposed solutions and actions in more detail. These are presented in Figure 3 as a mind map.

Figure 3 Potential solutions and actions devised by the participants in the area of housing ⁽³⁾



⁽³⁾ For reporting purposes, the clusters identified during the conference have been extended with the theme 'Targets'.

Food and drink

The potential solutions and actions proposed by the participants of this session are clustered into nine main categories (see box on the right).

The split of proposals in terms of the type of policy tools and instruments or other approaches towards SCP is shown in Figure 4.

Most proposals were made in the category **Central coordination and institutional arrangements**. Key topics in this category included better cooperation between ministries in charge of the environment, agriculture, health and energy; priority setting along the food chain; conducting stakeholder dialogue on sustainable food systems in Europe; negotiation of global trade rules; and launch of a debate at EU level on the question 'land for food, energy or biodiversity'.

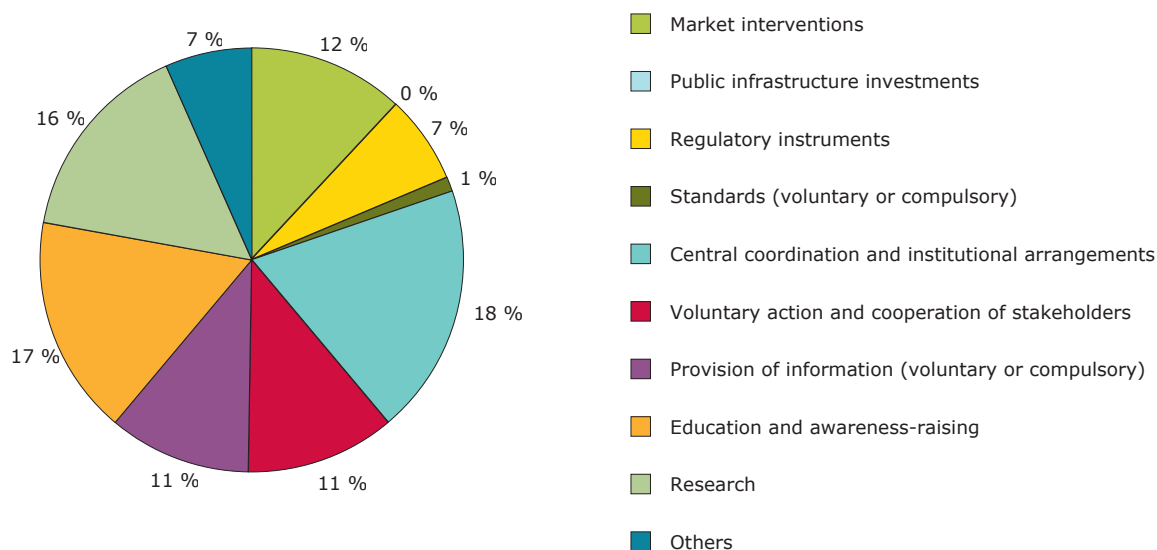
The joint second most common themes for proposals were **Education and awareness-raising** and **Research**. Under **Education and awareness-raising**, the most significant proposals were related to the

integration of food SCP aspects into formal curricula and training, and campaigns to a wide range of stakeholders including farmers, food providers, restaurants and retail (for example lifelong learning schemes for farmers and making citizens aware of the real prices of food). In the **Research** category, most proposals were related to the definition of targets, the identification of priorities for action along the food chain and the performance of organic agriculture.

Clusters of proposed solutions and actions – Food and drink

- Education, communication and information
- Research
- Labelling of food
- The economic framework
- The global food chain
- Coordination
- Sustainable diets
- The retail sector
- Development aspects

Figure 4 Split of participants' proposals in terms of the type of policy tools and instruments or other approaches towards SCP in the Focus on food and drink



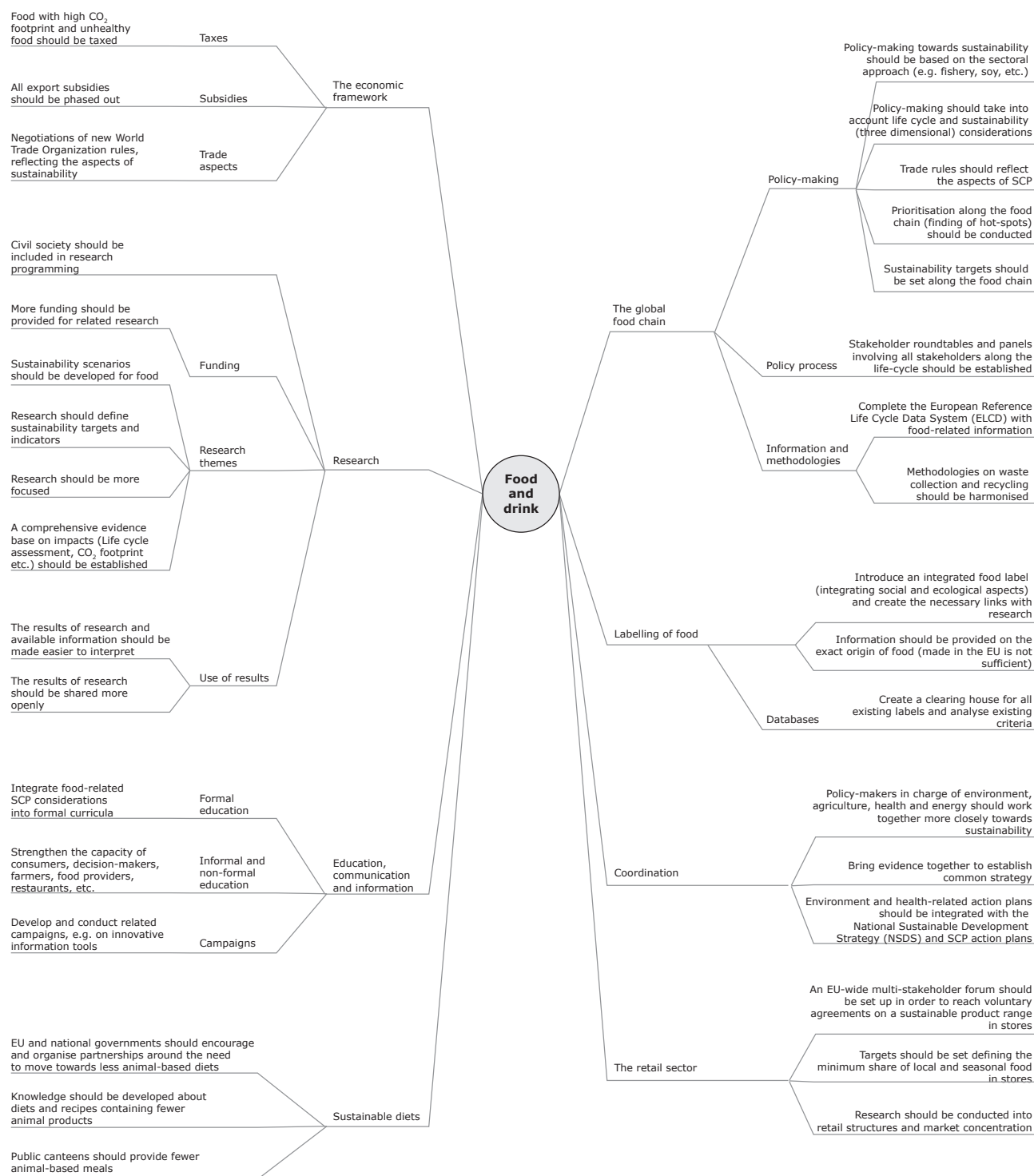
In the **Market interventions** category, the central themes of proposals were ecological tax reform, the EU's common agricultural policy (CAP) subsidy scheme and the price of meat. The most

relevant examples from the **Voluntary action and cooperation of stakeholders** category were voluntary agreements with retailers on a range of sustainable food and voluntary green purchasing

by public canteens. In the **Provision of information** category, most proposals were related to the creation of an integrated food label (covering all aspects of sustainability) and/or carbon-footprint labelling as well as labels certifying local or regional origin.

Some of the proposed solutions and actions were then developed further by the conference participants. These are presented in Figure 5 as a mind map.

Figure 5 Potential solutions and actions devised by the participants in the area of food and drink



Mobility

The potential solutions and actions proposed by the participants of this session are clustered into eight categories (see box on the right).

The split of proposals in terms of the type of policy tools and instruments or other approaches towards SCP is shown in Figure 6.

Most proposals were in the **Market interventions** category. Central themes included traffic charges (congestion charging and road-charging schemes), reduced VAT on energy-efficient vehicles, taxation of aviation, tradeable permits, as well as subsidies to both conventional and renewable energy and carbon offsetting.

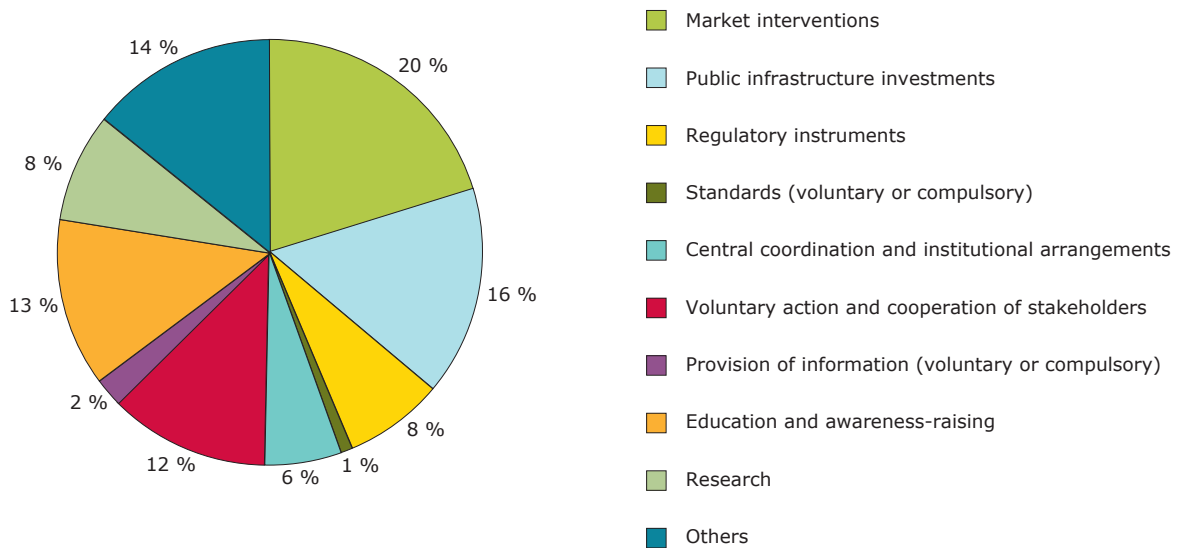
Infrastructure investment was rated the second most important category in terms of the number of proposals. The most frequently listed potential solutions in this category were related to public transport and other sustainable mobility infrastructure (for example, for trains and bicycles), as well as to the improvement of intermodal passenger and freight transport. The **Education and awareness raising** and **Voluntary action and**

cooperation of stakeholders categories were also considered important. Examples of proposals in the Education and awareness raising category include informing citizens about the life-cycle impacts of mobility, campaigns on regional products and the promotion of slow/local/green holidays, whilst in the **Voluntary action and cooperation of stakeholders** category car-free days, voluntary green purchasing and the involvement of civil society in car sharing were highlighted.

Clusters of proposed solutions and actions – Mobility

- Infrastructure and spatial planning
- Financial instruments
- Provision of information, behavioural aspects and education
- Policy-making
- Business responsibility
- Research
- Home-working
- Tourism

Figure 6 Split of participants' proposals in terms of the type of policy tools and instruments or other approaches towards SCP in the Focus Lab on mobility



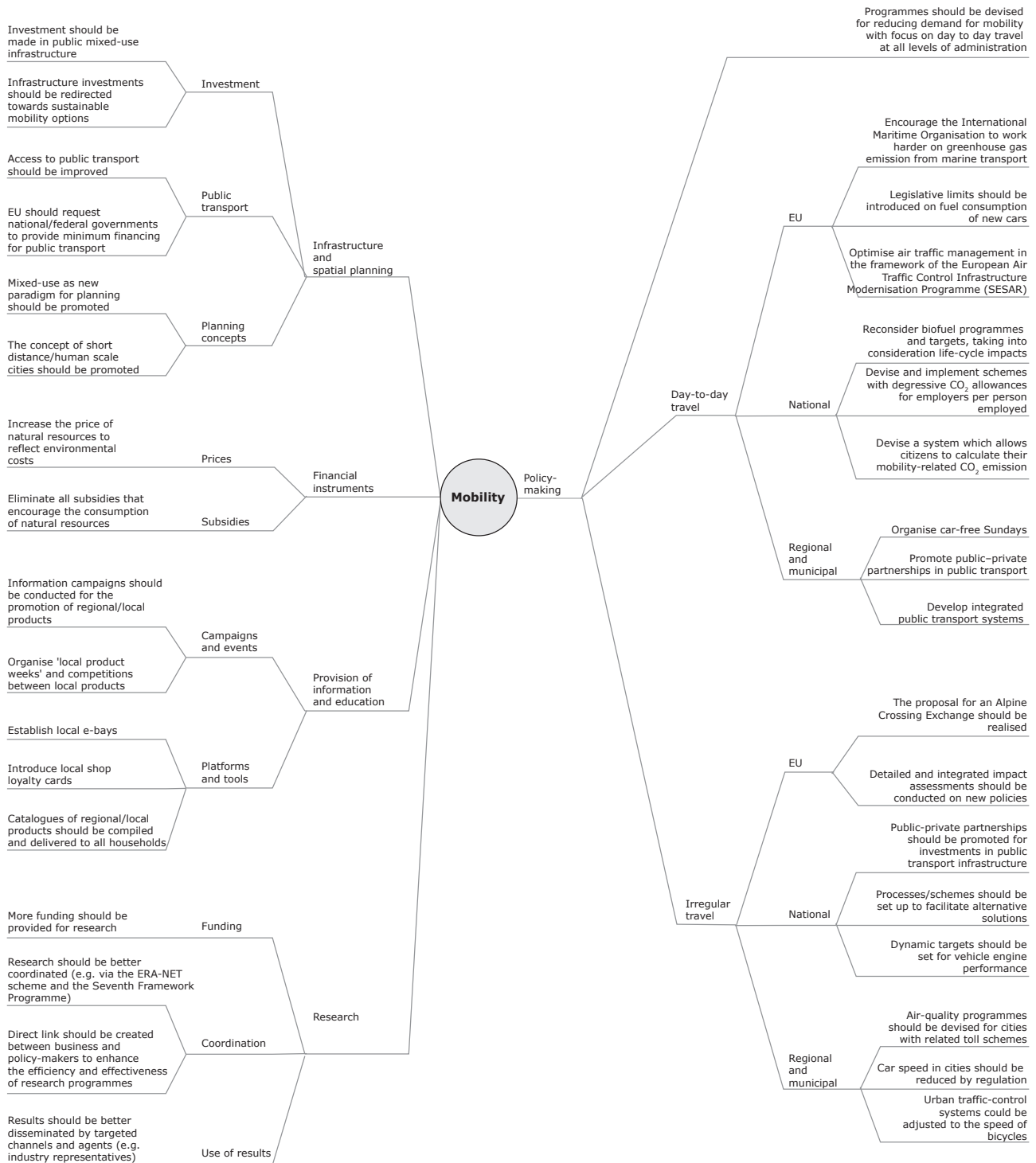
The **Research** and **Regulatory instruments** categories were also considered important. Examples in the **Research** category include studies of consumer behaviour and the use of car, as well as the life-cycle

impacts of biofuels and the drivers of demand for transport, whilst in the **Regulatory** instruments category the regulation of vehicle engine performance and mandatory employer mobility plans were highlighted.

The **Others** category mainly comprised recommendations related to the introduction of planning techniques, solutions and ways or methods of measuring related consumption or environmental pressure and impact assessment as well as general

directions of desired development (for example, localisation and dealing with urban sprawl). Some of the proposed solutions and actions were then further developed by the conference participants. These are presented in Figure 7 as a mind map.

Figure 7 Potential solutions and actions devised by the participants in the area of mobility



4 Policy recommendations

In line with the objectives of the conference, three top-priority recommendations for each of the following fields were developed in the Exchange Labs:

- for the EU Action Plan on Sustainable Consumption and Production;
- for national-level action in cooperation with business and civil society;
- for the Marrakech Process.

Starting with many different proposals, the conference participants narrowed them down step by step to three priority recommendations per area. In the following sections the results of the three Exchange Labs are summarised and presented in the following way:

- The top-priority recommendations are included in the graphs (funnels) illustrating

the three-stage process of developing the recommendations in the Exchange Labs.

- The recommendations at the second level are summarised in text boxes. To avoid duplication in the presentation of results, the recommendations have been grouped by key points.
- Recommendations developed by the participants at the third and most detailed level are presented using mind maps. These were derived following the conference, using materials produced by participants. Similar recommendations made by different groups have been combined and presented under a single entry.

The recommendations developed at the second level are summarised in the box below.

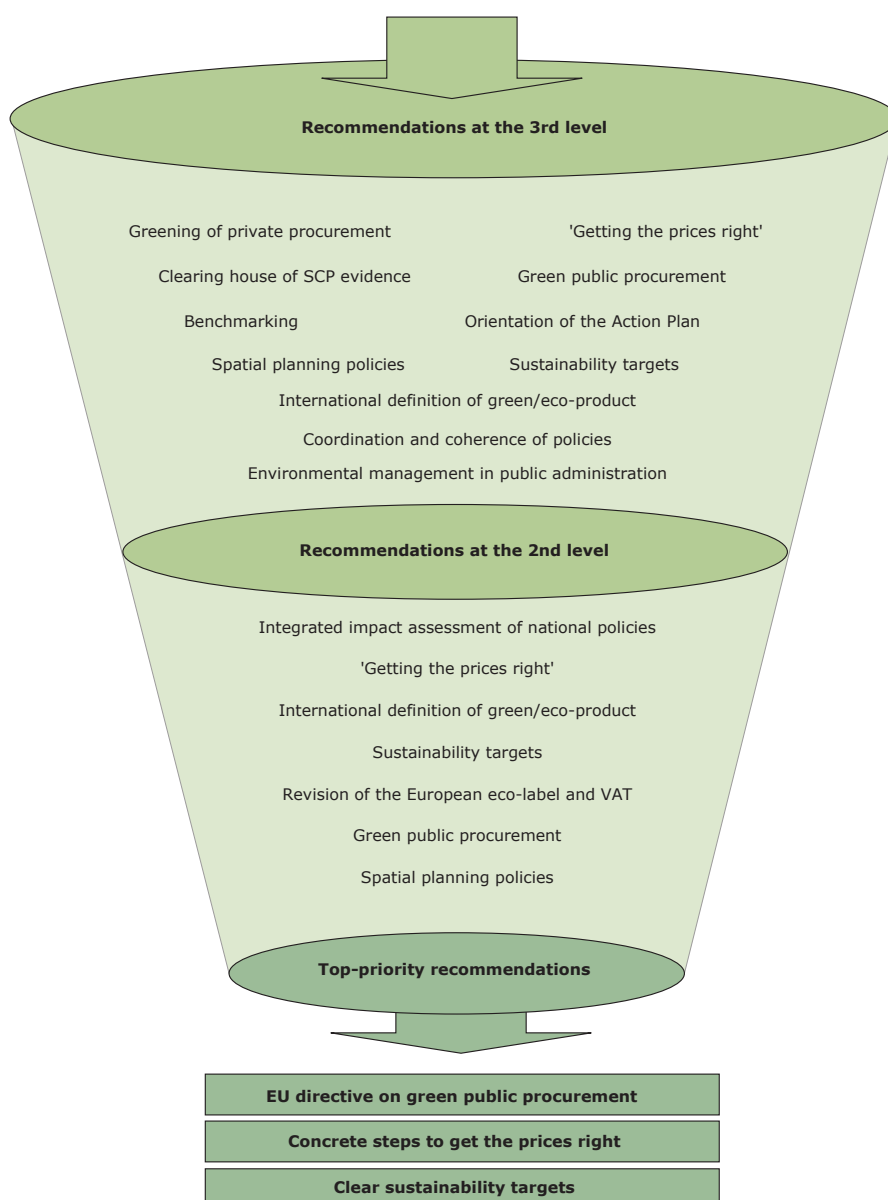
Recommendations to the European Commission: in the EU Action Plan on Sustainable Consumption and Production consider the following:

- 'Getting the prices right' — devise and implement a wide range of economic instruments to ensure that the environmental consequences of using natural resources and pollution are reflected in the prices.
- Green public procurement (GPP) — develop a directive on mandatory GPP for public authorities.
- Spatial planning policies — develop efficient spatial planning policies that cover aspects of mobility, housing and urban sprawl. This should be informed by an analysis of why existing legislation is not effective.
- Sustainability targets — define clear targets, based on sound and robust indicators, at the level of both the EU and Member States.
- Revision of the European ecolabel — revise the ecolabel and combine it with VAT differentiation.
- Integrated impact assessment of national policies — make heads of government responsible for ensuring that all aspects of sustainability are accounted for in setting new policies.
- International agreement on the definition of 'green'/'ecoproducts' — initiate an international process to reach agreement on the definition of 'green'/'ecoproducts'.

EU Action Plan on Sustainable Consumption and Production

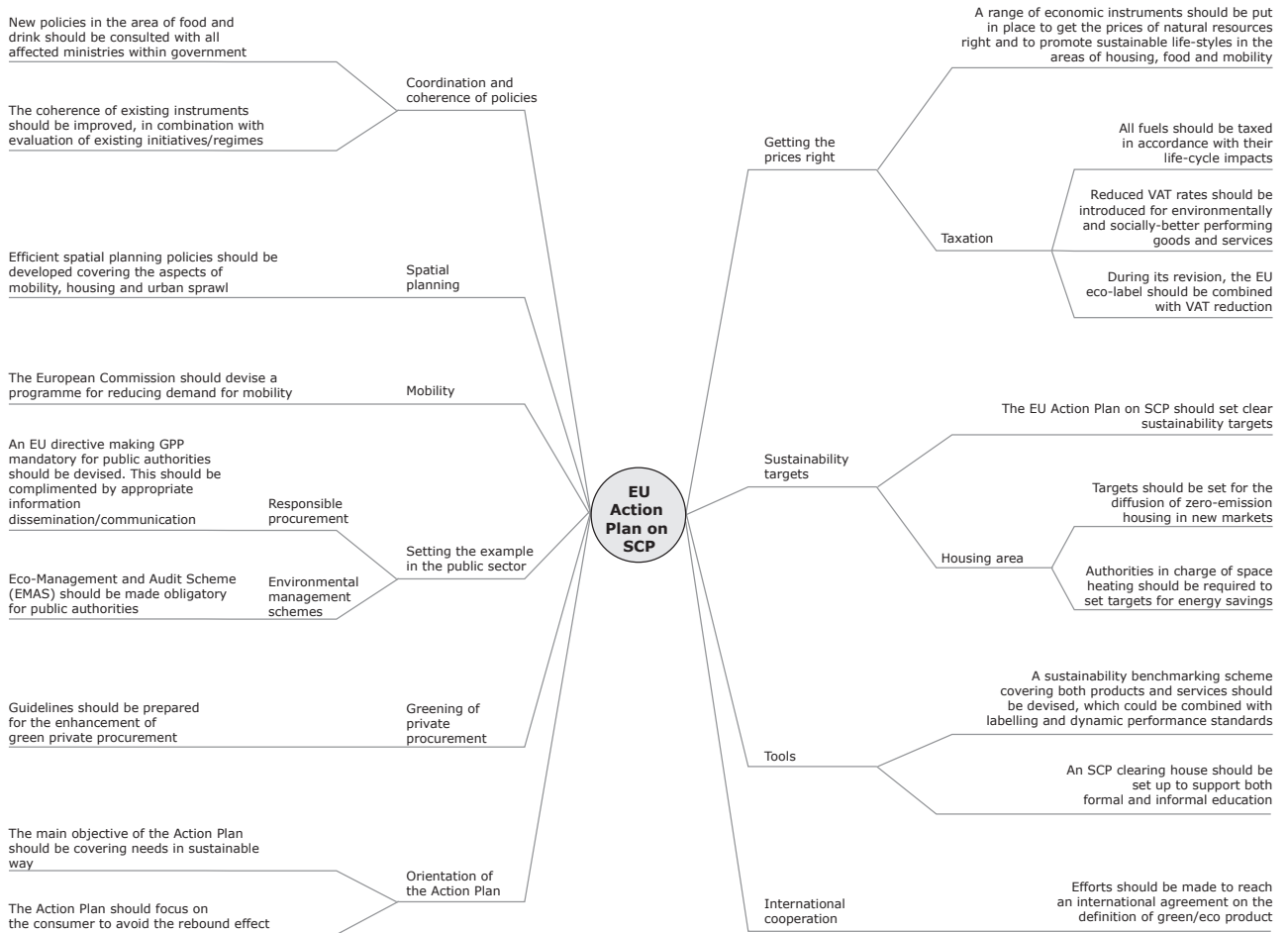
The three-stage process of the development of recommendations is illustrated in Figure 8.

Figure 8 Recommendations for the EU Action Plan on SCP: visualisation of the discussion process



The derived mind map of recommendations at the third level is presented in Figure 9.

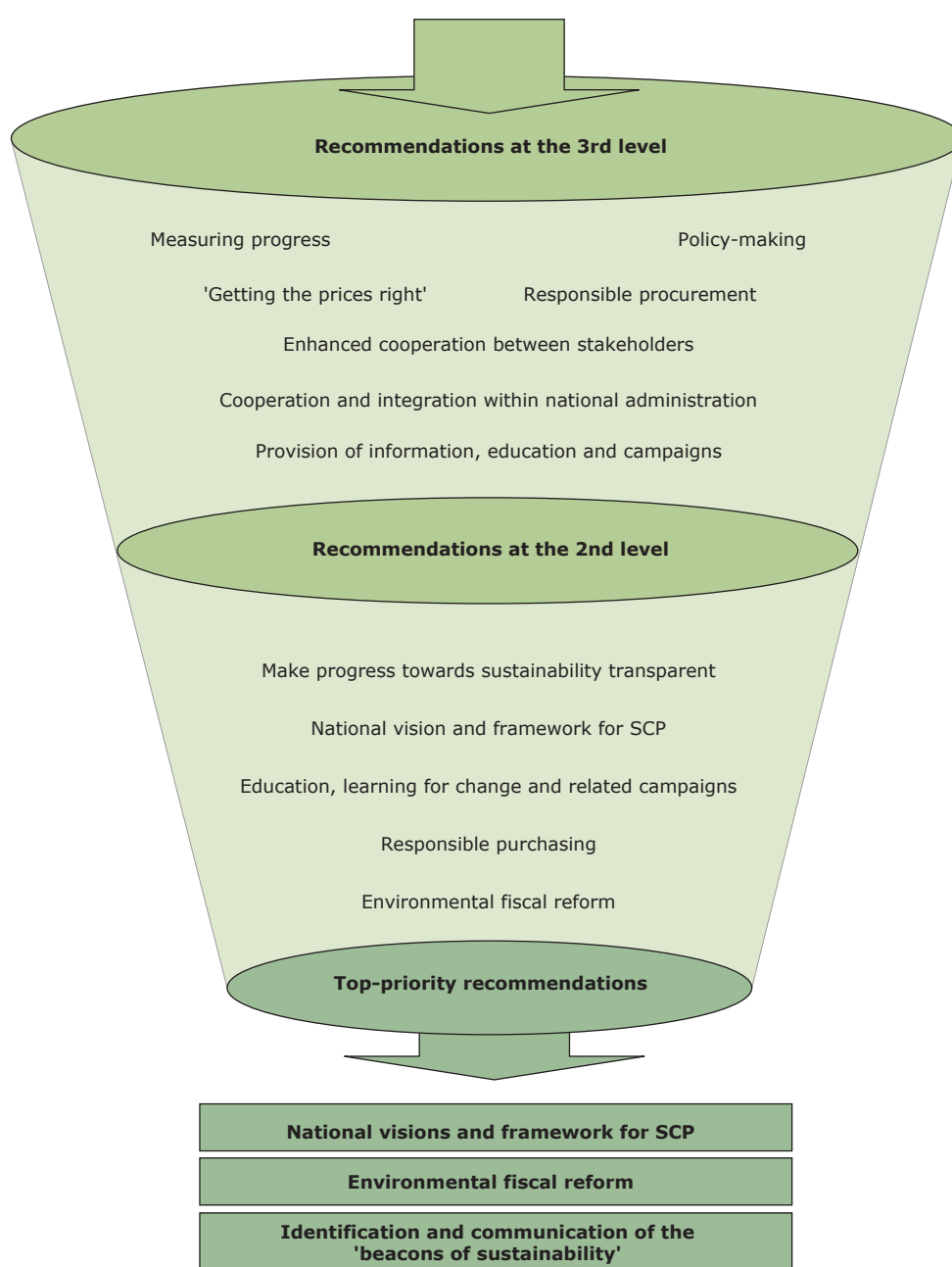
Figure 9 Third level recommendations on the EU Action Plan on SCP



National level action on SCP, in cooperation with business and civil society

The three-stage process of the development of recommendations in this session is illustrated in Figure 10.

Figure 10 Recommendations for national-level action on SCP, in cooperation with business and civil society: visualisation of the discussion process



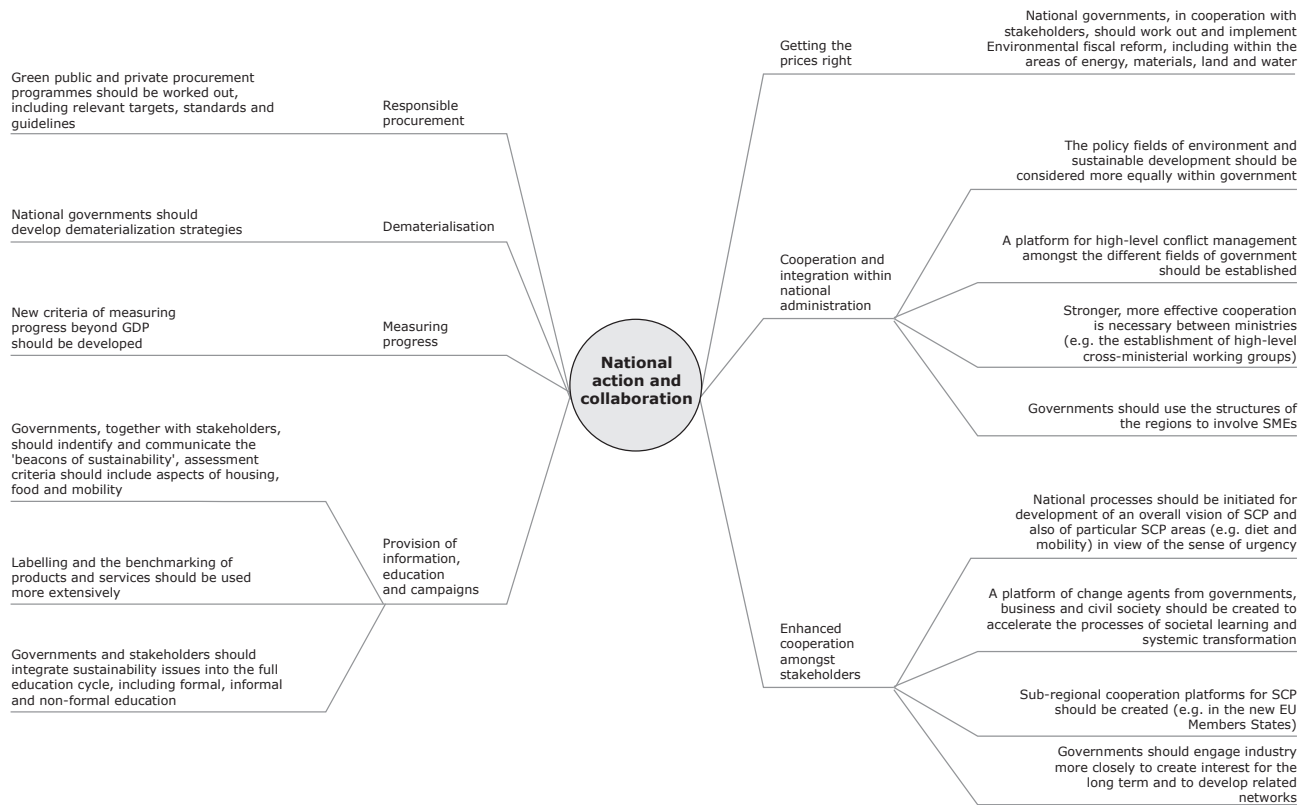
Recommendations developed at the second level are summarised in the box below.

Recommendations to national governments, in cooperation with business and civil society:

- **National vision and framework for SCP** — start processes for the development of national visions and frameworks of SCP, both in general and specific to SCP areas (for example, on less animal-based diets and reducing demand for mobility). The process and the vision should be based on available evidence and aimed at inducing systemic change.
- **Make progress towards SCP transparent** — develop and implement a framework of indicators for monitoring progress towards sustainability and new means of providing sustainability-related information (for example, enhanced use of labels).
- **Environmental fiscal reform** — governments should take the lead and work out and implement national environmental fiscal reforms, focusing particularly on the areas of energy, materials, land and water. The process should be carried out in consultation with stakeholders.
- **Responsible purchasing** — governments and the business community should prepare green procurement programmes and define relevant targets. The programmes should be supported by relevant standards and guidelines.
- **Education, learning for change and related campaigns** — create new platforms for education and the exchange of information and knowledge in the subject of SCP. These platforms should be accessible at all levels (national, regional and local) and should ensure the flow of information between different stakeholder groups. 'Beacons of sustainability' need to be identified and communicated to stakeholders.

The derived mind map of recommendations at the third level is presented in Figure 11.

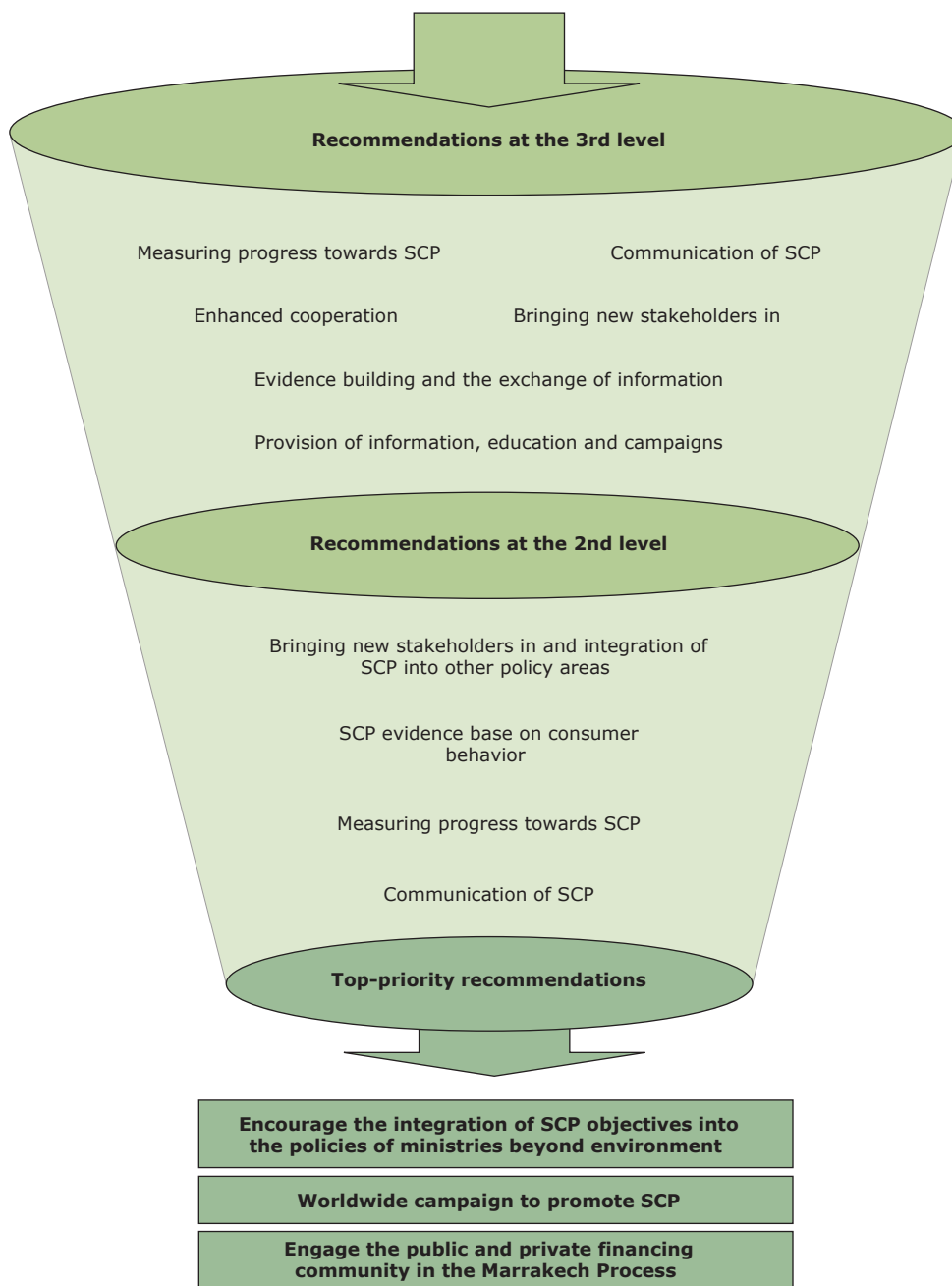
Figure 11 Third-level recommendations on national-level action on SCP, in cooperation with business and civil society



Marrakech Process

The three-stage process of the development of recommendations is illustrated in Figure 12.

Figure 12 Recommendations to the United Nations within the Marrakech Process: visualisation of the discussion process



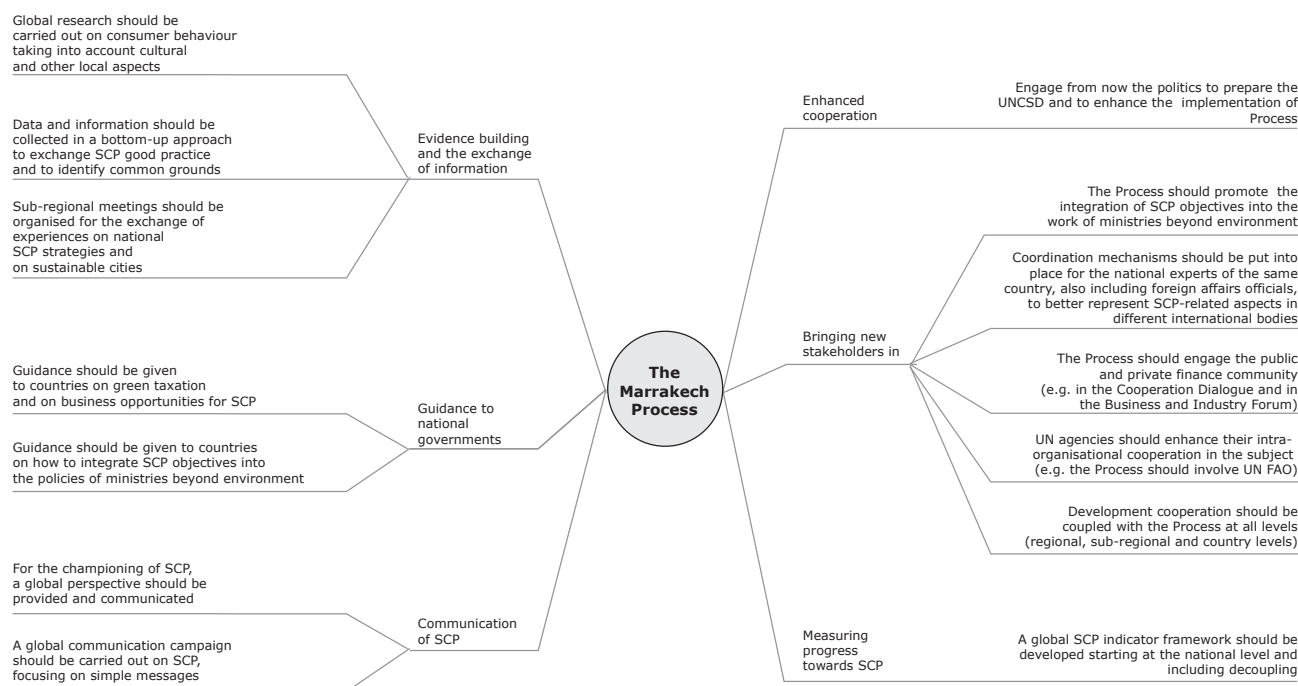
The recommendations developed at the second level are summarised in the text box below.

Recommendations to the United Nations within the Marrakech Process:

- **Bringing new stakeholders in and integration of SCP into other policy areas** — bring the public and private finance community on board (for example, in the Cooperation Dialogue and in the Business and Industry Forum); integrate SCP objectives into the work of ministries and agencies beyond the environment sector, particularly via national SCP programmes; make national experts working at international bodies as well as foreign affairs officials part of the process for an enhanced SCP cooperation both in the intergovernmental and in the international contexts; bring development cooperation agencies into the process and integrate SCP into their daily work.
- **Building of an SCP evidence base** — carry out global research on consumer behaviour, taking into consideration the different cultural and other aspects. The results of the research could inform the preparation of a communication strategy and the development of indicators.
- **Measuring progress towards SCP** — develop SCP indicators in order to be able to measure progress at the global level, in harmony with regional and national indicators.
- **Communication of SCP** — develop and implement a central communication strategy together with a worldwide campaign on SCP, with due respect for regional and other differences, focusing on simple messages and the champions of SCP.

The derived mind map of recommendations at the third level is presented in Figure 13.

Figure 13 Third level recommendations to the United Nations within the Marrakech Process



5 Reflections and statements in the final plenary session

The three top-priority recommendations developed in each Exchange Lab were presented to the participants of the parallel sessions in the final plenary session. Comments made by panel members about these recommendations are summarised below.

Timo Mäkelä (Director, Sustainable Development and Integration, DG Environment, European Commission)

Based on the conference outcomes, the European Commission is encouraged to continue with the development of the Action Plan, consistent with the original lines of action. Many of the ideas and recommendations put forward by the conference could be implemented now and it is not necessary to wait for and/or to expect their inclusion in the Action Plan. The Commission will be working hard to produce an SCP Action Plan for the EU that is robust, concrete and operational so that it will make a difference. Working with prices and taxes is important. At the same time, the difficulties of progress in this area at EU-level are well known – for example, taxation requires a unanimous vote in the Council. But progress can take place at the level of individual Member States and we will support this process. Although the topic poses a big challenge to the Commission, the setting of sustainability targets in areas such as energy and resource efficiency is important in order to move forward. Informed policy-making requires the development of much better knowledge and a stronger evidence base. In the housing sector, existing building stock is a big challenge and this topic was underrepresented in the conference discussions. Finally, we foresee progress in the area of product policies and you can expect some new initiatives in this area.

Jacqueline McGlade (Executive Director, EEA)

To bring SCP forward, the EEA will:

- work on integrated economic and environmental accounting as well as ecosystem accounting;
- address how to 'get the prices right' and support development of indices beyond GDP;

- develop a framework of indicators to measure progress towards SCP;
- produce 'country factsheets' on SCP, containing information on what measures have been implemented by EU Member States to promote SCP and to share best practice;
- analyse the effectiveness of green public procurement in selected EU Member States;
- provide information on the impacts of consumption to citizens across Europe (beyond the ecological footprint) and analyse the drivers of consumption;
- start a process to make the EEA canteen more sustainable, especially with respect to high-impact food such as meat.

Mitja Bricelj (Ministry of the Environment and Spatial Planning, Republic of Slovenia)

The results of the conference are highly relevant to the national policy-making process and will be very useful for Slovenia during the EU Presidency in the first half of 2008 when the draft EU Action Plan is presented. The results point to the really important structural issues that are at the heart of the problems of sustainability. So far we have not resolved many of them, for example fiscal reform and green procurement. To have any chance of success it is important to address SCP and devise related programmes of action at the following five levels of administration: global, EU, national, regional and local. It is essential that the process of developing the programmes of action is sufficiently flexible, the different levels at which challenges should be tackled are identified, and regional differences are also taken into account.

For the practical implementation of SCP, manageable functional units will be necessary at a scale smaller than the whole EU. Ecoregions such as the Mediterranean or the Alps could be considered in this context and given the opportunity to develop distinct patterns of sustainability within their ecological and social context.

Charles Arden-Clarke (*Head of Unit, SCP Branch, UNEP DTIE*)

A key challenge is how to mainstream SCP and integrate related objectives into the work of ministries beyond environment. It is particularly crucial to integrate SCP objectives into the investment plans of the public and private sectors, as well as to make the general public more aware of the importance of doing this.

To achieve this integration, the benefits of SCP need to be quantified and communicated. One also needs objective and widely-agreed definitions of green products to help direct investor and consumer choices.

Potential areas of cooperation on these issues and mechanisms will continue to be discussed and analysed in the Marrakech Process through international, regional and national consultation and dialogue with key stakeholders, as well as the work and activities with the Marrakech Task Forces and the Cooperation Dialogue with development agencies.

Mohan Peck (*Senior Economic Affairs Officer, Policy Integration and Analysis Branch, Division for Sustainable Development, UN DESA*)

The conference generated many good ideas that should be further discussed and realised. The Marrakech Process needs to involve local authorities and at the same time the broader engagement of UN agencies is necessary. Sub-regions with similar problems (for example, eastern Europe) should work together. The peer-review of national activities could be useful. It is important to establish a Marrakech Task Force or a partnership on agriculture and food consumption. Discussions on the potential establishment of a Task Force on small and medium enterprises (SMEs) are ongoing. A communication strategy for SCP is being prepared. It is important to speed up the preparation of the 10-year framework of programmes so that stakeholders are involved at an early enough stage and strong consensus can be reached.

Brigitte Tantawy Monsoû (*Director, Sustainable Value Chain, World Business Council for Sustainable Development (WBCSD)*)

The recommendations put forward by the conference are welcome. As regards related policy-making, the business community needs clearer, better-integrated and longer-term policies. The members of the World Business Council for Sustainable Development are already committed to life-cycle thinking, although it needs to be further integrated as part of business models. Through the provision of products and services, the business community is 'part of the solution', in an active way. The business community is keen to contribute positively to the debate and to work in partnership with governments and civil society to build a more sustainable society.

Anamarija Slabe (*Vice President, European Environmental Bureau*)

The EU Action Plan must include clear and binding targets. Furthermore, wherever possible, mandatory measures should be given priority. The role and involvement of environmental NGOs as part of civil society in policy-making is important, for example the question of ecological tax reform has been taken up and supported by civil society for years. The EU research agenda needs a vision, and civil society should be substantially involved in the steering of research, i.e. it should be part of the research platforms. Furthermore, civil society should be better involved in related dialogues, for example dialogue on agriculture and food systems. It is necessary to define what the optimal and feasible use of the agricultural system is, i.e. how much land should be used for food and how much for biofuels.

6 Brief analysis of results

This brief analysis can provide input to the relevant policy-making processes and in particular facilitate the integration of these considerations into policy. It is structured in the following way:

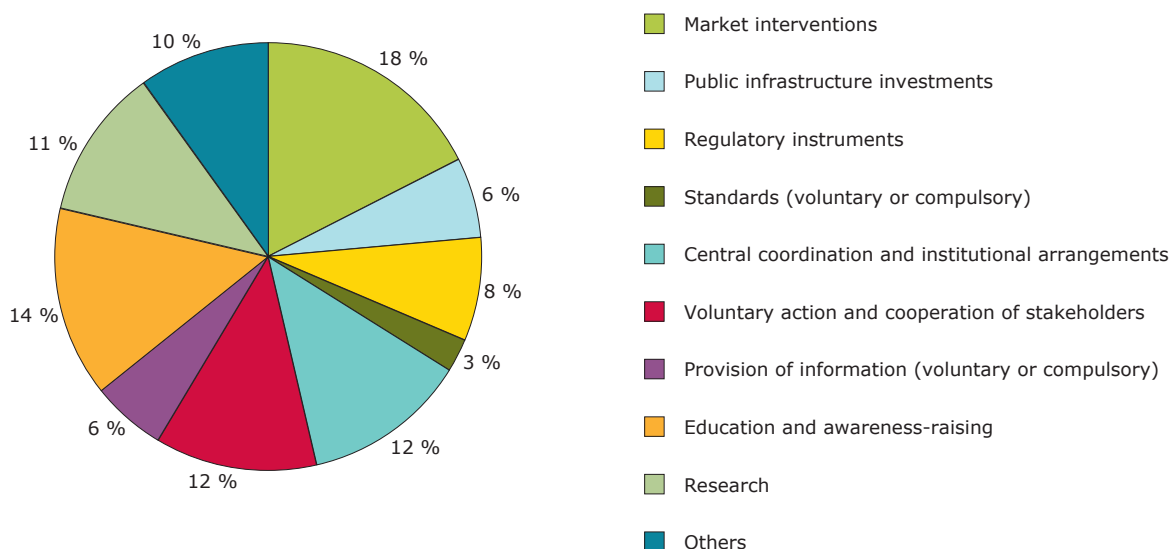
- Proposed solutions and actions on the three focus areas of housing, food and drink, and mobility
 - the split of participants' individual proposals in terms of the type of measures and tools at the aggregate level of the Focus Labs;
 - particular measures and tools most commonly recommended in the Focus Labs;
 - recommended measures and tools, which were specific to the thematic SCP areas;
 - key decision-makers and stakeholders per thematic SCP areas according to the recommendations/the character of the recommendations;

- Recommendations
 - potential fields of close cooperation between the European Commission, national governments, the United Nations and other stakeholders, based on the conference recommendations.

Solutions and actions for the three focus areas

The split of participants' proposals in terms of the type of policy tools, when considering all three Focus Labs together (on housing, food and drink, and mobility), is shown in Figure 14.

Figure 14 Split of participants' proposals in terms of the type of policy tools and instruments or other approaches towards SCP in the three parallel Focus Labs



Most proposals made by participants fell into the Market interventions category followed by the Education and awareness raising category.

The measures and tools most commonly recommended were:

- overall environmental fiscal reform, enhanced use of economic instruments (specifically differentiated VAT and other taxes);
- integration of SCP aspects into curricula (formal education) and large-scale targeted campaigns;
- more funding for more specialised research, along with better coordination, more transparency and the easier interpretation of results;

- labels and tools (for example benchmarking, evaluation tools) ⁽⁴⁾;
- green/sustainable public procurement (voluntary or compulsory) (GPP/SPP);
- laws and regulations ⁽⁵⁾;
- setting of specific targets ⁽⁶⁾ as well as setting of target/indicator frameworks;
- life-cycle impact assessment (LCIA) for policy-making, priority setting and communication ⁽⁷⁾;

The proposed area-specific measures, tools and key actors in the three thematic SCP areas are indicated in Table 1.

Table 1 Recommended area-specific measures and tools and area-specific key actors in the three thematic areas

	Recommended area-specific measures and tools or SCP approaches	Area-specific key actors based on the recommendations
Housing	Standards, demonstration centres, integrated spatial planning, tradeable certificates, green loans from banks to private owners and other investors	Standardisation bodies, local and regional authorities, architects and city planners, construction and refurbishment firms, banks (green loans), SMEs and local communities and inhabitants
Food and drink	Trade rules, sub-sectoral approach, localisation (consumption of local food)	WTO, a large variety of ministries are to be involved (ministries of environment, health, agriculture and energy), farmers and factory farms, food providers, retailers (SMEs), restaurants and public canteens
Mobility	Infrastructure investments, public-private partnerships, tradeable permits, renting schemes, mixed-use infrastructure, localisation (local, regional products)	Local and regional authorities, spatial planning authorities and city planners, banks and other investors (public-private partnerships), manufacturers of passenger vehicles and companies (travel plans)

⁽⁴⁾ E.g. housing: energy performance certificates; food and drink: integrated food label and carbon footprint label; mobility: methods, tools etc. to calculate the impact of (personal) transport and the provision of information on local and regional products.

⁽⁵⁾ E.g. housing: mandatory separation of demolition waste; food and drink: information is to be indicated on the exact origin of food; mobility: environmental performance of passenger cars.

⁽⁶⁾ E.g. housing: market diffusion of zero emission buildings; food and drink: availability of local and seasonal food in stores, canteens etc.; mobility: vehicle performance.

⁽⁷⁾ E.g. housing: rating system for ecobuildings, building passports etc.; food and drink: identification of hot spots along the life cycle; mobility: impact assessment of biofuels.

Recommendations

Overlapping and matching recommendations for the three areas of policy-making (EU Action Plan, national-level action in cooperation with business and civil society, Marrakech Process) are presented in Table 2. The table shows all top-priority

recommendations and as many recommendations as possible at the second and third levels, for each field. The top-priority recommendations are indicated in red, the recommendations at the second level are indicated in green and recommendations at the third level are indicated in blue.

Table 2 The top-priority recommendations of the Exchange Labs and second and third level recommendations in the same broader fields of action

	EU Action Plan	Collaboration and national-level action	Marrakech Process
Getting the prices right	Concrete steps to get the prices right	Environmental fiscal reform	Guidance to national governments on green taxation
Responsible purchasing	Directive on GPP	Responsible purchasing	
Measuring progress towards SCP	Clear sustainability targets	Make progress towards sustainability transparent	SCP indicators at the global level, in harmonisation with local frameworks
Communication of SCP to stakeholders		Identify and communicate to stakeholders the 'beacons of sustainability'	Develop a worldwide campaign to promote SCP
Evidence building and the exchange of information	Sustainability benchmarking scheme for products and services	New platforms to be created for education and the exchange of information and knowledge in the subject of SCP National visions to be based on available sound evidence	Global research into consumer behaviour
Bringing new stakeholders in and integration of SCP into other policy areas		Stronger, more effective communication between ministries	Encourage the integration of SCP objectives into ministries beyond the environment sector Engage the public and private financial community
Vision and framework for SCP		Develop long-term national visions and frameworks of SCP	

Based on the overview of the conference recommendations in Table 2, priority fields for potential close cooperation on SCP between the European Commission (SCP Action Plan), national governments (in cooperation with business and civil society) and the United Nations (Marrakech Process) can be identified as:

- 'getting the prices right' (top-priority cooperation field);
- measuring progress towards SCP;
- building an evidence base and the exchange of information.

A potential for close cooperation between national

governments (in cooperation with business and civil society) and the United Nations (Marrakech Process) has been identified for:

- communication of SCP to stakeholders;
- bringing new stakeholders in and integration of SCP into other policy areas.

A potential for close cooperation between the European Commission and national governments (in cooperation with business and civil society) has been identified for:

- responsible purchasing.

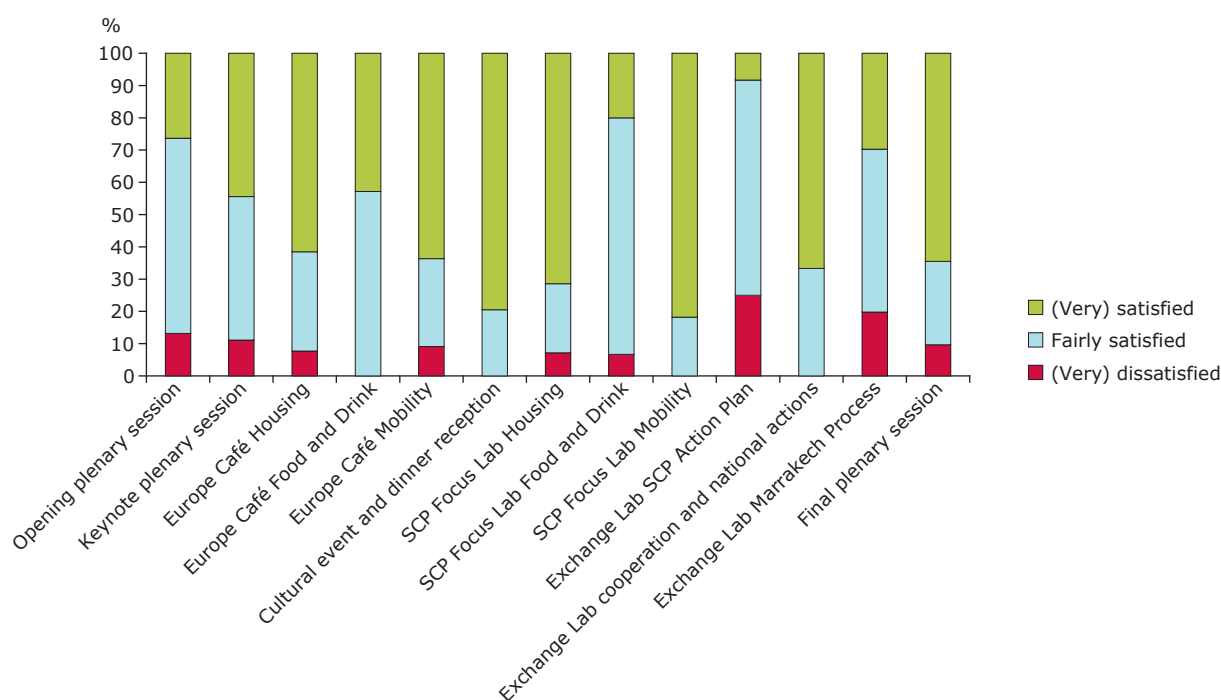
7 Evaluation of the conference

The conference organisers asked the participants for feedback on the conference, and 44 % returned the questionnaire. Most of the participants were satisfied with the overall quality of the conference and the background papers. Figure 15 presents the results for the different sessions in more detail.


For future conferences in a participatory format, participants suggested, for example, to have more time for interactive discussions and more targeted or more provocative key presentations. The opening session was generally felt to have been too long and

the final plenary session too short. Some asked for prepared key questions or policy action to better focus the discussions. Others suggested making participants provide their own written input for the group work as a basis for the dialogue in the Europe Cafés. It was proposed to communicate better from the beginning how the discussions and results would be reported. Overall, participants very much welcomed the participatory format and congratulated the organisers for the preparation and organisation of the conference.

Figure 15 Feedback from conference participants



Annex 1 Conference paper *Action towards sustainable consumption and production in Europe*





REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING

Action towards Sustainable Consumption and Production in Europe

Conference Paper

27-29 September 2007
Ljubljana, Slovenia

Readers' Note

This file contains the conference paper for the "**Time for Action - Towards SCP in Europe**" conference held September 27-29, 2007, in Ljubljana, Slovenia. The conference was hosted and organised by the Ministry of the Environment and Spatial Planning of the Republic of Slovenia, the European Environment Agency (EEA) and the UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP).

The conference has been organised in collaboration with the UK Department of Environment, Food and Rural Affairs (DEFRA), the Belgian Federal Secretary of State of Sustainable Development, the European Topic Centre on Resources and Waste Management (ETC/RWM), DG Environment of the European Commission, the United Nations Environment Programme (UNEP), the United Nations Department for Economic and Social Affairs (UN-DESA), and the World Business Council for Sustainable Development (WBCSD).

Objectives of the conference

1. Formulate recommendations for the development and implementation of the **EU Action Plan on Sustainable Consumption and Production (SCP)** – focusing specifically on housing, food and drink, and mobility, which have been identified as the fields of demand that result in the highest environmental impacts.
2. Formulate recommendations for action towards **SCP in European countries** and **encourage collaboration and partnerships between public authorities, business and civil society** taking action.
3. Discuss European inputs and recommendations to the **United Nations' Marrakech Process to develop a 10-year framework of programmes on SCP** for the period of 2012-2022.

This conference paper is a "**living document**" and it evolved and developed throughout the conference. There are three main purposes: to serve as a background paper for attendees in advance of the conference, to provide content to be used as input to working groups during the conference and reporting the recommendations on SCP, which were developed in the conference.

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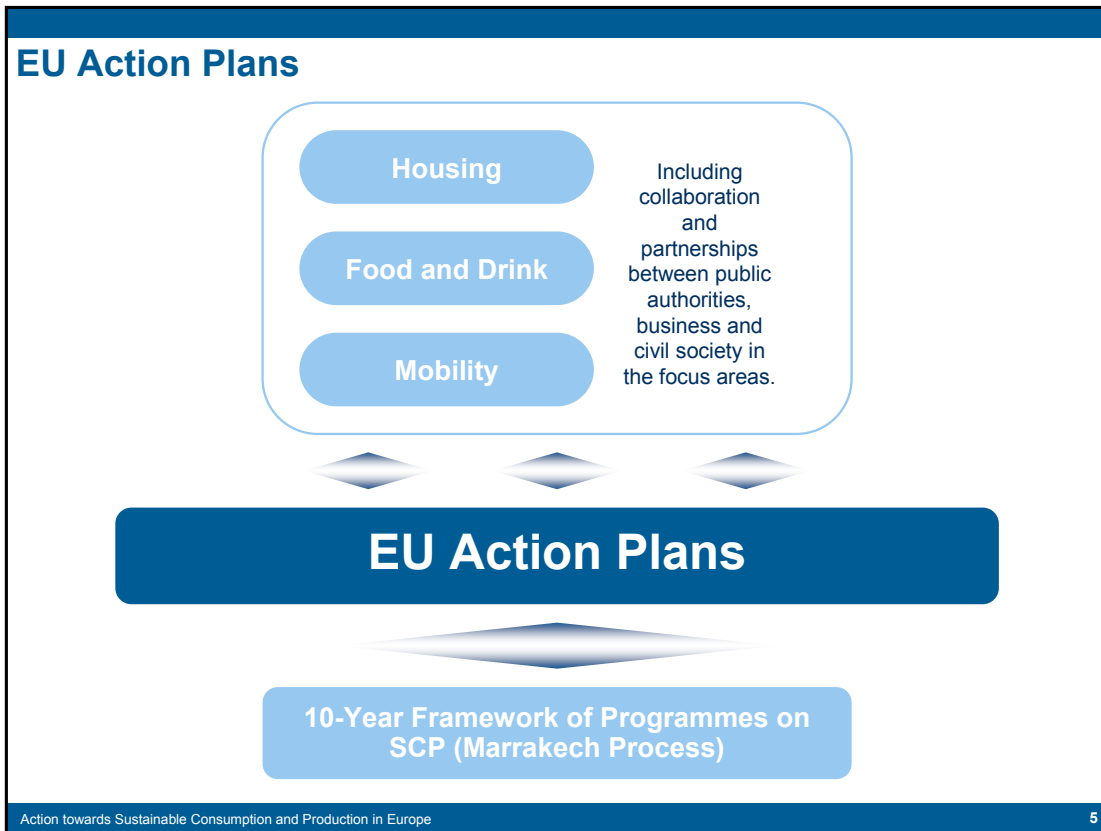
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Focus and Objectives of the Paper

This conference paper focuses on the challenges of sustainable consumption and production (SCP) in the areas of housing, food and drink, and mobility, which have been identified by the European Commission and the EEA to be the areas that lead to the highest environmental impacts over their full life cycle (EIPRO Study 2006, NAMEA 2006). The intention of focussing on these areas is to have concrete discussions at the conference and to develop tangible recommendations for SCP in Europe as well as internationally.

To this end, the paper starts by providing background information on the EU Action Plans and on the international Marrakech Process. Subsequently the three focus areas are discussed in detail. At the end of each chapter on a focus area, reference to the EU Action Plans and to the Marrakech Process are given in the form of questions for the participants to reflect upon prior to the conference. **Please note that you are only requested to read those chapters of this paper that correspond to the working groups, which you registered for at the conference.**





EU Action Plans

The renewed EU Sustainable Development Strategy adopted in June, 2006 introduced the concept of promoting sustainable consumption and production as one of seven key challenges of the strategy and committed the European Commission to proposing an EU Sustainable Consumption and Production Action Plan by the end of 2007.

On 27 July 2007, the European Commission launched a **background document to the consultation on the Action Plans on Sustainable Consumption and Production (SCP) and Sustainable Industrial Policy (SIP)**. Public consultation on Sustainable Consumption and Production and on Sustainable Industrial Policy is being undertaken by the European Commission via an on-line questionnaire and will end on 23 September 2007. Recommendations arising from specified consultation processes, such as **the Slovenia conference “Time for Action - towards Sustainable Consumption and Production in Europe” will be accepted by the Commission for consideration beyond this date.**

The conference as well as this conference paper address both SCP and SIP issues contained within the background document, however **from an SCP perspective.**

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Background Document on EU Action Plans

Objectives

Build upon existing policies and enhance policy coherence for SCP and Sustainable Industrial Policy (SIP)

Focus

Innovations, product improvement, leaner and cleaner production, sustainable consumption, transfer to global markets

Actions

Actions in the areas of products, production, consumption, global markets

How can conference outcomes add to the EU Action Plans?

- Recommendations with high potential to reduce impacts on the environment
- Recommendations for social sustainability, especially in the light of global value chains
- Recommendations for priority instruments and actions

Background Document on EU Action Plans

7 / 2007

- SCP Action Plan
- SIP Action Plan

2008

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Areas of action under consideration and corresponding instruments

In its background document the Commission identifies five main areas with corresponding instruments for consideration for the action plans:

Leveraging Innovation

Lead market initiative, support networking of innovation actors including research

Better Products

Dynamic performance requirements, labelling, eco-design and standardisation

Leaner and Cleaner Production

Resource/material efficiency targets, eco-innovation, environmental technologies, EMAS legislation review, SME programme

Smarter Consumption

Agreements with retailers, market-based instruments, differentiation of value-added tax rates, tackle misleading advertising, green public procurement, consumer information, education and training

Global Markets

Foster energy and resource efficiency worldwide, global sectoral agreements, strengthen international cooperation on SCP

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Clustering and characterising the instruments

The following slides provide possible methods of clustering and categorising selected instruments identified in the background document of the European Commission. **The categorisation below is suggested by the authors** as a means for conference participants to further reflect on the instruments from various perspectives. The authors do not assert that the categorization as presented in the following pages is entirely complete. Reflections and suggestions on a further or different clustering by conference participants is welcomed. The four options of clustering presented in the following section are as follows:

Stakeholders

	Leveraging Innovation	Better Products	Leaner and Cleaner Production	Smarter Consumption	Global Markets
Business					
Consumers/Civil society					
Governments					

Life-Cycle Stages

Types of Implementation

Voluntary Agreements

- Greening of standards
- Environmental performance Agreements with retailers
- EMAS
- "Green public procurement"
- "Global Sectoral Approaches"

Information instruments

- Eco-labeling revision
- Data centre for products
- Env. product declarations
- Networking of innovation stakeholders
- Consumer information campaigns

Regulatory Requirements

- Broaden eco-design
- Dynamic performance requirements for products
- Review of regulations to promote eco-innovation uptake

Market-based Instruments

- Forum on Market-based Instruments
- Environmental tax reform
- Incentives beyond BAT
- Differential V.A.T.

Support Programmes

- "Lead market initiative"
- Eco-innovation and environmental technologies"

Quantitative Targets

- Resource efficiency target of 5% per year
- Targets for eco-innovation and uptake of environmental technologies

Degree of Freedom/Point of Leverage

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Stakeholders affected by the instruments

To what extent might the different stakeholder groups at the conference be affected by the different actions mentioned in the background document to the consultation on the action plans? Who needs to get involved for the approach to be effective?

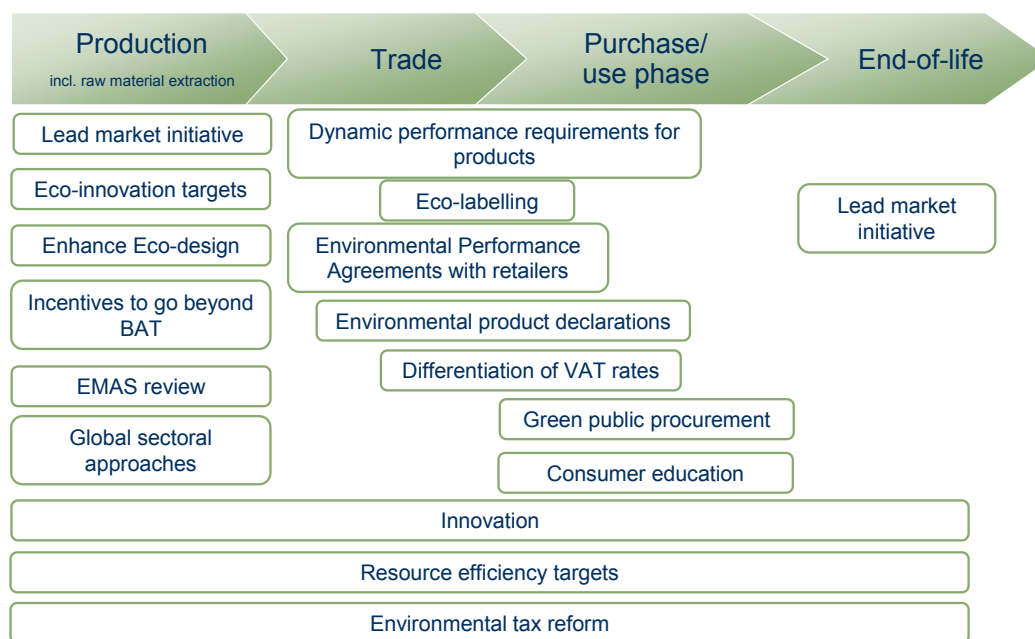
	Leveraging Innovation	Better Products	Leaner and Cleaner Production	Smarter Consumption	Global Markets
Business					
Consumers /Civil society					
Governments					

Note: highly affected/influential reasonably affected/influential involved but not main stakeholder

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Life cycle stages of selected instruments

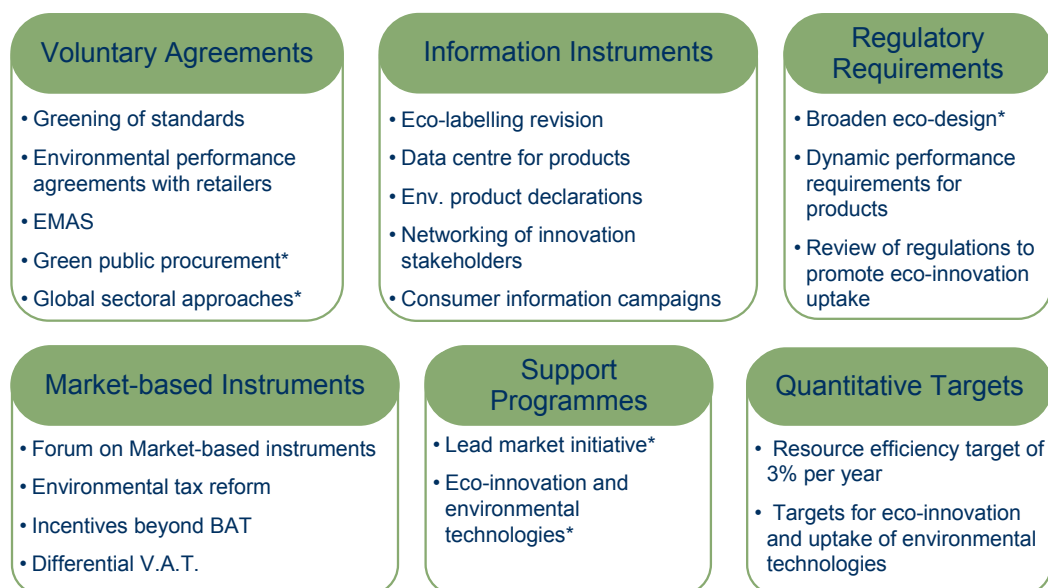
Which life-cycle stage do selected instruments most effectively address?



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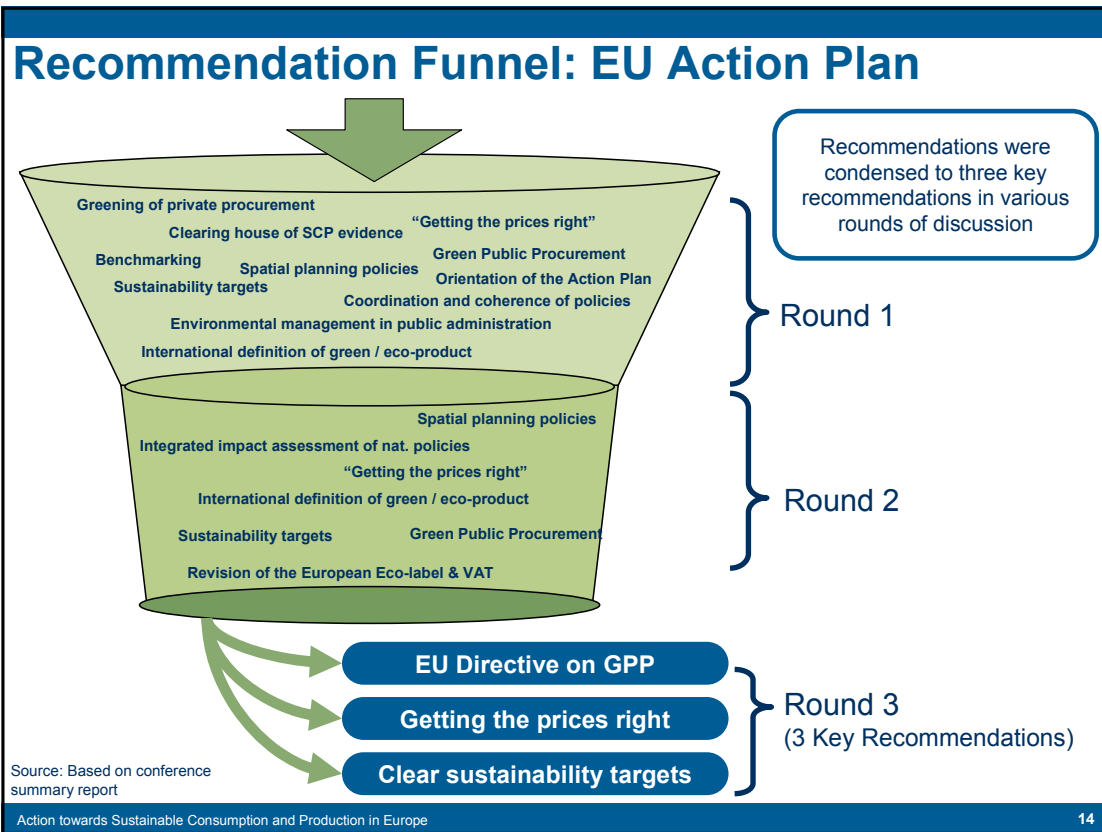
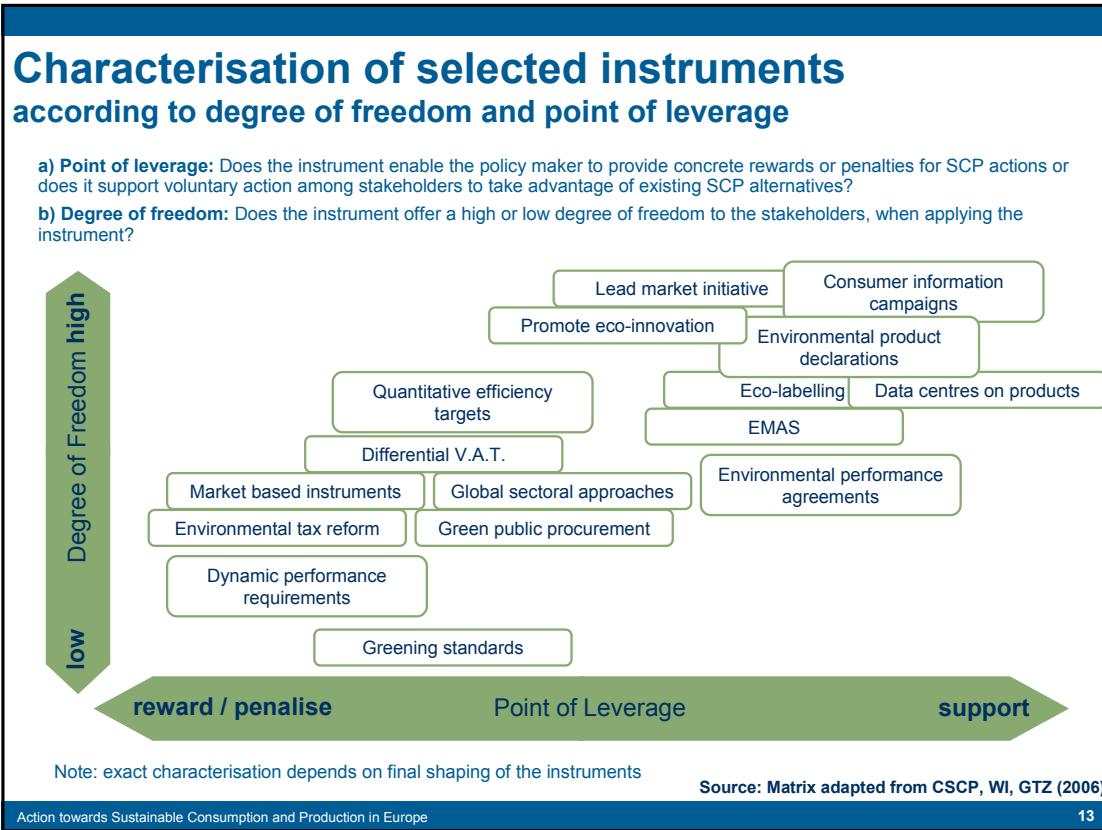
Types of implementation of selected instruments



Note: The symbol * indicates that characterisation particularly depends on final shaping of the instrument.

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Recommendations to the European Commission

Consider to include in the EU Action Plan:

EU directive on green public procurement

Make responsible purchasing mandatory for all public authorities

Concrete steps to “get the prices right”

A range of economic instruments should be worked out in order to ensure that the ecological consequences of using natural resources and pollution are reflected in the prices

Clear sustainability targets at the EU and at national levels

For example on resource use, emissions, green public procurement, products etc.

Source: Based on conference summary report

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The Marrakech Process

Housing

Food and Drink

Mobility

Including collaboration and partnerships between public authorities, business and civil society in the focus areas.

EU Action Plans

10-Year Framework of Programmes on SCP (Marrakech Process)

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The Marrakech Process

The Marrakech Process is a 10-Year Framework of Programmes on Sustainable Consumption and Production, named after the location of its inaugural meeting in 2003. The Marrakech Process is a global UN initiative to support regional and national actions to promote the **shift towards sustainable consumption and production (SCP) patterns**. It responds to the call of the Johannesburg Plan of Implementation to develop a **10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP)**. UNEP and UN-DESA are the leading agencies of this global process with the active participation and support of national governments, development agencies, the private sector, civil society and other stakeholders.

Framework

Expert Meetings & Roundtables

held at international, regional and national levels

SCP Frameworks & Strategies

developed at international, regional and national levels

Marrakech Process Activities

Marrakech Task Forces

led by governments with focus on specific SCP issues

Cooperation Dialogue

engages development agencies into SCP activities

Business/Industry

business to engage with implementation at regional development level (ICC/WBCSD)

NGO Platform

to integrate NGO's activities into the Marrakech Process

Implementation

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The Marrakech Process

The Marrakech Task Forces are voluntary initiatives led by governments which, in cooperation with other partners, commit themselves to carrying out a set of concrete activities that promote the shift to SCP patterns.

Sector-focused

Social & behavioural issues

Region-focused

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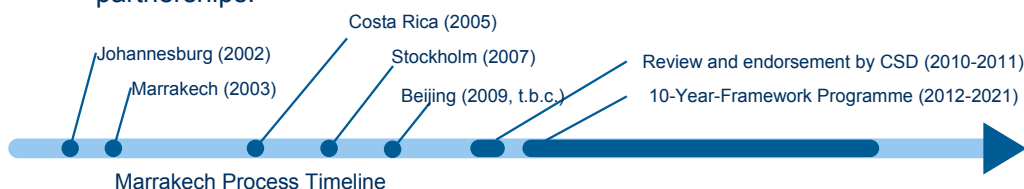
The Marrakech Process

Four phases of the Marrakech Process:

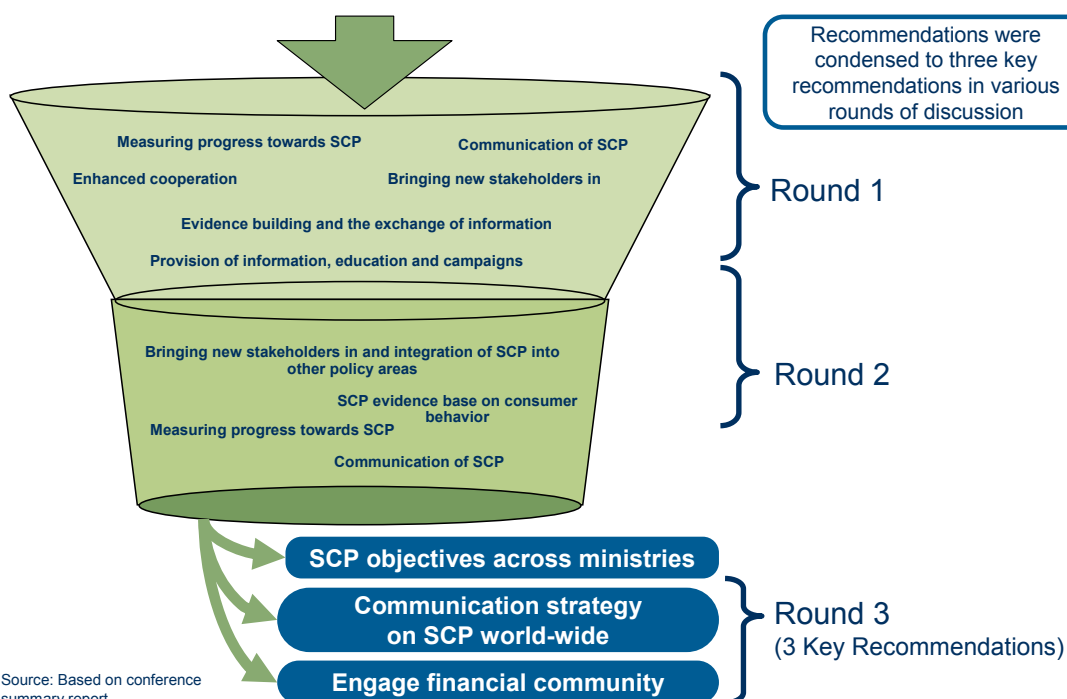
1. Organising regional consultations to promote awareness and identify priorities and needs for SCP
2. Building regional strategies and implementation mechanisms with regional and national ownership
3. Implementing concrete projects, programmes and initiatives at the regional, national and local levels
4. Monitoring and evaluating progress and exchanging information and experience at the international level with regional and national ownership and international cooperation and partnerships.

Conference outcomes can contribute to the development of the 10YFP by addressing the following questions:

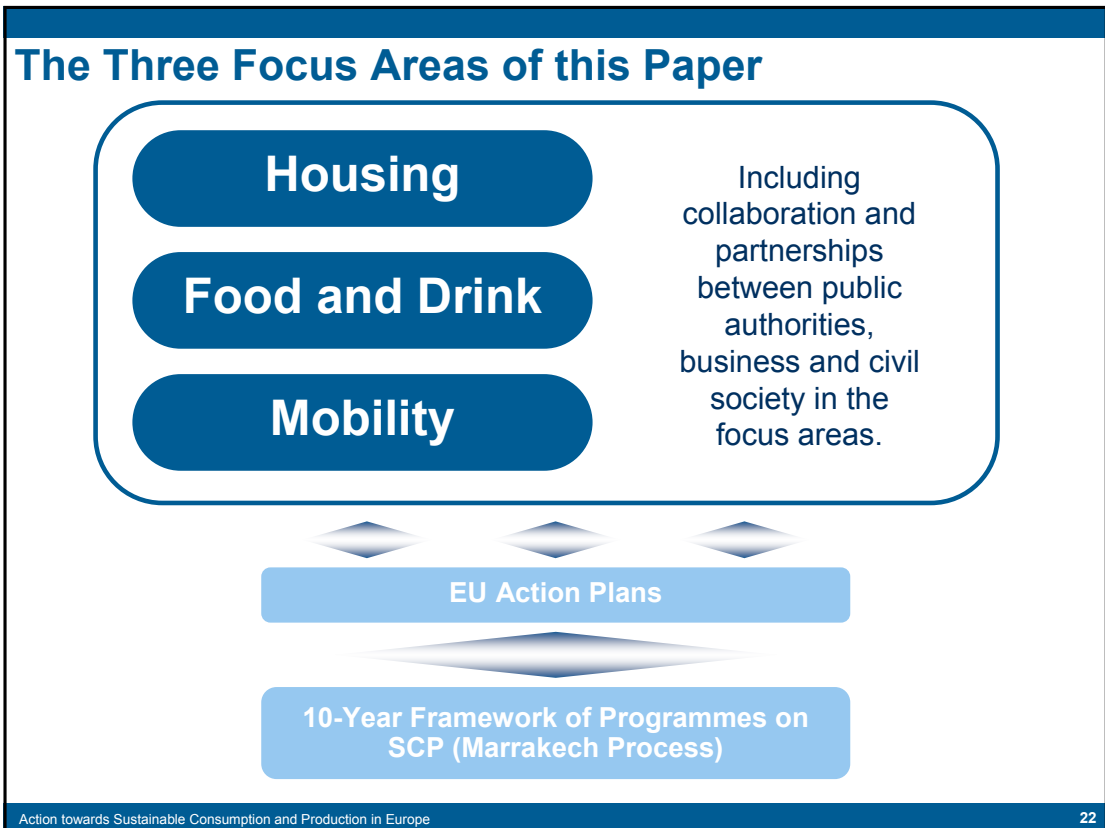
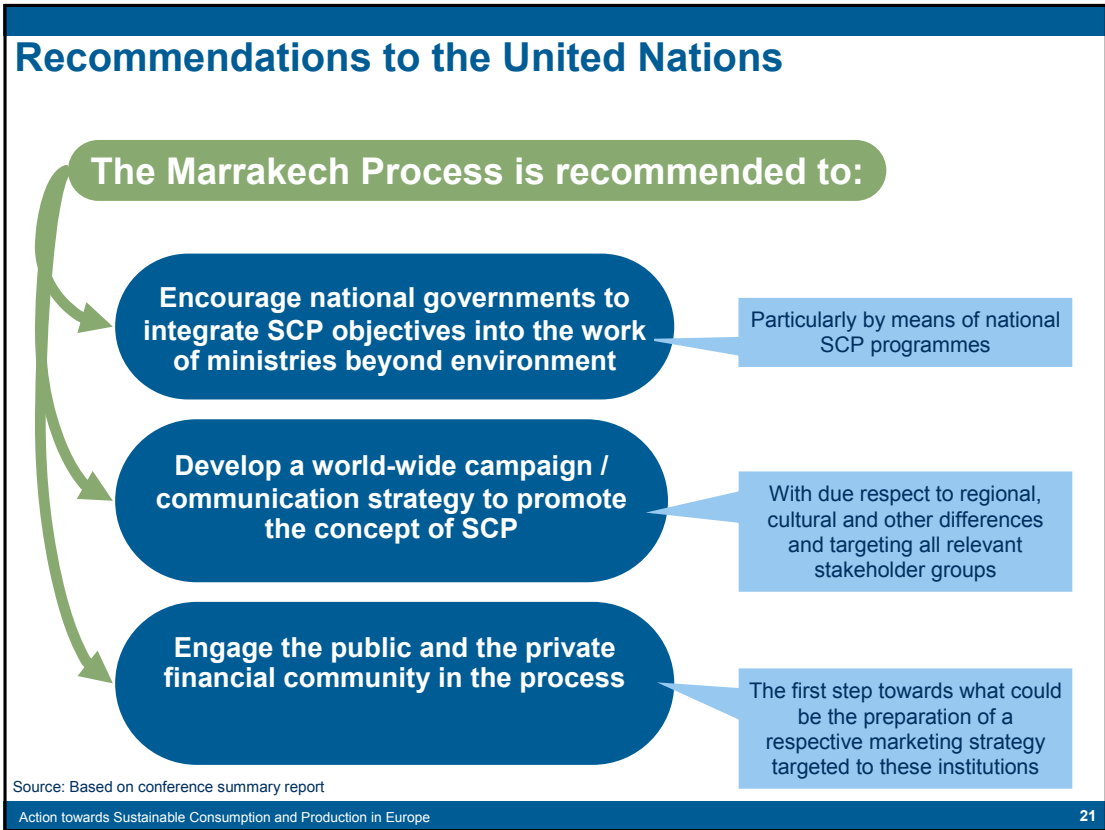
- What are the key programmes and actions needed in the 10YFP that could support implementation of the EU Action Plan?
- How can the 10YFP serve as a platform to provide information and offer support over the value chains in the three focus areas?
- How can Europe support other regions to move towards SCP?



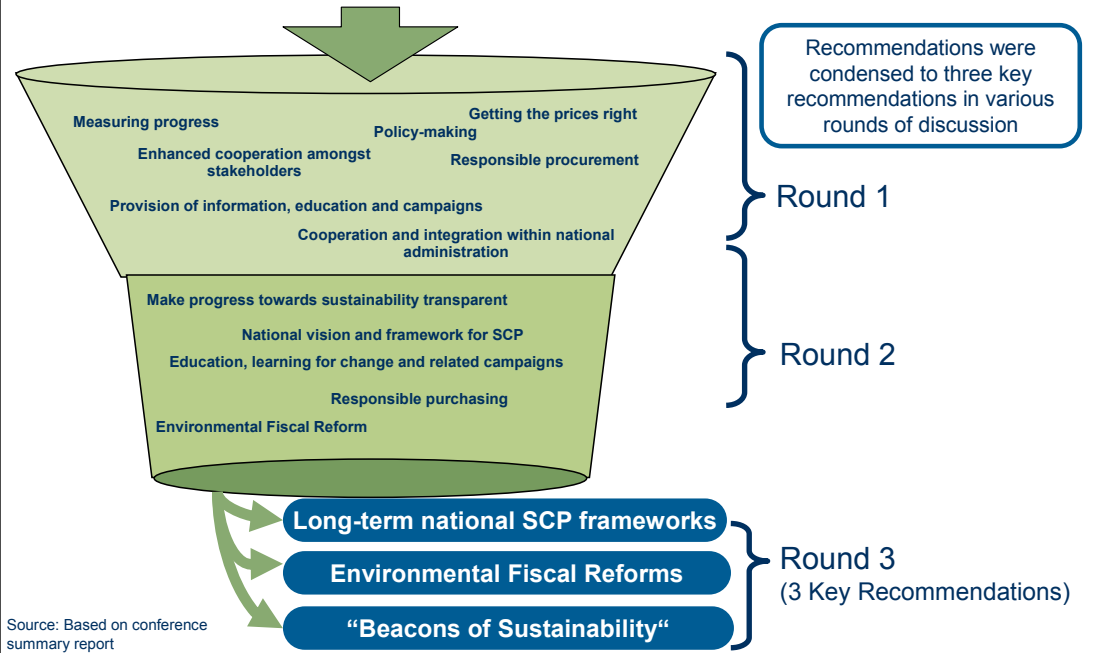
Recommendation Funnel: Marrakech Process



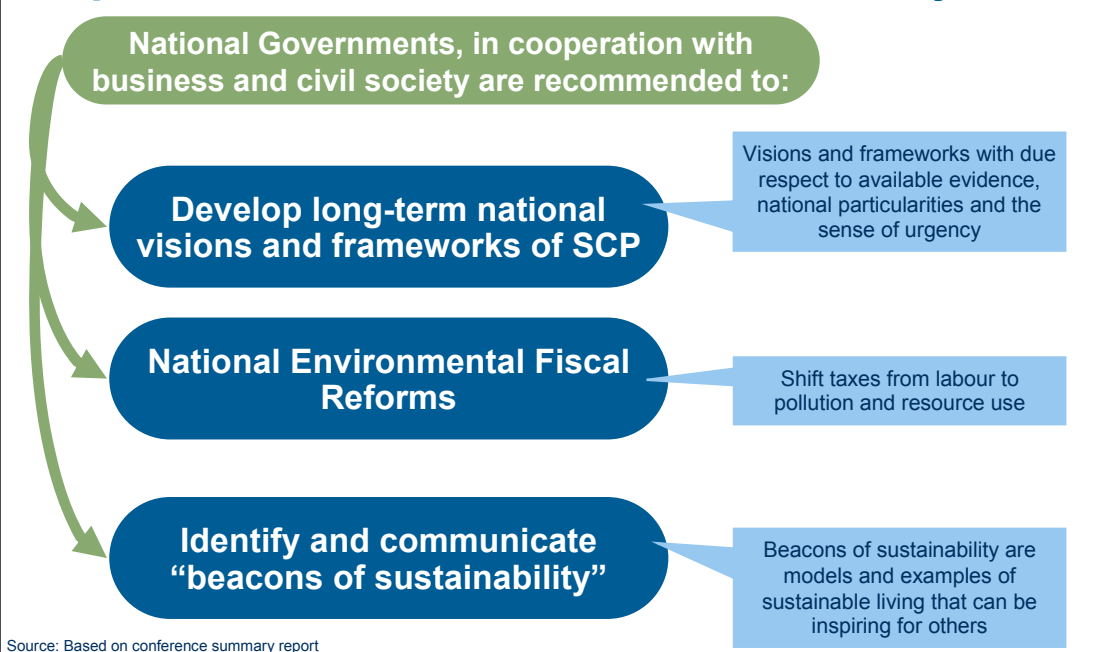
Source: Based on conference summary report



Recommendation Funnel: National Governments, in cooperation with business and civil society

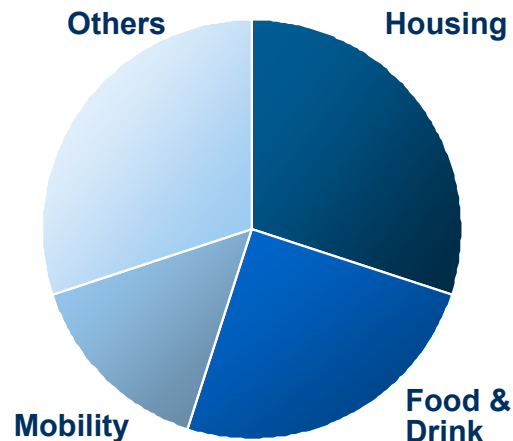


Recommendations to national governments, in cooperation with business and civil society



Focus on the three areas with the highest impact

This Conference Paper focuses on the three areas identified by the Commission and the EEA to lead to the highest environmental pressures over their full life-cycles. Together these fields of demand account for approximately **70-80% of environmental impacts arising from all products over their life cycles**. Impact categories thereby range from global warming, acidification, photochemical ozone formation to eutrophication.*



*Source: EIPRO Study 2006, NAMEA Study 2006, WI 1998

Why this focus on the three impact areas?

Targeting these three areas will ensure a focussed discussion and enable development of tangible recommendations for SCP in Europe. The conference aims to holistically address consumption and production elements within these three focus areas and the scope of discussions at the conference can include aspects such as:

- **Housing:** aspects relating to construction materials, use of chemicals, maintenance services, finance services, design of buildings, use of renewable energy sources, energy efficiency in buildings (public and commercial as well as private), household appliances, water use, construction, recycling of demolition and household waste, etc.
- **Food and Drink:** aspects relating to agricultural production, food processing, use of chemicals, energy use, packaging, logistics, retailers, consumer choices, waste, food services such as catering and restaurants, etc.
- **Mobility:** aspects relating to public and private transportation, freight transportation, railway service, aviation, disposal of vehicles, alternative vehicles and fuels, etc.

Not all of these aspects can be addressed in this conference paper. As mentioned above, the purpose of this paper is to provide a basis for structuring discussions at the conference using examples that relate to key aspects of SCP in the different sectors.

Environmental pressures from European consumption and production - insights from environmental accounts

Using the tool known as NAMEA (National Accounting Matrix including Environmental Accounts), the EEA and its Topic Centre on Resources and Waste Management have compiled and analysed environmental accounts for eight European countries for which comprehensive data was available (Denmark, Germany, Hungary, Italy, the Netherlands, Spain, Sweden and the United Kingdom).

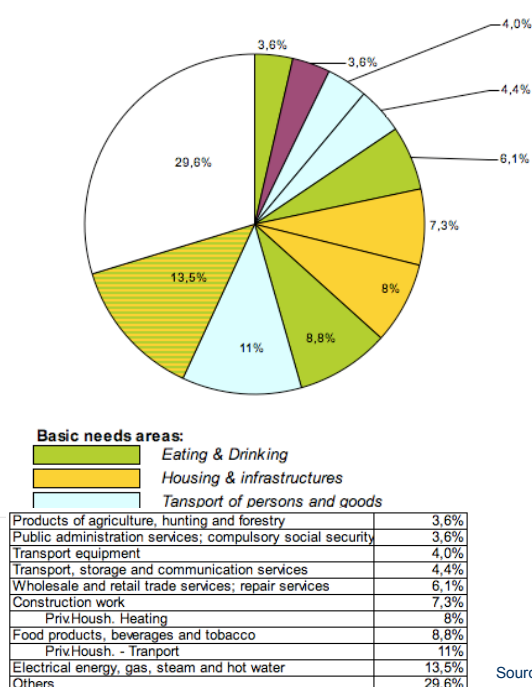
The environmental pressures analysed are global warming potentials, acidification potentials, tropospheric ozone forming potentials and resource use. From a production perspective, the study shows that in those countries, the sectors contributing the most to environmental pressures are agriculture, electricity generation, transport services and mining. Moreover, while these sectors emit over half the emissions analysed, they typically contribute little over 10% to GDP. From a consumption perspective, the study shows that the production-consumption chain of activities related to the consumption of food and drink, housing (including infrastructures) and mobility/transport causes the majority of environmental pressures. This is illustrated in the next two slides.

More information available at http://reports.eea.europa.eu/brochure_2007_1/en

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Global Warming Potential of three focus areas



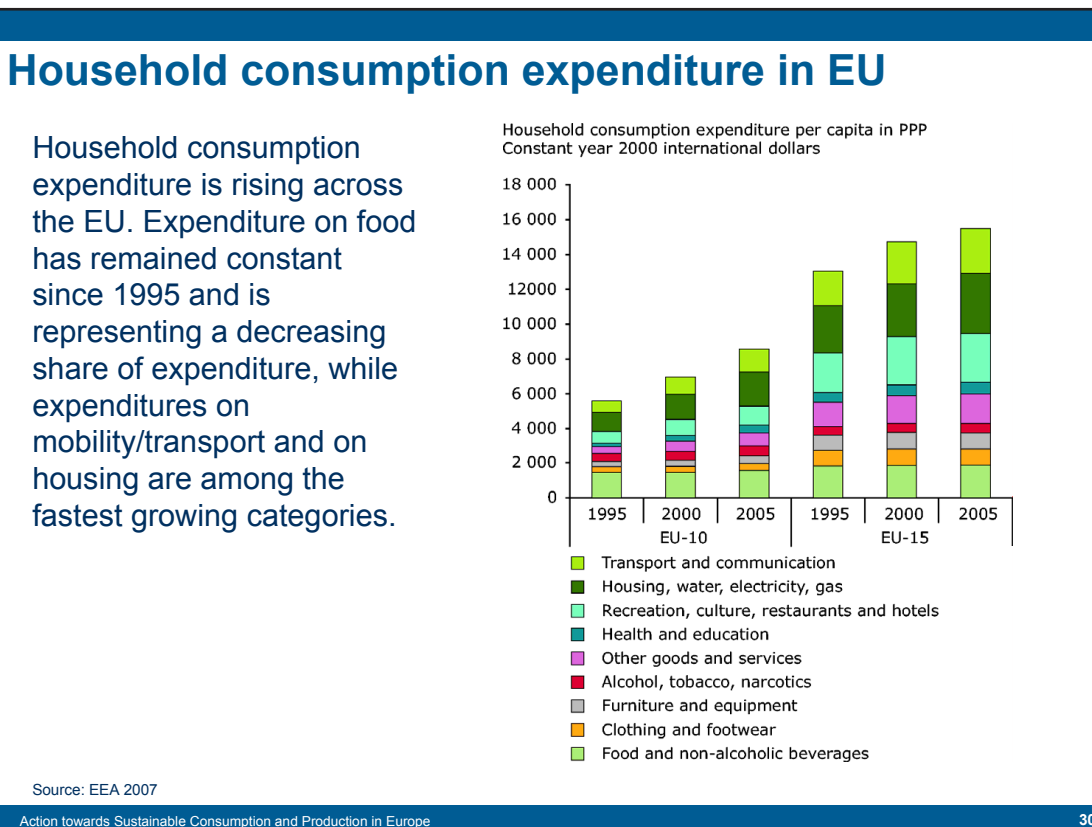
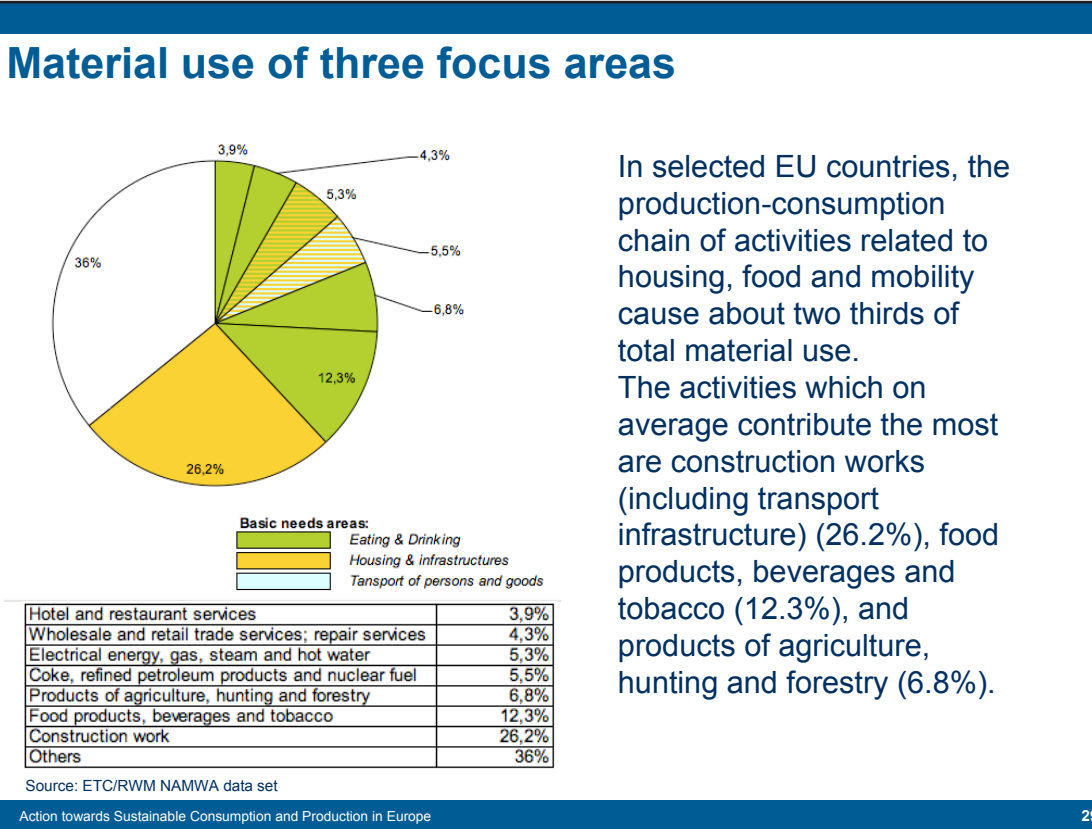
In selected EU countries, the production-consumption chain of activities related to housing, food and mobility cause about two thirds of the total global warming potential.

The activities which on average contribute the most are electrical energy, gas, steam and hot water (13.5%), private household transport (11%) and food products, beverages and tobacco (8.8%).

Source: ETC/RWM NAMEA data base

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Overview

Housing

Food & Drink

Mobility

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Trends, Drivers, Impacts and Actions

Trend

What are the dominant patterns in a focus area?

Trends indicate areas within a focus area that need to be addressed for moving towards SCP in the respective focus area. Many of the trends in this paper are two-sided and to some extent relate to both production and consumption.

Impacts

What is problematic about the trend? For example:

- Environmental impact
- Social Impact

Outline impacts and quantify effects of current problematic trends.

Drivers

What determines the trend? For example:

- Socio-cultural drivers (lifestyles and mindsets)
- Economic drivers
- Policy drivers
- Infrastructure
- Technological and demographic drivers

Drivers provide leverage points for actions towards SCP.

Actions

The Conference Paper identifies opportunities for actions of public authorities, businesses and civil society for moving towards SCP in each of the focus areas. Furthermore, case examples and collaborative initiatives are presented.

The Conference Paper suggests the structure to the left as a means of identifying and discussing SCP recommendations and options.

The following section presents an example of how the structure shown left might be applied for key trends within each of the three focus areas in order to form a basis for discussion.

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Conference Recommendations - Overview

	Recommended area-specific measures and tools or SCP approaches	Area-specific key actors based on the recommendations
Housing	Standards, demonstration centres, integrated spatial planning, tradable certificates, green loans from banks to private owners and other investors.	Standardisation bodies, Local and Regional Authorities (LRAs), architects and city planners, construction and refurbishment firms, banks (green loan), SMEs and local communities and inhabitants
Food and drink	Trade rules, sub-sectoral approach, localisation (consumption of local food)	WTO, a large variety of ministries (ministries of environment, health, agriculture and energy), farmers and factory farms, food providers, retailers (SMEs), restaurants and public canteens
Mobility	Infrastructure investments, public-private partnerships, tradable permits, renting schemes, mixed-use infrastructure, localisation (local, regional products) Also related to the other SCP areas, but the most characteristic to this area	Local and Regional Authorities (LRAs), spatial planning authorities and city planners, banks and other investors (public-private partnerships), manufacturers of passenger vehicles and companies (travel plans)

Source: Based on conference summary report

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Housing



Food & Drink



Mobility

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Focus Area: Housing

Housing conditions crucially influence individual health and well-being, and access to affordable and adequate housing is a key issue for improving human development.

Furthermore, housing activities have also been found to make up 35% of different environmental impacts like acidification, climate change etc. (EIPRO-Study 2006). These are related not only to constructing and maintaining the house itself, but also incidental expenditures for infrastructure, heating, cooling and electricity. Water heating as well as water-use furthermore are important impact areas.

From the economic perspective, construction is a significant source of employment (typically, 5% to 10% of employment and 5% to 15% of a country's GDP).



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Key Challenging Trends in Housing

Use of high-impact construction material (I)

Materials used in construction and maintenance have significant environmental and social life-cycle impacts (both up- and downstream).



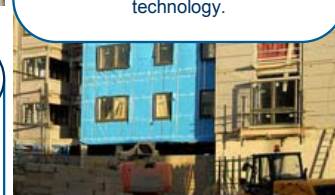
Growing demand for housing space (III)

Demand for housing space is growing due to reduced number of persons per household and increasing space demanded per person (Wilson & Boehland 2005).



Energy consumption in housing use phase (V)

Despite increasing energy efficiency in households, total use-phase energy consumption is rising and remains a major impact in the housing area (EEA 2005). This concerns especially older houses in the housing stock not build or refitted according to state-of-the-art technology.



Access to appropriate and affordable housing (II)

Access to safe, decent and affordable housing for low-income groups remains a challenge in many countries, including those in eastern Europe (SP/HUMI 2005).



Urban sprawl and lower urban density (IV)

Urban sprawl, lower urban density and city centre decline lead to new infrastructure investments and increased resource consumption (EEA 2006a).



In the following all five trends will be described more in-depth...

All images on this page: Wikimedia Commons

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Housing Trends

Use of high-impact construction material (I)

II

III

IV

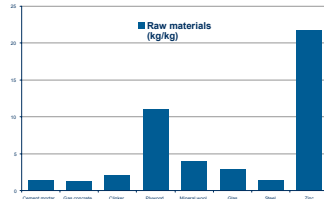
V

The construction and renovation of dwellings consumes significant amounts of resources, and low social and environmental standards may prevail in sourcing and processing stages, especially abroad. This particularly holds true when building materials are evaluated from a life cycle perspective, i.e. taking into account their sourcing, processing and disposal. Prices for key material inputs have risen significantly in the past years. Construction and demolition waste also poses an environmental challenge, but also offer recycling opportunities. Smart building design can help to shift towards low-impact materials.



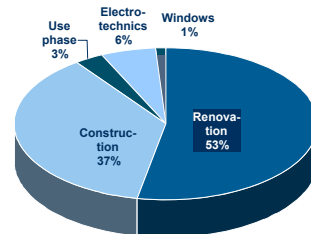
Life-cycle wide material intensity of building materials

Providing construction materials results in high resource consumption along the life cycle. 1 kg of plywood induces 11.3 kg of material use along its life cycle, the value for zinc is 21.76 kg/kg (Wallbaum/Kaiser 2006).



Life-cycle wide material consumption for housing

When assessing resource consumption in the housing area, construction and renovation emerge as hot-spots. This is especially relevant for new buildings that are already energy-optimised, as shown in the figure (Wallbaum/Buerkin 2003).



Housing Trends

Access to appropriate and affordable housing (II)

I

III

IV

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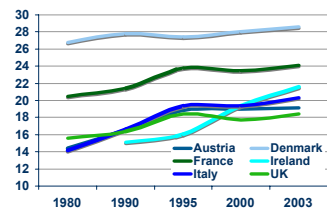
Access to safe, decent and affordable housing for low-income groups remains a challenge in many countries, including those in eastern Europe (SP/HUMI 2005). Decent housing has strong effects on well-being and health (WHO 2004). Housing is considered affordable if housing expenditures do not exceed a certain percentage (e.g. 30%) of household income.

Affordability of housing can also be reduced by high incidental expenditure related to inefficient energy use (see trend V).



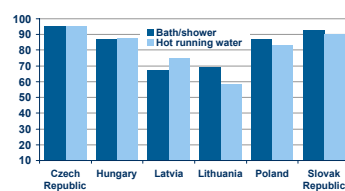
Share of housing expenditure rising

The share of housing of total household expenditure is rising in many countries, e.g. from 14.2 to 20.3 percent in Italy, creating challenges for access to decent housing for low-income households (Boverket 2005).



Access to sanitary facilities and services in dwellings

Access to sanitary facilities and services in dwelling differs significantly across countries, with perceivable gaps in Central and Eastern Europe (Boverket 2005).



Housing Trends



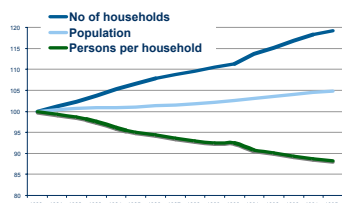
Growing demand for housing space manifests itself in growing number of houses and growing house size. This trend is linked to resource use, occupied land area, increased soil sealing, and energy consumption (Wilson & Boehland 2005). Growing demand for housing space can result from more single occupancies, multi-property ownership and expectations regarding living space.

The trend also reinforces urban sprawl (trend IV) and is linked to higher energy consumption (trend V).



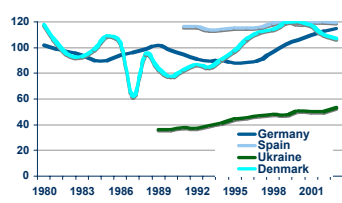
The growth in single households

The number of households has grown faster than the population increased from 1980 to 1995. The average number of people per household has decreased from 2.82 to 2.49 (EEA 2001).



Average size of newly completed dwellings is rising (in sqm)

Although the number of persons per household is declining, the average living floor space per newly completed dwelling is tending to rise across Europe (UNECE 2006).



Housing Trends



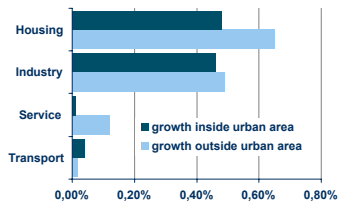
Urban sprawl is characterised as (unplanned) urban expansion through low-density development on city fringes (EEA 2006). Traditional 'compact' European city centres get increasingly supplemented by suburbs and outskirts. One driving factor is increasing urbanisation. While 75% of Europeans live in cities today, this share is expected to rise to 80% in 2020. Other factors include lifestyle expectations favouring city proximity living whilst having access to the countryside.

Urban sprawl has great repercussions on transport patterns and related sustainability impacts.



Functional changes for urban areas

New housing and service areas are increasingly appearing within the 5km zone outside of the urban area (EEA 2006) – a characteristic of urban sprawl.



Urban and infrastructure development

Urban sprawl in Spain and Portugal is concentrated on coastal regions – driven by coastal city and tourism development, including a growth in second and retirement homes (EEA 2006).



Housing Trends

I
II
III
IV

Energy consumption in housing use phase (V)

In developed countries of temperate and cold climates, typically 80-90% of total life cycle energy use in housing is consumed during the use phase of a building's life, 70% of that in space heating. Household heating is consistently one of the most important contributors to different environmental impacts (EIPRO-Study 2006). Cooling in summer might become increasingly important.

Potential energy efficiency lies in electric appliances and lighting.

Building insulation, whether in new or existing buildings, also is the most financially interesting option to address climate change. Each tonne of CO₂ equivalent saved would result in net cost savings of 150 € (Enkvist et al. 2007). Consequently, investments in housing energy efficiency (e.g. insulation) often pay back fairly quickly.

Distribution of energy use in housing use phase in %

70	14	12	4
----	----	----	---

space heating
 water heating
 electric appliances and lighting
 other

Source: Enerdata (2004) in EEA (2006)

Energy efficiency potentials in lighting technology

Incandescent lamp	→	CFL – Compact Fluorescent Lamp	Save 70-80%
Mercury vapour lamp	→	High-pressure sodium lamp	Save 40%
T8 fluorescent lamp	→	T5 fluorescent lamp	Save up to 35%
HID lamp with magnetic ballast	→	HID lamp with electronic ballast	Save 30-40%

Source: IEA (2006) *Light's Labour's Lost*. HID = High-intensity discharge

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Housing Trends

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Energy consumption in housing use phase (V)

Spotlight

The trend “energy consumption in housing use phase” will be taken as an example and assessed in greater depth with respect to impacts, drivers and case examples for actions. The intention is to provide a generic structure for how to discuss challenges and opportunities within a focus area and how to come to recommendations for actions towards sustainable consumption and production during the conference.

Why?

‘Energy consumption in the housing use phase’ is detailed in this Conference Paper to exemplify the challenges in the focus area housing, because...

Use phase accounts for high share of energy consumption in housing, depending on climate zone and building properties

Links to other challenges (e.g. affordable housing)

Solutions are available, but mainstreaming is challenging

What?

Impacts
Environmental, fuel poverty, health

↓

Drivers
Price signals, knowledge gap, barriers to renovate, missing LCT, investment barriers

↓

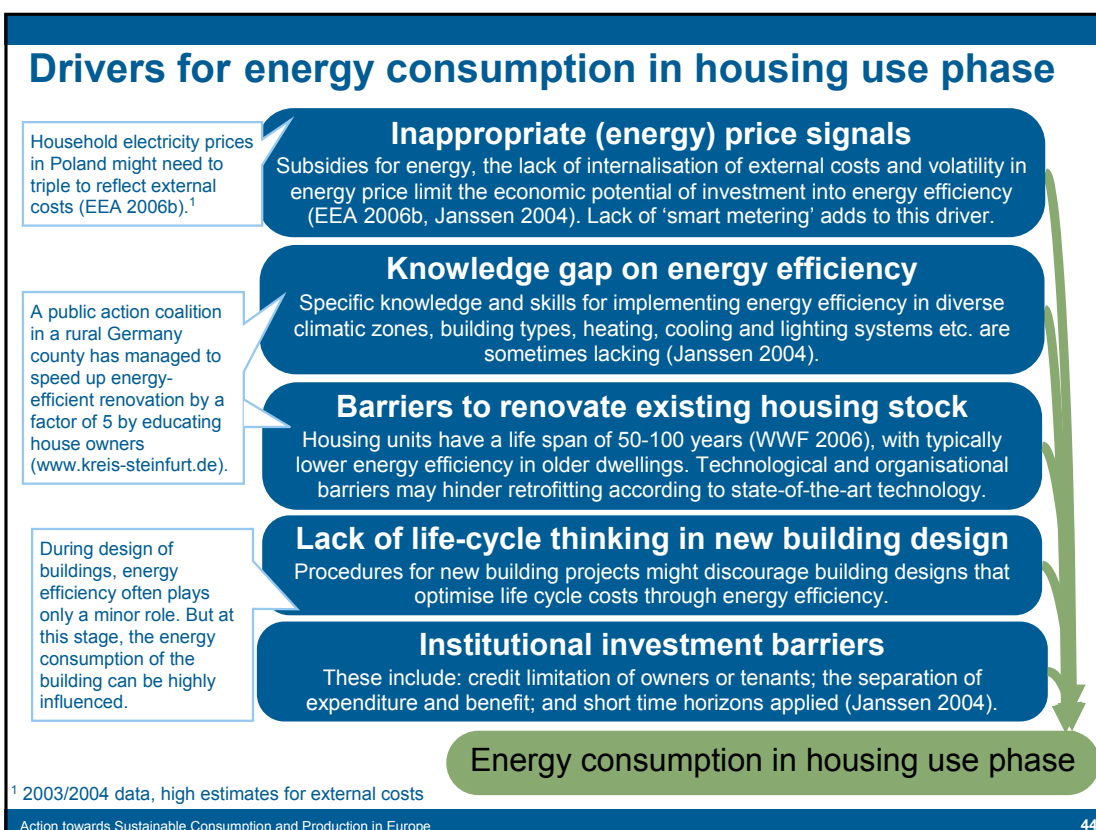
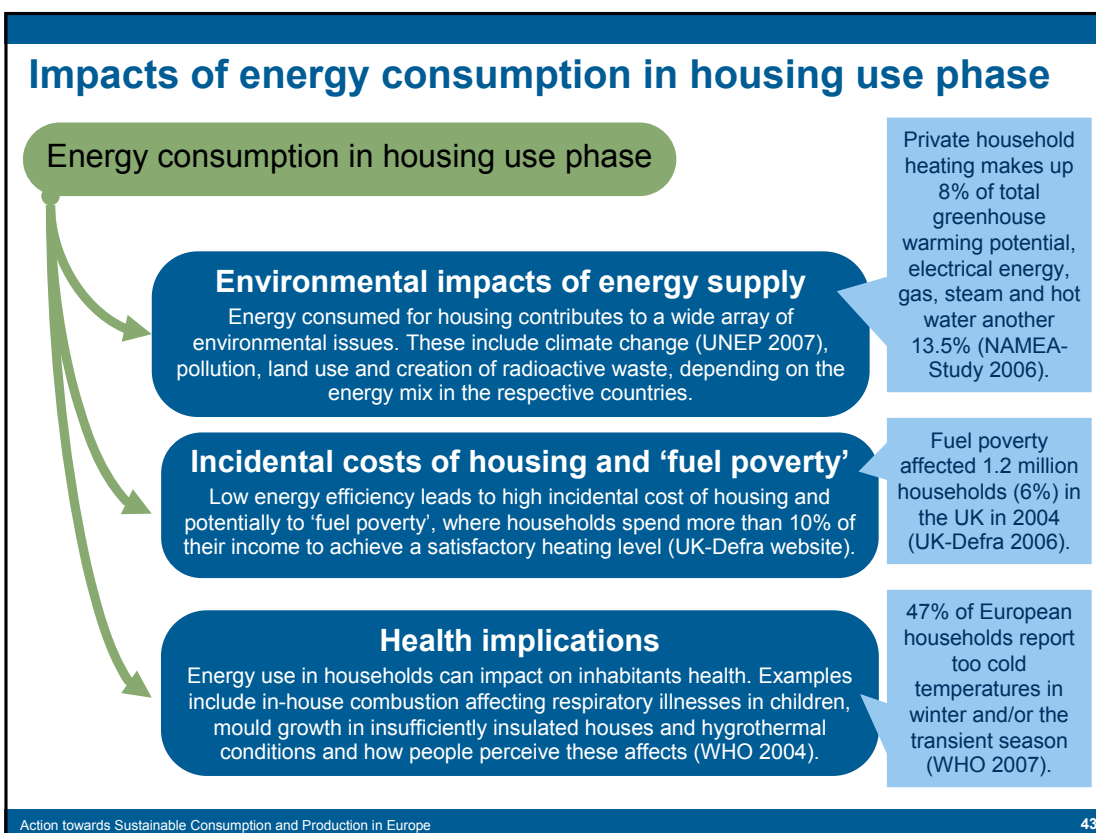
Overview of instruments

↓

Case Examples
Energy Service Company
UK Fuel Poverty Strategy
ENSNET Programme Slovenia

Energy consumption in the use-phase is also identified as a crucial sustainability aspect by the Marrakech Task Force on Sustainable Buildings and Construction, MTF-SBC (2007a).

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Actions towards SCP

After impacts and drivers for the trend “energy consumption in housing use phase” are identified, actions need to be discussed that encourage drivers that move in more sustainable directions and reduce impacts. The following section provides an **overview of instruments** for addressing energy consumption in housing use phase. The overview categorizes the potential policy actions in terms of their:

- a) **Point of leverage:** Does the policy offer concrete rewards or penalties for actions towards SCP or does it rather support stakeholders in taking advantage of existing SCP alternatives?
- b) **Degree of freedom:** Does the policy offer a high or low degree of freedom to the stakeholders it addresses by executing the respective actions towards SCP?

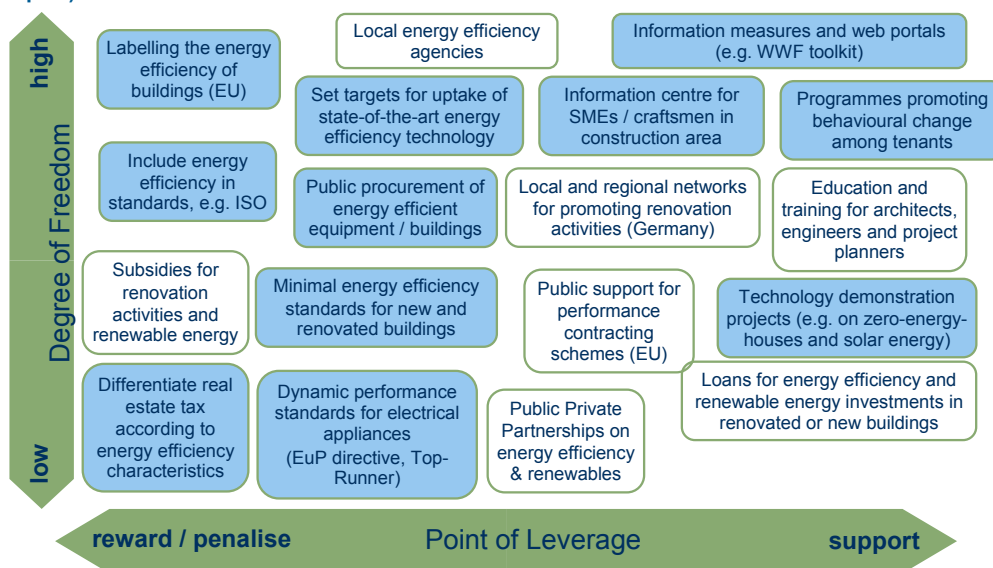
The overview is exemplifying and amendment by conference participants is encouraged.

Subsequently three **examples for concrete actions towards SCP** within Europe are presented for means of idea generation. The focus thereby lies on different, innovative partnership types between governments, business and/or civil society that managed to successfully address SCP.

Overview of Instruments

addressing energy consumption in housing use phase

(examples)



Source: Matrix adapted from CSCP, WI, GTZ (2006)


* Instruments which to some extent are referred to in the background document on the EU Action Plans are highlighted in blue. Examples for policy best practice can also be found in MTF-SBC (2007a).

Case examples		Addressing impacts of energy consumption in housing use phase	
Goals	Drivers / Impacts	Partnership Type	Examples
Encourage investment in energy efficiency in Central and Eastern Europe	Reduce investment barriers Energy efficiency knowledge and skills	Local and national energy service providers, development bank	1. Investing in Energy Service Companies (ESCOs)
Enable energy efficiency investments by low income households to end "fuel poverty"	Institutional investment barriers Barriers to renovate existing housing stock Energy efficiency knowledge and skills	Public authorities, civil society, energy providers	2. UK Fuel Poverty Strategy
Provide advice for energy efficiency and renewable energy investments	Renovation of existing housing stock, new buildings Energy efficiency knowledge and skills Renewable energy sources	Local and national authority, joint-stock company ZRMK	3. ENSVET Programme Slovenia

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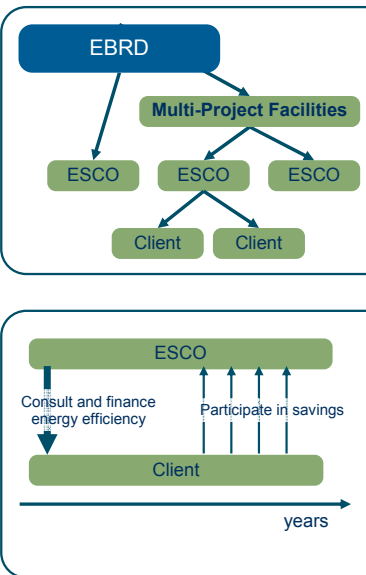
1. Investing in Energy Service Companies (ESCOs)



How does it work? To promote energy efficiency in its countries of operation in central and eastern Europe, the European Bank for Reconstruction and Development (EBRD) has programmes targeted at promoting Energy Service Companies (ESCOs). ESCOs assess the potential for energy savings in a public or private client's facilities and subsequently design and implement energy-saving measures. ESCO remuneration is directly tied to the energy savings achieved by the initial investment financed.

Who is involved? The EBRD works directly with ESCOs, but also has set up multi-project facilitates with companies like Honeywell, Landis and Gyr [now Siemens] and Dalkia for bundling smaller contributions to ESCOs. The ESCOs work together directly with a diverse range of public and private sector clients.

What are the results? By the end of 2004, the EBRD had financed 15 ESCOs. For example, Energy Alliance was the first private ESCO in Ukraine and received a US\$10 million loan from the EBRD. The bank also financed Prometheus, an Hungarian subsidiary of Dalkia, that manages 350 contracts in the country.



Source: CSCP based on EBRD 2007

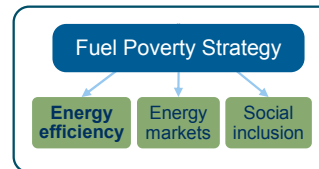
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2. 'Fuel Poverty' strategy in the United Kingdom

How does it work?

To end 'the blight of fuel poverty' for vulnerable households in the UK by 2010 is the goal of the UK Fuel Poverty Strategy issued in 2001. Through the 'Warm Front Team' (WFT) assistance for energy efficiency investments is channelled to low-income households, and efforts are implemented to improve the characteristics of social sector homes. Awareness raising, education and capacity building activities complement the financing schemes.



Source: (CSCP 2007)

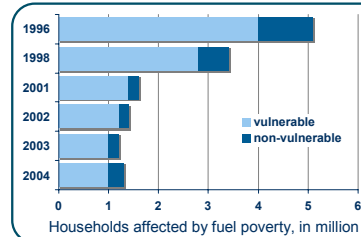
Who is involved?

The energy efficiency measures under the Fuel Poverty initiative are designed as a multi-stakeholder initiative, encompassing public and private actors on different levels:

- The *Affordable Warmth Programme* uses innovative lease finance for energy-efficiency
- *Local Authorities* are required to deliver reports on energy efficiency potential and progress in the local residential sector in their administrative area
- Energy Saving Trust (EST) and NGOs finance pilot exploratory actions for later up-scaling

What are the results?

Annual Progress reports provide information on both implemented programmes activities and concrete outcomes. In England, for example, financial assistance has reached 1.1 million households from 2000 to 2005. Fuel poverty has fallen significantly, especially in the early years of the programme (see right hand chart).



www.defra.gov.uk/environment/energy/fuelpov/index.htm

3. ENSVET Programme: Energy Advices for Citizens

How does it work?

ENSVET programme is a net of 35 energy advising offices. Over 66 qualified energy advisers give free advices to citizens about renewable energy sources, efficient use of energy, energy savings, costs of energy investments, payback time for investments etc. They also ensure education and training for new advisers and publish information materials.



Who is involved?

This is a public and private partnership, involving the Ministry for the Environment and Spatial Planning, Local Communities and joint-stock company ZRMK (research on materials and construction). The Ministry finances it annually with around 600.000 euros.

What are the results?

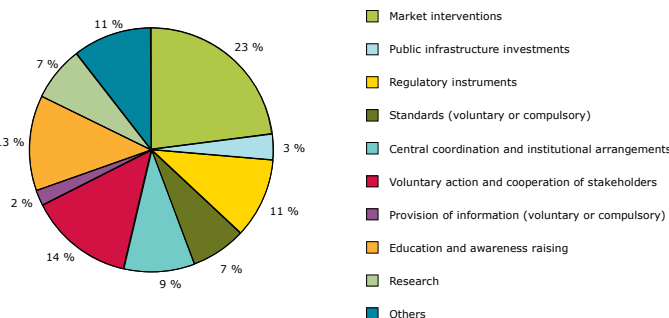
In 2006 the energy offices provided 6,000 written and some 10,000 verbal cases of advice to citizens and held 300 presentations and produced written articles for* local communities and media. From the measures discussed in the counselling sessions, 70 to 90 percent are reported to be implemented, leading to a 19% energy reduction in the households evaluated.

Civil Building Institute ZRMK, Slovenia: <http://qcs.qi-zrmk.si/svetovanje/pisarne.htm>

Solutions and actions discussed at the conference: Housing

Split of proposed solutions and actions by the participants in terms of the type of tools, instruments and approaches towards SCP

Source: Based on conference summary report



Snapshots of solutions and actions mentioned:

Market Interventions:

- Ecological tax reform and individual pieces of economic instruments in the housing sector (e.g. differentiated VAT rate for zero emission buildings and subsidy schemes for renewable energy etc.)
- Greening of public infrastructure investment

Other Voluntary action and the cooperation of stakeholders:

- Voluntary green purchasing and building codes
- Use of environmental declaration schemes
- Establishment of European networks for professional cooperation

Education and awareness raising, regulatory instruments and central coordination and institutional arrangements:

- Integration of housing-related sustainability aspects into formal curricula
- Establishment of training schemes to professionals
- Mandatory implementation of EMAS and green public procurement for public authorities
- Increased coordination amongst state agencies
- Different levels of public administration for an improved policy-making

Solutions and actions discussed: Housing



Source: Based on conference summary report

Questions for personal reflection

The following section provides questions, which intend to kick-off and support participants' reflection on challenges, actions and recommendations on SCP within a focus area. As such, the questions serve as a personal reflection and preparation for the working groups in the conference. The following questions are related to the three main aspects of the conference:

- The three focus areas of housing, food & drink and mobility as well as collaboration potential between public authorities, business and civil society for SCP in the focus area
- Recommendations and options for the EU Action Plans
- Discuss European Inputs to the United Nations Marrakech Process

The diagram illustrates the flow from focus areas to EU Action Plans and then to the 10-Year Framework of Programmes on SCP (Marrakech Process). It features three blue rounded rectangles labeled 'Housing', 'Food and Drink', and 'Mobility' stacked vertically. To their right, text reads: 'Including collaboration and partnerships between public authorities, business and civil society in the focus areas.' Below these are three blue diamond shapes pointing downwards to a blue rounded rectangle labeled 'EU Action Plans'. Below that is a larger blue diamond shape pointing downwards to a final blue rounded rectangle labeled '10-Year Framework of Programmes on SCP (Marrakech Process)'.

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Questions relating to focus area housing

The previous chapter outlined some of the important trends, drivers, impacts, instruments and partnership opportunities within the focus area housing. It is not possible to cover all aspects in this paper. The aspects outlined here are given as an example and intend to provide background information as well as food for thought and discussion. The following questions relate to the previous chapter and are intended to serve as reflection and preparation for conference participants to discuss challenges within the focus area housing.

- What other trends, drivers and impacts, not addressed in this paper, do you consider key for housing?
- What are the key instruments needed to revert the trends identified towards unsustainable housing? What are the chances and barriers for implementing them?
- What are sustainable development scenarios for housing in the future?
- What are fruitful options for collaboration between public authorities, business and civil society for promoting SCP in housing?
- How does your organization link to trends, impacts and drivers of SCP in housing? What are your needs and contributions for addressing SCP in the area of housing?

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Questions relating to EU Action Plans

- What would be the specific goal of the application of a policy instrument in the focus area of housing? What trends, impacts and drivers would be addressed by the policy?
- Which are the most effective instruments to address the highest impacts in the area of housing?
- Which policies would deliver economic, social and environmental benefits (win-win-win results)?
- Which policies tackle specific housing issues? Which policies are broad (e.g. life-cycle perspective)?
- Which stakeholders from housing would the different policies address?
- How would the policy have to be designed and applied in order to be successfully accepted by stakeholders in the area of housing?
- Which policies can be applied quickly and easily? Which policies take time to be implemented successfully?
- What are the potential barriers for the success of policies in the area of housing?
- What indicators would be feasible to measure the success of policies in housing?

Application examples of policy instruments for housing

The following provides examples of how policy instruments referred to in the background document to the consultation on the Action Plans could be applied in the focus area of housing. The trend of energy efficiency in the housing use phase is used as an example. The intention of this matrix is to provide a structure for a reflection about how different EU policy instruments can successfully be applied in the focus area of housing. Subsequently additional instruments are indicated that are not mentioned explicitly in the background paper, but could be an important amendment to the policy mix in the area of housing. (See white rows of matrix on next page).

Energy efficiency in the housing use phase	
Leveraging Innovation	Raising energy efficiency requires social, organisational, procedural and technological innovations. To foster innovations in energy efficient technology in the European market, the 'lead market' instrument could be applied. This would entail targeting the different customer groups (e.g. house owners, tenants, house builders) and professionals and businesses operating in the field (architects, engineers, construction companies) to create sufficient aggregate demand to promote innovation through economies of scale in research and development. Targeting remaining inner-community market barriers (e.g. different building codes) could help to foster this process. A different approach could lie in energy taxes, which spur demand for energy efficient innovations.
Better Products	The upcoming 'energy passport' displaying the energy use characteristics of housing units to potential tenants or buyers can be interpreted as an innovative environmental product declaration. It will foster the application of energy efficiency criteria in housing decisions by consumers, thereby strengthening the market for energy efficient designs and technologies in housing. The voluntary approach of the energy passport could be complemented by a dynamic performance standard requiring a certain level of energy efficiency in housing.
Leaner and Cleaner Production	Small and medium sized businesses (SMEs) play an important role in the housing market, especially for maintenance and renovation activities. Small-scale residential units (e.g. single-family houses) are most often constructed by SMEs. Information programmes for this target group as foreseen in the EU Action Plans could foster the spread of environmental best practice, e.g. through on-site-visits or exchange programmes with SMEs active in housing from other member states.

Application examples of policy instruments for housing

Energy efficiency in the housing use phase	
Smarter Consumption	Raising awareness among consumers could foster energy efficient behaviour and lifestyle choices in private households. The application of 'online consumer education tools' in combination with 'smart metering' methodologies can provide the basis for timely billing based on actual use data and display details about patterns of energy usage to raise awareness and affect consumer behaviour.
Global Markets	Europe's diverse climatic and geographic conditions requires the creation of a range of energy efficiency technologies in housing to address the challenges in these different climates within one common market. Flexible, modular and locally adaptable technologies could help European businesses to exploit global market opportunities. EU policies should inspire and promote policy frameworks worldwide to enable effective action.
Public Procurement	Public agencies procure housing products and services in various fields, including administrative and representative buildings as well as public housing units. Projects mainstreaming energy efficiency criteria into rental contracts, buying bids and maintenance and renovation procedures could directly reduce environmental impacts and relieve public budgets. Furthermore, this would create publicly visible examples and help to foster demand required for spurring innovation in 'lead markets' (see previous slide).
European Structural Funds	The spending guidelines for European Structural Funds and other community instruments could be applied to increase energy efficiency in housing, e.g. through funding local information networks for professionals and businesses or by supporting the start-up of energy service companies (ESCOs, see case study). These actions could be co-ordinated with activities to create 'lead markets' in the field.

Questions relating to the Marrakech Process

- How do European housing activities exert pressure internationally, e.g. on supply of metals and special building materials, and what implications does this hold for European action on SCP?
- How can Europe contribute to an *international* vision of sustainable building and construction?
- How can European countries contribute to and benefit from the best practice exchange on public policies on energy efficient buildings as initiated by the Marrakech Task Force on Sustainable Buildings and Construction (MTF-SBC)?
- Which of the five trends could be addressed by the MTF-SBC beyond its current focus on energy efficiency? How can the conditions for successfully targeting a trend be met (e.g. clear scope & funding)?
- How can housing issues be integrated into the 10YFP? What role does the MTF-SBC play in this regard?



Best Policy Practices
– publication by the
Marrakech Task
Force on Sustainable
Buildings and
Construction



Housing

Food & Drink

Mobility

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Focus Area: Food & Drink

Food and Drink in this paper is about how food goes through agricultural production, how it is processed, packaged, transported and finally consumed. This includes the full production and distribution chain 'from farm to fork'. It is also about how the composition of diets is changing.

Food and drink cause 20-30% of the various environmental impacts of private consumption. Meat and meat products, in different degrees of processing, are the most important sources of impact, followed by dairy products. (EIPRO, 2006; ETC/RWM, 2007)



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Key Challenging Trends in Food & Drink

Intensive farming & heavy land use (I)

The most significant environmental impacts related to food consumption comes from agriculture and processing in Europe and in other regions of the world (EEA, 2005c)



Increasing packaging waste (III)

More than two thirds of packaging waste is related to food consumption (EEA, 2005c). Packaging waste could increase by about 50% between 2000 and 2020 (EEA, 2005b).



Increasing demand for high-impact processed food (V)

There has been increasing demand for processed and imported food, individual portions and packaging (Kristensen, 2004).



Centralisation and concentration of sales (II)

There is a trend towards centralisation and concentration of sales in supermarkets, with a switch from frequent food shopping (on foot) at small local shops to weekly shopping by car at large out of town supermarkets. (Watkiss, 2005)



Increasing food-miles (IV)

Increasing demand for non-seasonal food and exotic food is leading to a large increase in the distance food travels from farm to fork, known as 'food miles'.



In the following all five trends will be described more in-depth...

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Food & Drink Trends

Intensive farming & heavy land use (I)

Intensive farming has been the predominant trend in most EU-15 regions for several decades (EEA, 2005d).

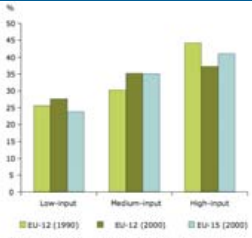
One of the reasons for increasing intensity of farming is that during the last 30 years, **consumption of pig and poultry meat, fish and seafood, and cheese have increased**. For example, in France there has been approximately a x4 increase in the consumption of prepared meat, fish and seafood consumption in the last 40 years (INSEE, 2006).

Land use efficiency of meat production is considerably low compared to other protein sources. For example, usable protein yield per acre for beef is x15 less than that of soyabeans (CIWF, 2004).

II
III
IV
V

Share of high input farms is still high

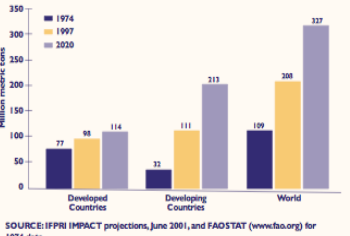
High input farm types are predominant in the Netherlands, Belgium, south-eastern England, northern France, northern Italy and northern Greece. Still a large share of the agricultural area is still managed by high-input farms, despite their lessening importance (in EU-12) (EEA, 2005d).



Source: FADN – DG Agriculture and Rural Development, adaptation IEL.

Increasing meat consumption

Globally, meat consumption is increasing at a phenomenal rate. In the last 40 years, consumption has grown from 56 to 89 kilos of meat per person, per year in Europe and from 89 to 124 kilos in the US (Rosegrant et al. 2001*)



SOURCE: IFPRI IMPACT projections, June 2001, and FAO STAT (www.fao.org) for 1974 data.

* Reproduced and adapted with permission from the International Food Policy Research Institut www.ifpri.org. The report from which this figure comes can be found online at <http://www.ifpri.org/pubs/ftp/for30.pdf>. Authors' calculations and Food and Agriculture Organization, 1974. FAO/IFPRI.

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Food & Drink Trends

I

Centralisation and concentration of sales (II)

III

IV

V

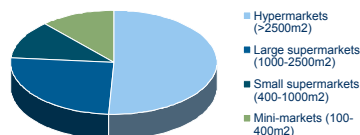
In home markets, where consumers' purchasing power is strong, most retailers are facing stagnant demand and intense competition. The sector is restructuring itself into larger business entities. Companies centralise their purchasing at group level and open retail outlets with large floor areas. (Sarasin, 2006).

Market restructuring into closed 'value chains' is a global phenomenon. More than 50% of growth in global food retail markets is expected to come from emerging markets (Vorley, 2003).



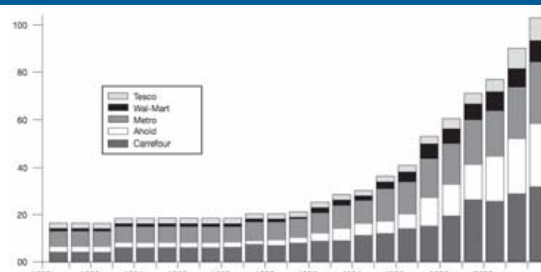
Market share of retail formats in UK 2000

High street retailers are gaining an increasing market share at the cost of independent and co-operative retailers (Transport 2000 Trust).



Source: AC Nielsen Nordic Market Monitor, 2002

Global expansion of the Big Five Retailers



The graphic shows the accumulated growth of supermarkets (in percentage units), using 1980 as baseline year. Source: Adapted on Vorley, 2003, based on data from Planet Retail

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Food & Drink Trends

I

II

Increasing packaging waste (III)

IV

V

A shift towards the purchase of fresh food all year round from all over the world and of pre-prepared and convenient food has resulted in large streams of packaging waste, on average 160 kg per person per year in EU-15 (EEA, 2005c).

Amounts of packaging waste have increased in most European countries despite the agreed objective of waste prevention (Kristensen, 2004).



Waste prevention targets are not met

A study by the EEA concluded that although almost all EU-15 countries had met the 2001 recycling and recovery targets of the Packaging Waste Directive; they did not meet the waste-prevention objective. In ten of the EU-15 countries packaging waste quantities increased between 1997 and 2001. It is believed that it would generally be more efficient and better for the environment to focus on both waste management through recycling and recovery and to prevent waste generation (EEA, 2005c).

Supermarkets can still do a lot to reduce waste

In many EU countries, supermarkets can play a major role in reusing and recycling their own waste as well as reducing the waste burden they impose on consumers.

Some countries have still not managed to tackle the problem of increasing use of carrier bags. Plastic carrier bags account for 3.5 to 5.3 percent of the total plastic packaging used in the UK. It is estimated that each year the Brits carry home between eight to ten billion plastic bags weighing 80,000 tonnes (NCC, 2006).

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Food & Drink Trends

- I
- II
- III
- IV
- V

Increasing food miles (IV)

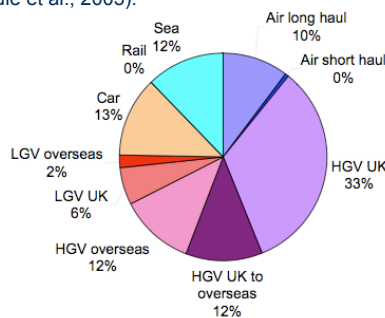
Increasing demand for non-seasonal food and exotic food is leading to a large increase in the distance food travels from farm to fork, known as 'food miles'. For example, in the UK, the annual amount of food moved by heavy goods vehicles has increased by 23% since 1978.

Transport of food by air has the highest CO2 emissions per tonne, and is the fastest growing mode

Direct environmental, economic and social costs of food transport are estimated to be over £9 billion annually (Smith, Watkiss, Tweddle et al., 2005).

Climate change impact versus development impact

Aid experts say that banning air-freighted food would harm producers in many countries, especially in Africa. For example, Action Aid estimates that developing countries earn £3bn per year from goods sold in supermarkets alone. More than 1 million people in Africa rely on selling fruit and vegetables to UK shoppers (Smith, Watkiss, Tweddle et al., 2005).



CO₂ emissions associated with UK food transport (Date for 2002) - HGV stands for heavy goods vehicles, LGV for light goods vehicles

Source: Smith, Watkiss, Tweddle et al., 2005.

Food & Drink Trends

- I
- II
- III
- IV
- V

Increasing demand for high impact processed food (V)

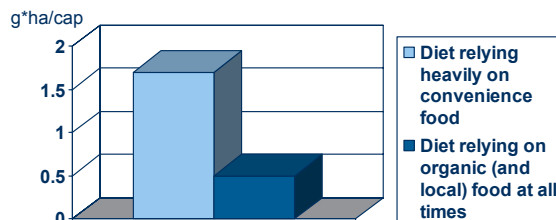
The last three decades have seen **tremendous growth in sales of processed food** – sales now total \$3.2 trillion, or about three-quarters of the total world food sales (Amber Waves, 2005).

The demand for **pre-prepared and processed food could continue to rise**, driven partly by the trend to individualism, smaller households and more double income households (EEA, 2005c).



Convenience food driven diets typically have higher ecological footprint

The ecological footprint of a diet based on convenience food such as microwave meals, take-aways or catering services might be significantly high compared to a diet based on organic fresh food at all times. Hence, food related footprint can be reduced by a factor of three by eating fresh organic (and local) food.



Data source: (WWF and SEI, 2005)

Food & Drink Trends

Spotlight



Increasing demand for high impact processed food (V)

The trend "Increasing demand for high impact processed food" will be taken as an example and examined in greater detail with respect to impacts, drivers and case examples for actions. The intention is to provide a generic structure of how to discuss challenges and opportunities within a focus area and how to make recommendations for actions towards sustainable consumption and production during the conference.

Why?

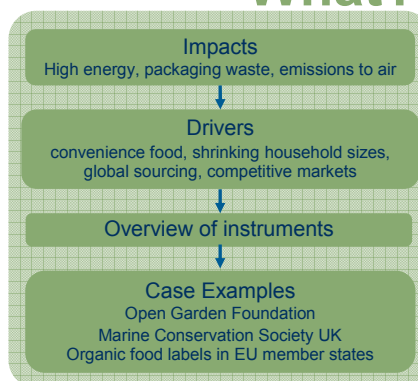
'Increasing demand for high impact processed food' is detailed in this Conference Paper to exemplify the challenges in the focus area food & drink, because...

Convenience food consumption leads to a whole array of environmental impacts

Links to other challenges (e.g. increasing food miles & packaging)

Most complex trend as it directly links to our way of living, i.e. lifestyles

What?



Impacts of Increasing Demand for High-Impact Processed Food

Increasing Processed Food

High energy input

Greater processing leads to increased energy and material inputs and packaging waste (Kristensen 2004).

In the EU15, the food, drink and tobacco industry in 2001 consumed 3.9% of the final energy consumption making it the fifth biggest energy consumer among all industrial sectors (Eurostat).

Increasing packaging waste

Most of the processed food items we buy have some kind of packaging. At the supermarkets secondary transport packaging is used and often consumers themselves pack the food in a disposable bag.

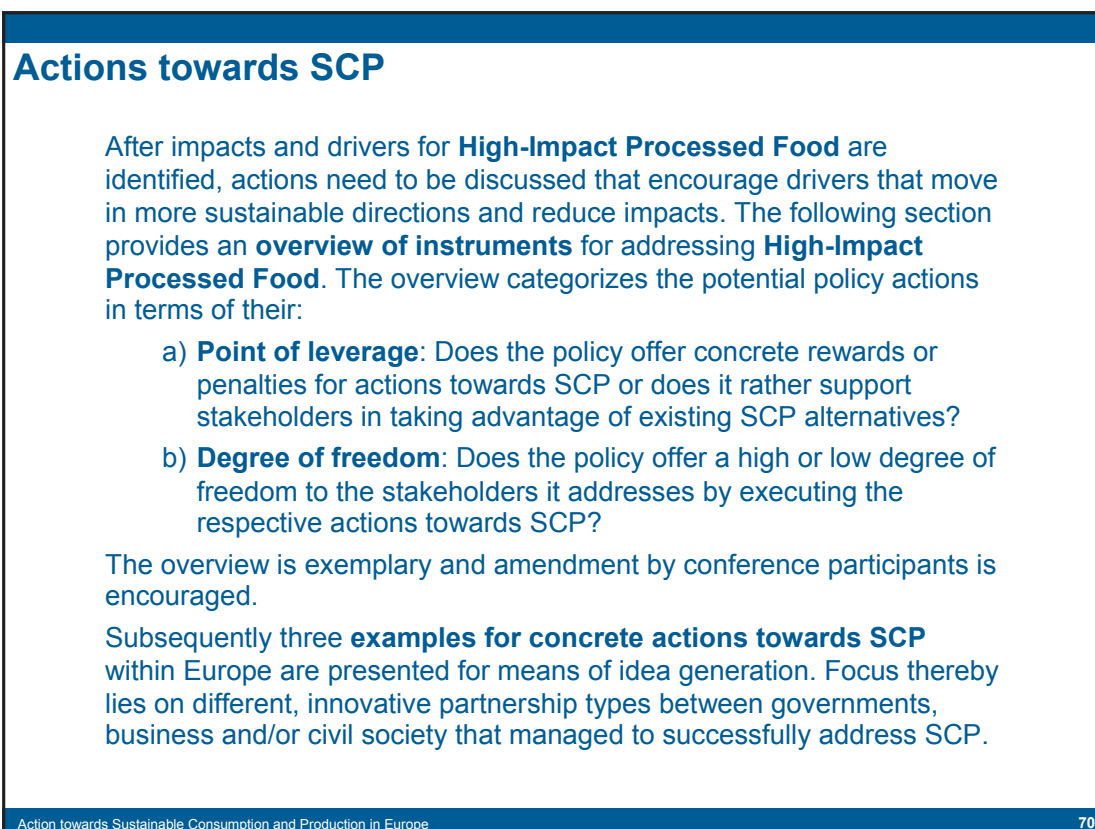
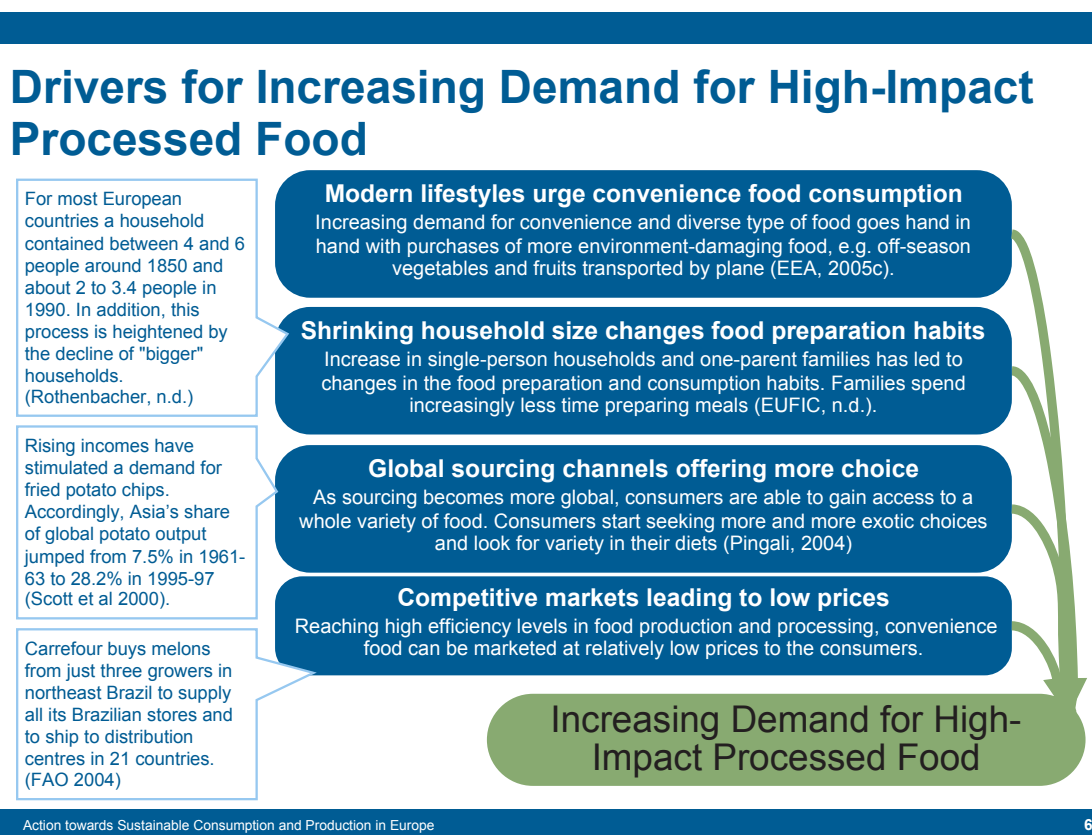
Over two thirds of packaging waste is related to consumption of food. Packaging waste is increasing in most European countries. Between 1997 and 2001 it grew by 7% in the EU as a whole (Kristensen, 2004).

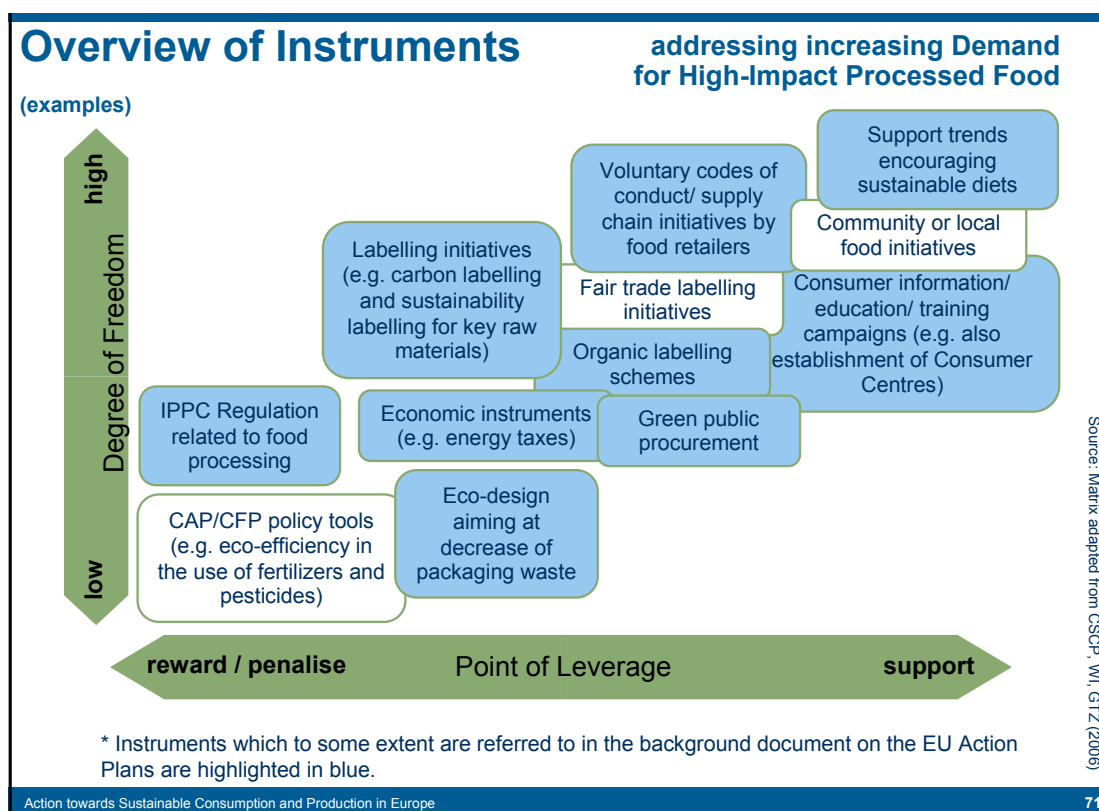
Emissions to air

Major air emissions of processed food stem from the agriculture phase. Depending on the mode of transport and food miles, air emissions of imported food products can also be relatively high (Wuppertal Institute, 2003).

Agriculture contributed around 9% (476 Tg CO₂ equivalent) of total EU-27 greenhouse gas emissions in 2005 (EEA, 2007).

Other significant impacts could be identified in the food & drink chain, such as inefficient water use, water pollution or excessive use of agrochemicals.





Case examples

Addressing impacts of increasing demand for highly processed food

Goals	Drivers / Impacts	Partnership Type	Examples
Provide consumers with seasonal and local choice of food products	Lack of information for consumers on how to locate local and environmentally friendly food products	Municipal & Business	1. Open Garden Foundation
Motivate retailers to source sustainable seafood and inform consumer choices.	Large supermarket chains account for 80 and 90% of all retail sales of fresh fish and shellfish in the UK (Fishonline, 2007) Prevent unsustainable sourcing of fish	Partnership between civil society or business	2. Marine Conservation Society UK - Sustainable Supermarket League Table
Create integrated, humane, environmental and economically sustainable agriculture systems	Promote organic farming Excessive use of agro-chemicals, resource-intensive farming practices and animal welfare issues	Partnership between local public authority and local businesses	3. National and local food labels in EU member states

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1. Open Garden Foundation

How does it work? Since 1998 Hungary's Nyitott Kert (Open Garden) Foundation has been promoting sustainable Community Supported Agriculture (CSA) and healthy lifestyles. The group runs an up-market, door-to-door, home-delivery business of organic vegetables, fruit and groceries serving a growing demand for organic produce in the Budapest-Gödöllő area. The flagship product is the "Real Food Box."

Who is involved? Setting up the Community Supported Agriculture scheme required the involvement and cooperation of several actors including private family enterprises of local farmers, the Gödöllő local authorities, the Institute for Environmental Management at Szent István University and several international organic agriculture organisations. Financial support to cover fixed costs is provided by Non-profit Enterprise and Self-sustainability Team (NESsT) based in Chile.

What are the results? Organic food box schemes contribute towards the localisation of food chains (food mile reduction), supports the local rural economy and reduces the distance between producers and consumers. The annual number of "Real Food Boxes" increased from 863 in 2002 to 2540 in 2005. The annual turnover from boxes rose from EUR 12 400 in 2002 to EUR 31 600 in 2005.



<http://www.nyitottkert.hu/>

2. Marine Conservation Society UK – Sustainable Supermarket League Table

How does it work? To encourage sustainable seafood practices MCS advises all the key retail chains that sell seafood in the UK. Several have adopted sustainable fish sourcing policies as a result. The MCS League Table started in 2006 and surveys the UK's supermarkets' environmental and wild caught fish policies, as well as buying policies and the sustainability of their fish stocks. Marine Stewardship Council (MSC) sustainability guidelines are used to judge the retailer's efforts.

Who is involved? The project is initiated and conducted by the UK's Marine Conservation Society. Supermarket chains and retailers including M&S, Waitrose, Sainsbury's, Tesco, Co-Op, Morrison's, ASDA, and Iceland provided information about their policies and products. Lidl, Somerfield and Booths did not respond to the survey. The supermarkets have been ranked through a point system and the responses and results are published on <http://www.fishonline.org> for consumer information.

What are the results? M&S & Waitrose came first and second in the 2007 League Table survey. Their policy is to source MSC certified fish only. Both companies are strongly committed to sustainability and through the survey, have established a reputation for only selling fish from responsibly managed fisheries. Tesco and Sainsbury's are placed third and fourth respectively. Since last year's survey (March 2006) a number of fish identified by MCS as coming from unsustainable sources have been delisted or removed from sale by the various supermarkets. For example, ASDA has discontinued sale of North Sea cod, swordfish and European monkfish and Iceland is reducing the number of beam trawled plaice products.



http://www.fishonline.org/buying_eating/supermarkets.php

3. Organic food labels in EU member states

How does it work? Organic food labels provide consumer information about organically grown food. For consumers "certified organic" labels serve as a product credibility assurance and a protection from misuse. Certification bodies are required to operate according to standards that meet the requirements and well-defined quality criteria for organic agricultural production set by legislation.

Who is involved? To provide high levels of credibility among consumers and guarantee quality, food labels ideally cover and involve the whole food supply chain (feed/seed providers and farm suppliers, farmers and growers, food processors and packagers, food retailers, private consumers). It requires cooperative partnerships with external stakeholders such as consumer protection groups, researchers, international organizations, government institutions and environmental NGO communities. The EU is supporting product labelling.

What are the results? A wide range of different organic food labels categories exist in the European Union including: Organic Agriculture Certification Schemes, Integrated Production Certification Schemes, National or Sector Level Farm Quality Assurance Schemes, Food Processor/Manufacturer Led Quality Initiatives, Retailer Led Quality Assurance Schemes, Retailer House Brands, Traditional or Regional Quality Aspect Schemes, Benchmarking Initiatives.

In EU-15, certified organic and in-conversion holdings increased from 29 000 in 1993 to more than 140 000 in 2003 and account for about 2% of all holdings (EC, 2005).

Solutions and actions discussed at the conference: Food & Drink

Split of proposed solutions and actions by the participants in terms of the type of tools, instruments and approaches towards SCP:

Snapshots of solutions and actions mentioned:

Central coordination and institutional arrangements:

- Closer cooperation between ministries in charge of the environment, agriculture, health and energy
- Conduction of stakeholder dialogue on sustainable food system in Europe
- Negotiation of global trade rules
- Launch of a debate at the EU level on the question "land for food, energy or biodiversity"

Research:

- Defining targets
- Identification of priorities for action along the food chain
- Enhance performance of organic agriculture

Market interventions:

- Ecological tax reform
- CAP (Common Agricultural Policy) subsidy scheme
- Price of meat

Education:

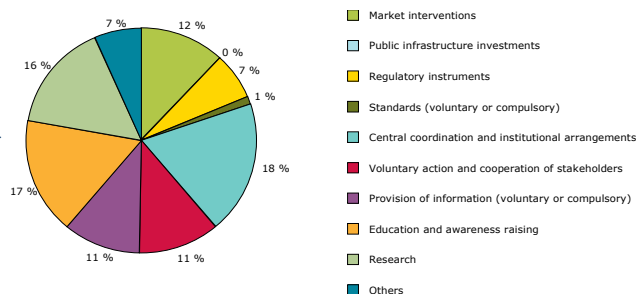
- Integration of food SCP aspects into formal curricula and training
- Campaigns to a wide range of stakeholders including farmers, food providers, restaurants and retail (e.g. lifelong learning schemes for farmers, making citizens aware of the real prices of food, campaigns on healthy and environmentally sound food to the general public etc.).

Provision of information:

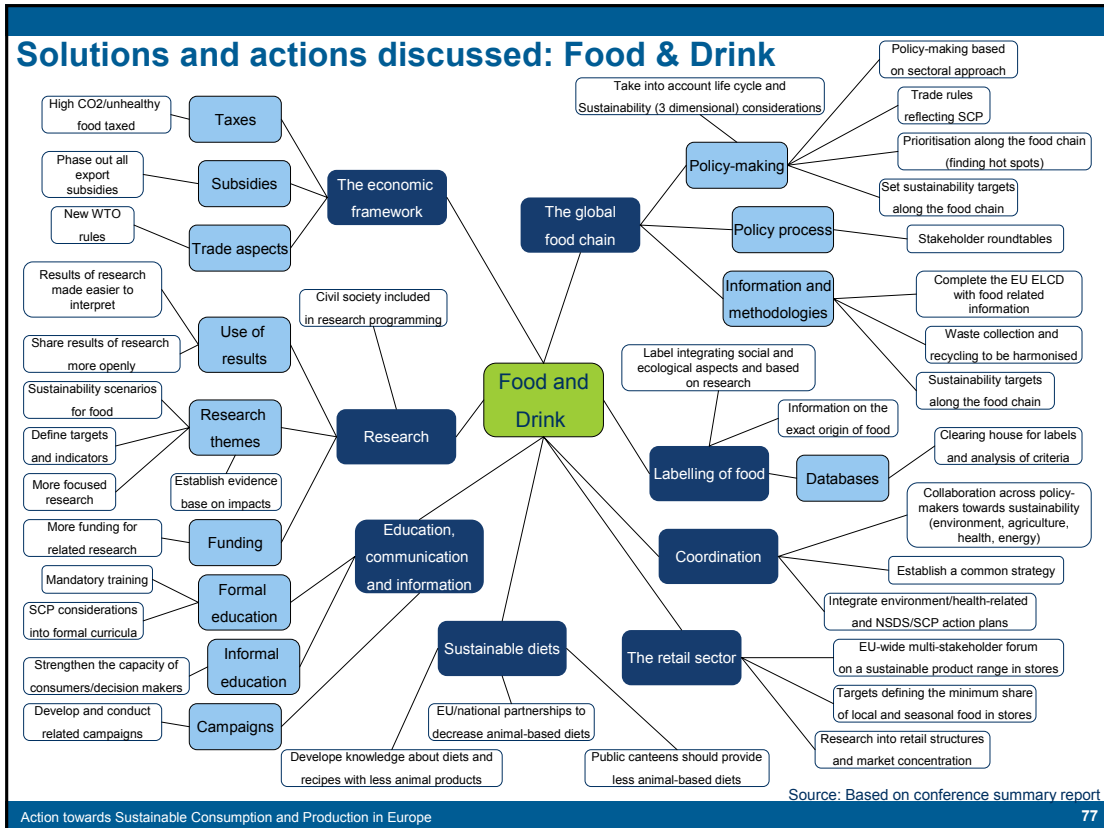
- Creation of an integrated food label (covering all aspects of sustainability) and carbon-footprint label
- Label certifying local or regional origin

Other voluntary action and the cooperation of stakeholders:

- Voluntary agreement with retailers on a range of sustainable food and voluntary green purchasing by public canteens



Source: Based on conference summary report



Questions for personal reflection

The following section provides questions, which intend to kick-off and support participants' reflection on challenges, actions and recommendations on SCP within a focus area. As such, the questions serve as a personal reflection and preparation for the working groups in the conference. The following questions are related to the three main aspects of the conference:

- The three focus areas of housing, food & drink and mobility as well as collaboration potential between public authorities, business and civil society for SCP in the focus area
- Recommendations and options for the EU Action Plans
- Discuss European Inputs to the United Nations Marrakech Process

Housing

Food and Drink

Mobility

Including collaboration and partnerships between public authorities, business and civil society in the focus areas.

EU Action Plans

10-Year Framework of Programmes on SCP (Marrakech Process)

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Questions relating to focus area food & drink

The previous chapter outlined some of the important trends, drivers, impacts, instruments and partnership opportunities within the focus area of food and drink. It is not possible to cover all aspects in this paper. The aspects outlined here are given as an example and intend to provide background information as well as food for thought and discussion. The following questions relate to the previous chapter and are intended to serve as reflection and preparation for conference participants to discuss challenges within the focus area of food and drink.

- What other trends, drivers and impacts, not addressed in this paper, do you consider key for the area of food & drink?
- What are the key instruments needed to revert the trends identified towards unsustainable food & drink? What are the chances and barriers for implementing them?
- What are sustainable development scenarios for food & drink in the future?
- What are fruitful options for collaboration between public authorities, business and civil society for promoting SCP in food & drink?
- How does your organization link to trends, impacts and drivers of SCP in food & drink? What are your needs and contributions for addressing SCP in the area of food & drink?

Questions relating to EU Action Plans

- What would be the specific goal of the application of a policy instrument in the focus area of food & drink? What trends, impacts and drivers would be addressed by the policy?
- Which are the most effective instruments to address the highest impacts in the area of food & drink?
- Which policies would deliver economic, social and environmental benefits (win-win-win results)?
- Which policies tackle specific issues of food & drink? Which policies are broad (e.g. life-cycle perspective)?
- Which stakeholders of the focus area food & drink would the different policies address?
- How would the policy have to be designed and applied in order to be successfully accepted by stakeholders in the area of food & drink?
- Which policies can be applied quickly and easily? Which policies take time to be implemented successfully?
- What are the potential barriers for the success of policies in the area of food & drink?
- What indicators would be feasible to measure the success of policies in the area food & drink?

Application examples of policy instruments for food & drink

The following provides examples of how policy instruments referred to in the background document to the consultation on the Action Plans could be applied in the focus area of food & drink. *The trend of high-impact processed food is used as an example. The intention of this matrix is to provide a structure for a reflection about how different EU policy instruments can successfully be applied in the focus area of food & drink. Subsequently additional instruments are indicated that are not mentioned explicitly in the background paper, but could be an important amendment to the policy mix in the area of food & drink. (See white rows of matrix on the next page).

High-impact Processed Food	
Leveraging Innovation	<ul style="list-style-type: none"> - Lead Market Initiative encouraging the food industry to take a life-cycle approach and to reduce the resource intensity of high impact processed food. - Producers and retailers of processed food products collaborating to carry out R&D activities, which might tackle high impact environmental and social aspects. <p>Example: Supermarket chains are developing biodegradable packaging based on corn starch, reducing the need for fossil fuels compared to traditional plastics (bitc.org.uk).</p>
Better Products	<ul style="list-style-type: none"> - Eco-design of high-impact processed food - International social standards for producers located in the supply chain of processed food products.
Leaner and Cleaner Production	<ul style="list-style-type: none"> - Setting resource efficiency targets for high-impact processed food. How can resource efficiency per calorie be increased and impacts per calorie be decreased? - In line with above, networking of innovation stakeholders in the area of environmental technologies for agricultural production, processing of food and cooking of food. - Example: The fish farming industry in Norway has substituted harmful chemicals with the use of "cleanerfish" to get rid of parasites on the fish (Villaorganic.com). - Take up of EMAS in agriculture and food industry

Application examples of policy instruments for food & drink

Smarter Consumption	<ul style="list-style-type: none"> - Retailers encouraging sales of less impactful processed food e.g. less energy intensive per calorie food, regional produce, vegetarian. - Retailers significantly decreasing high-impact processed food from their product portfolio, choice-editing for seasonal and organic produce. - Pricing mechanisms reflecting environmental and social impacts of processed food. - Advertising/communicating the energy intensity of high-impact processed food as a quality attribute to consumers/households. - Green public procurement: public agencies refusing to purchase high-impact processed food. - 'On line consumer education tools' on the high-impact processed food. - Example: "PhunkyFoods" is a comprehensive programme in the UK to teach primary school children healthy eating and hands on food experience (www.phunkyfoods.co.uk). - Include environmental issues in nutrition advice
Global Markets	<ul style="list-style-type: none"> - EU development policy promoting uptake of resource efficient food production and processing - EU development policy promoting less resource intensive diets and exporting sustainable food provision services to other parts of the world
Community or local food initiatives	<ul style="list-style-type: none"> - Encouraging establishment of local food schemes and supporting community initiatives to achieve less energy intensive diets, more consumption of seasonal and fresh produce.
Support trends encouraging sustainable diets	<ul style="list-style-type: none"> - Providing support to trends (such as 'slow food'), which can encourage sustainable diets and lead to consumer behaviour change <p>Example: The London Food Link works to increase availability of sustainable food.</p>
CAP/CFP policy tools	<ul style="list-style-type: none"> - Fully integrate environmental and social issues in the CAP/CFP (e.g. eco-efficient practices in the use of fertilizers and pesticides, the health benefits of making fresh products affordable), etc. - The CAP and the Water Framework Directive are the two most influential policies in the EU regarding environmental issues. Interlinkages between the Regional Development Funds, the Habitat Directive and Natura 2000 should be promoted

Questions relating to the Marrakech Process

- Is increase in fair trade products the key for fair pricing of food commodities? How can fair pricing be ensured?
- How can organic farming practices be disseminated whilst increasing requirements for land use?
- How can consumers in the West be best guided on the trade-offs between environmental impacts and social benefits? For example, while labelled as fair trade, many food products are air-freighted from developing countries. Which actors along food chains should assume responsibility to balance social and environmental issues further upstream?
- How can the Sustainable Lifestyles Task Force promote changes in consumer preferences and adoption of more sustainable diets? How can the Sustainable Lifestyles TF provide inputs on the best case examples of community or local food initiatives? What strategies are there for encouraging resource efficient diets?
- What role can cooperation with Africa and Sustainable Products TFs play in this focus area?
- Is it necessary to create a Task Force on sustainable food? Or can the Sustainable Public Procurement TF provide guidelines for action on the areas of food and beverage?
- What are the key elements that need to be included in the 10YFP to promote sustainable practices in the supply chains of food? What international cooperation is needed for that?

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Housing



Food & Drink



Mobility

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Focus Area: Mobility

Transportation is the movement of people and goods. Use of diverse modes of transport (walking, animals, bicycles, automobiles, buses, trains, aircrafts, ships) is dependent on the transport infrastructure.

Transport is responsible for 13.5% of global greenhouse gas emissions (WRI).




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Key Challenging Trends in Mobility


Increasing freight transport (I)

Economic globalisation drives more goods being produced and imported from abroad. Global freight transport is estimated to triple by 2050 (WBCSD, 2004).




Increasing long-distance leisure and air travel (III)

More than 20% growth in passenger kilometres by 2010 are expected with a 70% growth in travel between European countries. Long-distance trips increase at twice the rate of "short" trips (of less than 40 km) (EC, 2001).




Increasing personal mobility (V)

Over the past 50 years the number of vehicles worldwide increased from 50 million cars to about 700 million (EU-UNEP, 2005). Every year 4.3 million extra cars are added to Europe's roads (EurActiv, 2007).




Increasing fuel price and application of alternative fuels (II)

The energy transport uses accounts for more than a quarter of the world's demand for oil (UNEP). After a century of fossil fuel dominance in the transport sector, biofuels are beginning to be more common on the market (EEA, 2007b).



Deteriorating quality of public transport system (IV)

Trend in EU is not only caused through high maintenance costs due to under-investment but also organisational issues: decentralisation of responsibilities without financial resources; transport operators are often not responsible for investments; no depreciation of assets (EBRD, 2004).



In the following all five trends will be described more in-depth...

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Mobility Trends

Increasing freight transport (I)

II

III

IV

V

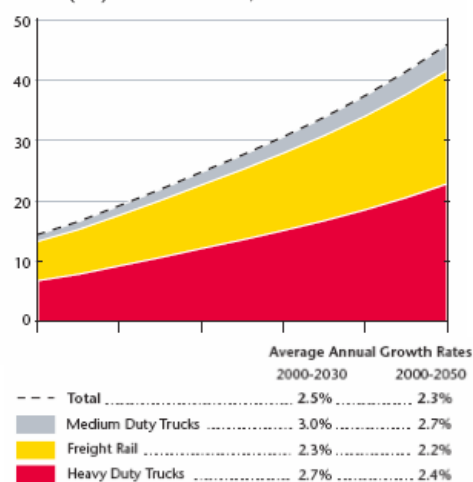
More goods are being transported over longer distances and more frequently. The freight transport volume has grown by 43% since 1992, outpacing the rate of economic growth. Demand for freight transport is expected to increase by around 50% between 2000 and 2020 in the EU-25.

The growth in freight transport is dominated by road transport. Over the past decade, the share of road transport in the inland freight transport markets in European countries increased to 78% at the expense of rail and inland shipping.

Low transport costs have resulted in growing distances between consumers and producers, allowing companies to shift production to the regions with lower production and labour costs (EEA, 2007b).

Global inland freight transport activities

Trillions (10¹²) of Tonne-Kilometers/Year



(WBCSD, 2004)

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Mobility Trends

I

Increasing fuel price & application of alternative fuels (II)

III

IV

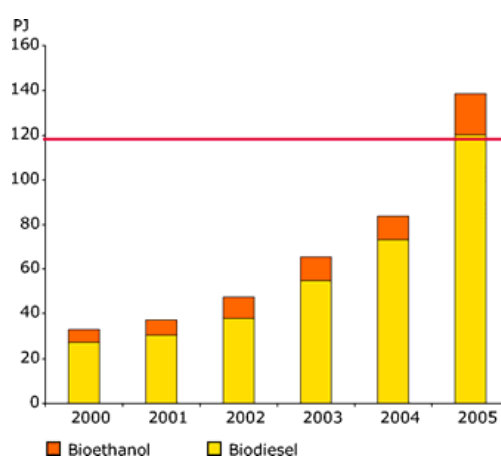
V

The price of standard crude oil has tripled since 2003. This has led to increasing demand of more fuel-efficient cars (hybrid and diesel) as well as alternative fuels becoming more competitive.

Although remaining on a small scale, biofuels are becoming more common on the fuel market as a result of the implementation of the EU Biofuels Directive. Many Member States have implemented the EU indicative target for 5.75% share of biofuels by 2010.

However, concerns about the potential negative effect of biofuels on biodiversity and food production are growing and need to be addressed in the EU future biofuels policy (EEA, 2007b).

Biofuel production in the EU



(EEA, 2007b)

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Mobility Trends I II III IV V

Increasing long-distance leisure & air travel (III)

Passenger transport (km/person) in the EU-25 is projected to increase by 53% between 2000 and 2030. Partly due to the increasing popularity of low-cost carriers, the aviation's share of total passenger-km now almost matches that of rail transport. This share in the EU-25 is projected to increase from 5.5% to 10.5% in the same period.

Tourism is now a booming business and accounts for about 4.3% of GDP in the EU. Tourism from northern Europe to the Mediterranean amounts to about one-sixth of all tourist trips worldwide.

On the other hand, around half of passenger car trips are no more than 6 km and could often be substituted by bicycle or other non-motorised transport modes (EEA, 2005).

Rapid decrease in international flight prices

Note: Yields of US airlines in international traffic. Domestic figures show similar trends. (EEA, 2005)

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Mobility Trends I II III IV

Deteriorating quality of public transport (IV)

Per-capita passenger transport demand

There has been a significant shift from the use of public transport towards the private car in the EU-15 in recent decades. The share of private car use is now around 80%.

In the new Member States, car travel has increased its share at the expense of public transport by bus and rail. There is a deterioration in the quality of public transport in some countries and the share of rail use in five new Member States fell from 13.2% in 1995 to 9.7% in 2002.

There is also a trend that public transport fares have increased faster than the costs of private car use (EEA, 2005).

These trends together with the points listed above (slide 86) indicate low efficiency in public transport.

(EEA, 2005)

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Mobility Trends

I

II

III

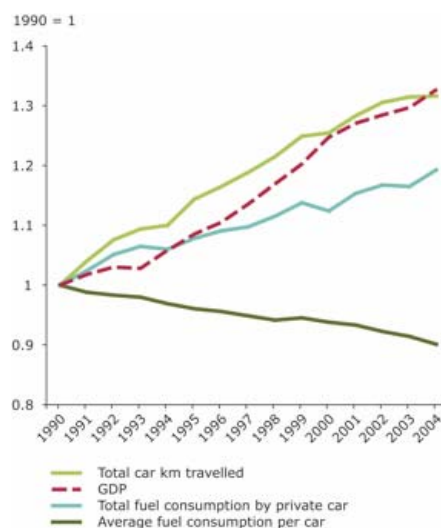
IV

Increasing personal mobility (V)

In 2004 the number of passenger cars in EU-25 reached 216 million. Since 1990, the total number of cars **increased by 38%**. The largest increases were in **Lithuania, Latvia, Portugal, Poland and Greece**, all more than doubled (Eurostat, 2006). A **40%** increase in passenger transport in EU-15 between 2005-30 and an **85%** increase in the New Member States is forecasted (ACEA, 2006).

Three-quarters of journeys travelled in EU-25 are made by cars, while **80% of the world population has no access to motor vehicles yet**. (EC, 2006; EU-UNEP, 2005).

Increase in car travel outweighs efficiency gain



(EEA, 2007c)

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Mobility Trends Spotlight

I

II

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IV

Increasing personal mobility (V)

The trend “Increasing personal mobility” will be taken as an example and assessed in greater depth in the following slides with respect to impacts, drivers and case examples for actions. The intention is to provide a generic structure for how to discuss challenges and opportunities within a focus area and how to come to recommendations for actions towards sustainable consumption and production during the conference.

Why?

‘Increasing personal mobility’ is detailed in this Conference Paper to exemplify the challenges in the mobility focus area, because...

Links to lifestyle choices and the issue close to citizens

Strong links to food and housing focus areas since it encourages urban sprawl

DG Joint Research Centre (IPTS) is currently examining improvement options in passenger cars in its IMPRO study.

What?

Impacts

Construction, pollution, accidents, wastes



Drivers

Subsidies, lack of public transport, personal freedom, economic importance of car manufacturing



Overview of instruments

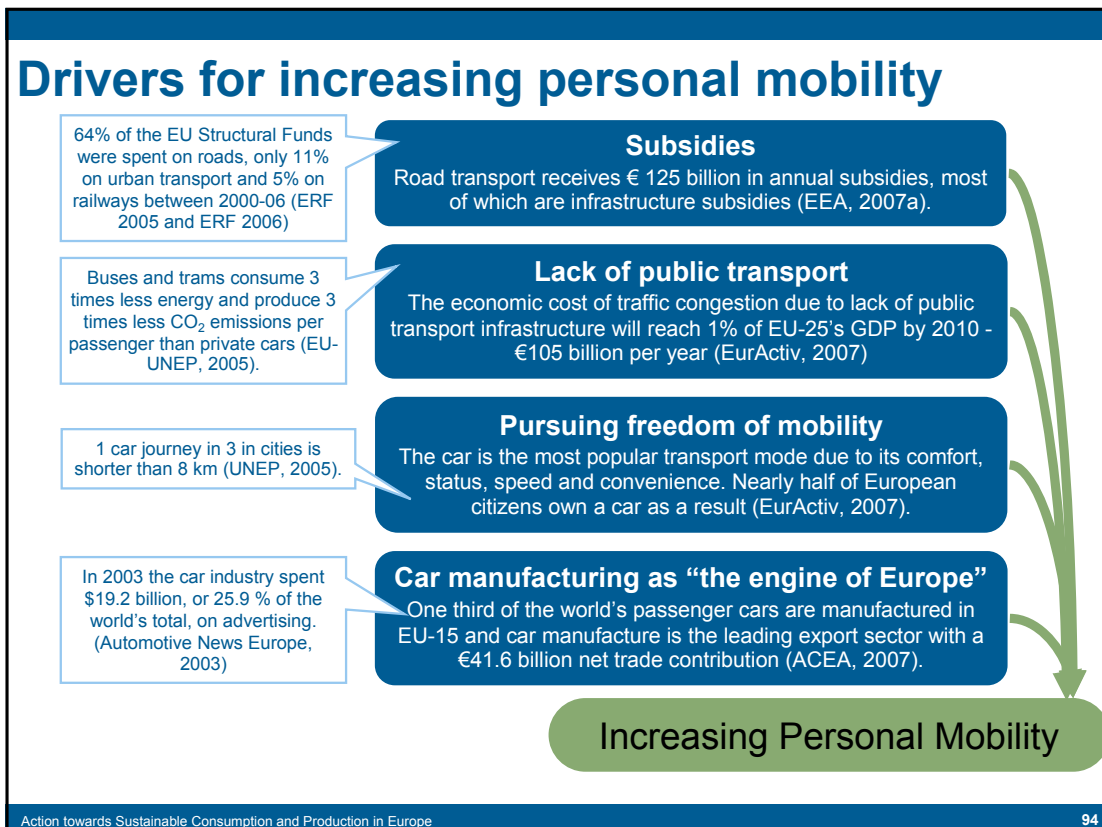
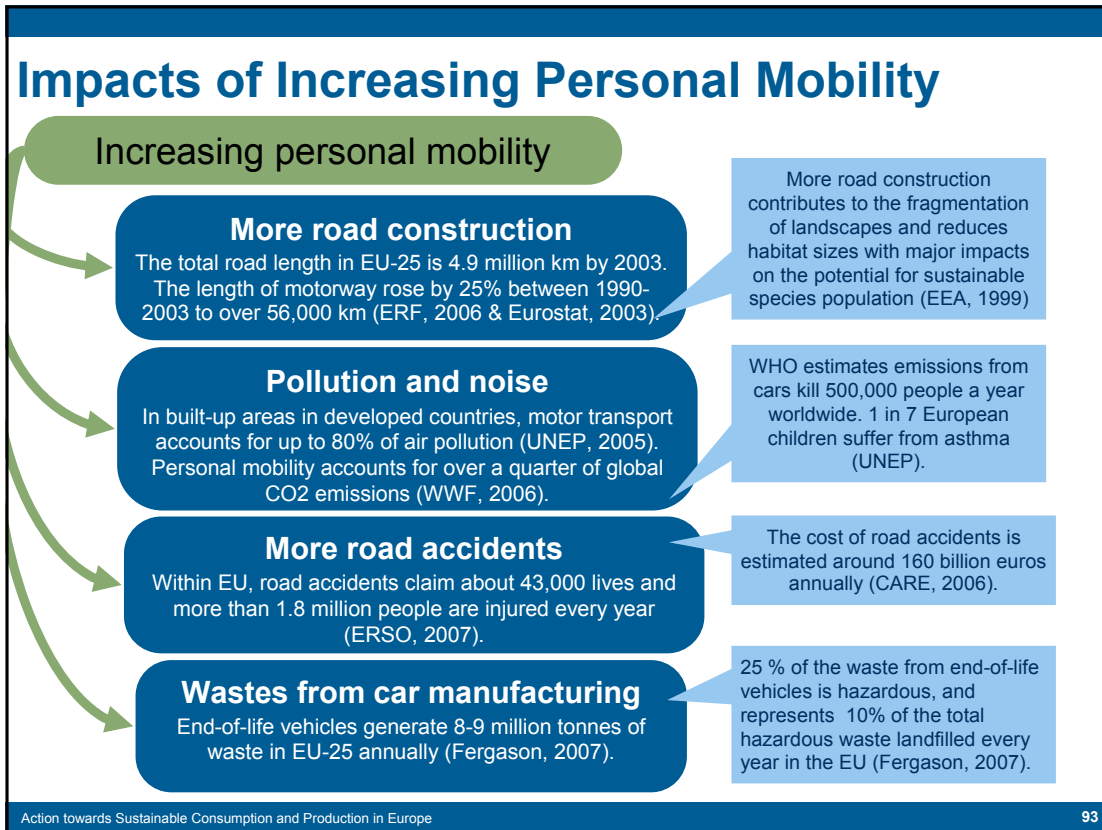


Case Examples

London congestion charge
Bicikl
Greenwheels carsharing

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Actions towards SCP

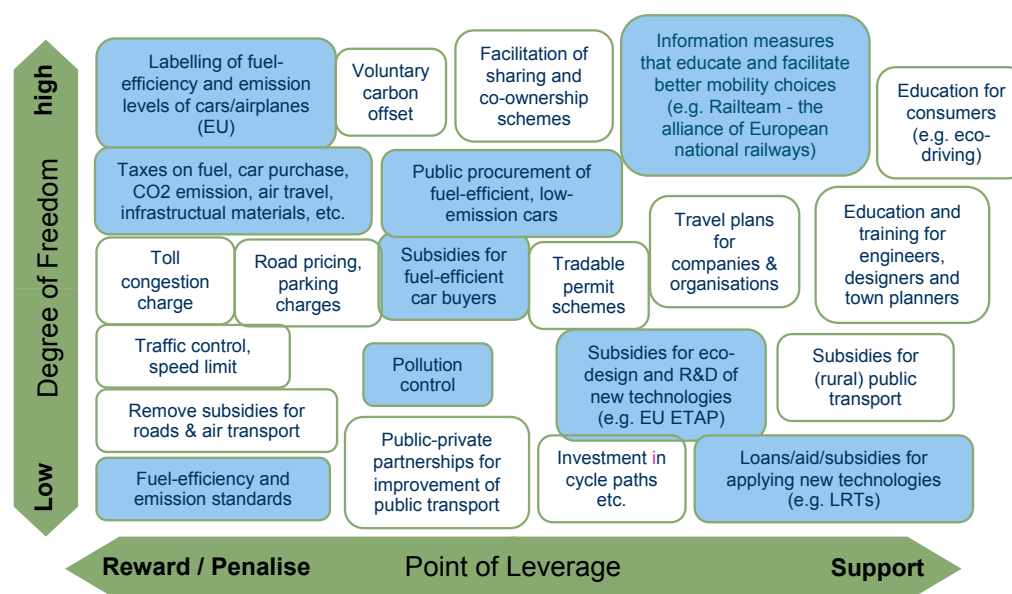
After impacts and drivers for “increasing personal mobility” are identified, actions need to be discussed that encourage drivers that move in more sustainable directions and reduce impacts. The following section provides an overview of instruments for addressing increasing personal mobility. The overview categorises the potential policy actions in terms of their:

- Point of leverage:** Does the policy offer concrete rewards or penalties for actions towards SCP or does it rather support stakeholders in taking advantage of existing SCP alternatives?
- Degree of freedom:** Does the policy offer a high or low degree of freedom to the stakeholders it addresses by executing the respective actions towards SCP?

The overview is exemplary and amendment by conference participants is encouraged.

Subsequently three **examples for concrete actions towards SCP** within Europe are presented for idea generation. Focus thereby lies on different, innovative partnership types between governments, business and/or civil society that managed to successfully address SCP.

Overview of Instruments addressing increasing personal mobility (examples)



* Instruments which to some extent are referred to in the background document on the EU Action Plans are highlighted in blue.

Actions – Addressing impacts of increasing traffic volume due to personal mobility (examples)

Goals	Drivers / Impacts	Partnership Type	Examples
Demotivate people to use cars by toll and parking charges.	<ul style="list-style-type: none"> Charges reduce vehicle traffic in designated zones Reduced traffic improves air quality (TfL, 2006) 	PPP between Public Authority & Business	1. London Congestion Charge
Increase use of bicycles within cities	<ul style="list-style-type: none"> New and reconstructed roads incorporate bicycle lanes. The number of bikers increased from 0.9% in 2003 to 5.6% in 2006. 	NGOs and Public Authorities	2. Bicikl in Zagreb, Croatia
Reduce private car ownership and encourage use of public transport	<ul style="list-style-type: none"> One shared car substitutes ten private cars, therefore saves parking spaces & reduces traffic (Greenwheels, 2007) Environmental mobility impact of car sharers is 40 percent less than that of average households (Delft Outlook, 2000) 	Business, City Councils and Public Transport	3. Greenwheels Carsharing, The Netherlands


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1. London Congestion Charge

How does it work? The London congestion charge came into effect **February 2003**. It is a **£8 fee** for private motorists and **£7 fee** for business vehicles (alternative fuel vehicles are exempt) entering the **Central and West London area between 7am and 6pm**. CCTV cameras record vehicles entering and exiting the zone and record number plates with a **90% accuracy rate**. The identified numbers are checked against the list of payees overnight by computer. Those that have not paid and are seen are **fined up to £150**. Methods to pay fees and fines include Internet (used by 30%), SMS (22%), PayPoint in shops and phone.

Who is involved? The **local government authority Transport for London (TfL)** is responsible for the scheme policy, public information campaigns and the on-street enforcement. The **PPP** includes the **business process outsourcing company Capita Group** who is contracted to ensure professional services. Capita Group has set up the ICT infrastructure, provides customer service and management of call centres, fee collection, and information processing using of the national database of the Driver and Vehicle Licensing Agency (DVLA).

What are the results? The 2006 report from TfL stated that **congestion was down around 26%** in comparison with the pre-charge period and traffic delays had also been reduced. The scheme generated **net revenues of £122 million** in 2005/6. Comparing annual average values for 2002 and 2003 within the charging zone **NOx emissions fell by 13%** and **total PM10 emissions fell by 15%**. The boundary of the zone was extended in February 2007 and **now includes parts of West London**.



www.cclondon.com/

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2. Bicikl - Improving infrastructure and attitudes

How does it work? The NGO **Udruga Bicikl** works on the improvement of the cycling infrastructure throughout the Zagreb city centre. In 2003, the first measure to ensure that **every reconstructed or newly build road has a cycling lane** was introduced. The bicycle network was also enlarged by **converting existing parking lots into pedestrian zones and cycling space**, and **cycling crossings** were established. In addition to all the infrastructural changes, promotional activities were initiated. A "city cycling map" was inserted in daily newspapers and citizens were informed about the advantages of cycling. Another campaign called "Friday to Friday" made it possible for non-cycling citizens to borrow a bike for free.

Who is involved? Udruga Bicikl was founded in 2000 with volunteer staff. For the infrastructure improvement, it acted like a **consultant body to the municipality**. It **co-operates with the Ministry of Tourism** on the introduction of cycle tourism throughout Croatia. For promotional and informational campaigns such as car free day and mobility week, Bicikl works with the Zagreb city council, the Ministry of Environmental Protection and the city police department.

What are the results? In 2003, only 40 km of cycle lanes existed in the Zagreb area. By 2006 **the number of cyclists on the streets increased to 5.56%** and by 2007 the bicycle network consists of around 150 km of cycling lanes. The Urbanity Plan intends to **establish 360 km of cycling paths** in total (ELTIS).



www.bicikl.hr

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3. Greenwheels Carsharing

How does it work? A subscription (€ 5 per month) and a deposit (€ 225) allows customers to make round-the-clock reservations online or over the phone. **The average time to reserve a vehicle is one minute**. Greenwheels cars are parked at special pick-up points in designated cities. An electronic chip card and pin provides access to the vehicles which are equipped with on-board computers. The minimum rental time is one hour. Charges are calculated according to amount of kilometres (€ 0.10/km) driven and the time of day the vehicle is used. Greenwheels customers receive a petrol-pass that can be used at all petrol stations around the Netherlands and the amount is charged directly to the Greenwheels account.

Who is involved? Greenwheels started in 1994 as one of the earliest car sharing initiatives in Europe. It now offers services in **42 cities in the Netherlands and 23 cities in Germany**. Within these cities there are about 1,000 locations where one or more cars are available on specifically reserved parking places leased from the city. The **City of Amsterdam** provides 450 pickup points for vehicles (80 in Rotterdam), spotted all over the city with an average walk required to get to the nearest on the order of 300 metres. Cooperative agreements with the **Dutch Railways and local Dutch councils** allows customers to use a NS *Voordeelurenkaart* (rail travel reduction card).

What are the results? Customers report that commuting which would take 45 minutes to an hour and a half by car can be **reduced to 25 minutes** door-to-door using the Greenwheels service in tandem with the train. However, this might depend on conditions like proximity to Greenwheel pick-up point, punctuality of train etc. Greenwheels customers **reduce between 30 to 45 percent** of their annual vehicle miles. 50 percent of Greenwheels clients used the service as a **replacement for either a first or second private car**.



<http://new.greenwheels.nl/>

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Solutions and actions discussed at the conference: Mobility

Split of proposed solutions and actions by the participants in terms of the type of tools, instruments and approaches towards SCP

Snapshots of solutions and actions mentioned:

Market interventions:

- Traffic charges (congestion charge and road charging schemes)
- Reduced VAT on energy efficient vehicles
- Taxation of aviation
- Tradable permits
- Subsidies to both conventional and renewable energy and carbon offsetting

Infrastructure investments:

- Enhance infrastructure for sustainable mobility (train, bicycle)
- Improvement of intermodal passenger and freight transport

Voluntary action and cooperation:

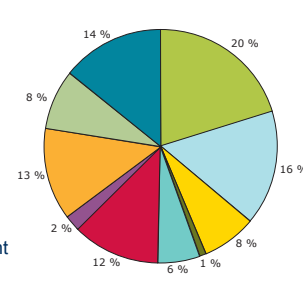
- Company travel plans
- Public private partnership related to the development of public transport
- Voluntary green purchasing
- Involvement of civil society in car sharing

Education and awareness raising:

- Sensitization of citizens about the life-cycle impacts of mobility
- Campaigns on regional products and the promotion of slow/local/green holidays

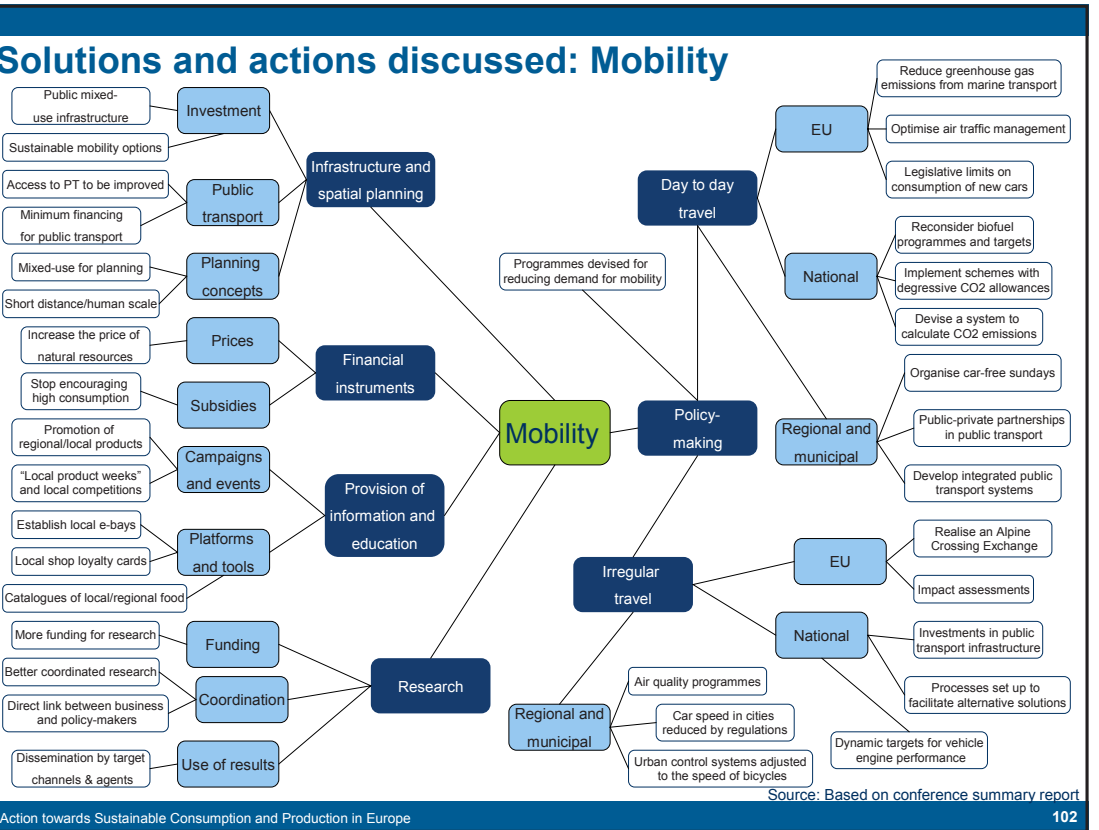
Research:

- Conduction of studies into consumer behaviour and the use of car
- Life cycle impacts of biofuels and on the drivers of demand for transport



- Market interventions
- Public infrastructure investments
- Regulatory instruments
- Standards (voluntary or compulsory)
- Central coordination and institutional arrangements
- Voluntary action and cooperation of stakeholders
- Provision of information (voluntary or compulsory)
- Education and awareness raising
- Research
- Others

Source: Based on conference summary report



Questions for personal reflection

The following section provides questions, which intend to kick-off and support participants' reflection on challenges, actions and recommendations on SCP within a focus area. As such, the questions serve as a personal reflection and preparation for the working groups in the conference. The following questions are related to the three main aspects of the conference:

- The three focus areas of housing, food & drink and mobility as well as collaboration potential between public authorities, business and civil society for SCP in the focus area
- Recommendations and options for the EU Action Plans
- Discuss European Inputs to the United Nations Marrakech Process



Questions relating to focus area mobility

The previous chapter outlined some of the important trends, drivers, impacts, instruments and partnership opportunities within the focus area of mobility. It is not possible to cover all aspects in this paper. The aspects outlined here are given as an example and intend to provide background information as well as food for thought and discussion. The following questions relate to the previous chapter and are intended to serve as reflection and preparation for conference participants to discuss challenges within the focus area of mobility.

- What other trends, drivers and impacts, not addressed in this paper, do you consider key for mobility?
- What are the key instruments needed to revert the trends identified towards unsustainable mobility? What are the chances and barriers for implementing them?
- What are sustainable development scenarios for mobility in the future?
- What are fruitful options for collaboration between public authorities, business and civil society for promoting SCP in mobility?
- How does your organization link to trends, impacts and drivers of SCP in mobility? What are your needs and contributions for addressing SCP in the area of mobility?

Questions relating to EU Action Plans

- What would be the specific goal of the application of a policy instrument in the focus area of mobility? What trends, impacts and drivers would be addressed by the policy?
- Which are the most effective instruments to address the highest impacts in the area of mobility?
- Which policies would deliver economic, social and environmental benefits (win-win-win results)?
- Which policies tackle specific mobility issues? Which policies are rather broad (e.g. life-cycle perspective)?
- Which stakeholders from mobility would the different policies address?
- How would the policy have to be designed and applied in order to be successfully accepted by stakeholders in the area of mobility?
- Which policies can be applied quickly and easily? Which policies take time to be implemented successfully?
- What are the potential barriers for the success of policies in the area of mobility?
- What indicators would be feasible to measure the success of policies in mobility?

Application examples of policy instruments for mobility

The following provides examples of how policy instruments referred to in the background document to the consultation on the Action Plans could be applied in the focus area of mobility. The trend of increasing personal mobility is used as an example. The intention of this matrix is to provide a structure for a reflection about how different EU policy instruments can successfully be applied in the focus area of mobility. Subsequently additional instruments are indicated that are not mentioned explicitly in the background paper, but could be an important amendment to the policy mix in the area of mobility. (See white rows of matrix on the next page).

Increasing personal mobility	
Leveraging Innovation	Developing a network/partnership of innovation stakeholders (universities/research institutes, business, public agencies, etc.) for fuel-efficient cars and next-generation transport systems (e.g. EU project, Clean Urban Transport for Europe (CUTE), which tests 3 Citaro fuel cell buses in 9 European cities)
Better Products	Dynamic performance standards for fuel efficiency and emissions (e.g. EU car emission standards)
Leaner and Cleaner Production	Promoting implementation of environmental management systems for cleaner production processes (e.g. Danish government provides EMAS-certified companies with a discount of supervision fee and financially supports SMEs to introduce EMAS)
Smarter Consumption	Providing performance information on cars and subsidies for consumers buying fuel-efficient cars while discouraging production and purchasing of inefficient cars (e.g. EU proposals to link purchase taxes on cars to their climate change impact; taxes on sand and gravels)


Application examples of policy instruments for mobility

Increasing personal mobility	
Smarter Consumption	Providing performance information on cars and subsidies for consumers buying fuel-efficient cars while discouraging production and purchasing of inefficient cars (e.g. EU proposals to link purchase taxes on cars to their climate change impact; taxes on sand and gravels)
Global Markets	Setting higher standards than other regions, which can later be applied as de facto global standards (e.g. EU end-of-life vehicle directive; REACH directive)
Mitigating impacts	Controlling the volume of transport and its impacts by legal enforcement [e.g. speed/weight limit], space allocation (e.g. parking spaces), charges (e.g. tolls), etc.
Demand-side Management through Intelligent Urban Planning	Introducing reduction of transport demand into urban planning objectives by planning to provide access to public transport and make non-motorised transport modes attractive (e.g. construction of bicycle lanes; introduction of new tram lines; congestion charges)

Questions relating to the Marrakech Process

- How can mobility issues (urban transport and infrastructure in particular) be addressed under the Marrakech Process? Is there a need to set up a new task force on mobility?
- Should the 10YFP support the elaboration and implementation of sectoral action plans for sustainable mobility and urban planning at the national and regional level?
- How can the 10YFP encourage initiatives to tackle climate change in mobility? What policy framework and international co-operation is needed?
- How can the Sustainable Public Procurement Task Force provide guidance to governments to encourage sustainable public transport?
- How can the Sustainable Tourism Task Force address the increasing environmental impacts of long-distance leisure and air travel as well as support sustainable practices such as eco-holidays?

Linking the three focus Areas



The slide features three images arranged in a 2x2 grid (with the bottom-right cell empty). The top-left image shows a dining table with plates of food, glasses of wine and beer, and hands using cutlery. The top-right image shows a construction site with a worker in a yellow hard hat and blue uniform. The bottom-center image shows a cyclist in a blue shirt and yellow vest riding past a blurred car.

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Questions for Reflection

- What are coherent policy mixes across the focus areas?
- What important linkages exist between the different focus areas (e.g. freight transportation of food, biofuels and agriculture, housing and mobility/urban sprawl)?
- What are the overarching meta-trends that have manifestations in different areas (e.g. aspects of (non-) sustainable lifestyles)?
- Which are overlapping stakeholder groups that impact on various areas (e.g. retailers)?
- Which cross-area partnerships could promote SCP?

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- * Images in the paper without other source indicated are retrieved from i-stockphoto

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Annex 2

National sustainable consumption and production (SCP) strategies in the EU

A comparative review of selected cases

European Environment Agency



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Context

This study is primarily intended to be used as a background paper for of the conference “*Time for Action - Towards Sustainable Consumption and Production in Europe*”.

The conference is jointly organised by the Ministry of the Environment and Spatial Planning of the Republic of Slovenia, the European Environment Agency (EEA) and the UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP). It takes place in Ljubljana, Slovenia on 27-29 September 2007. More information is available at: <http://www.mop.gov.si>

Disclaimer

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Executive Summary

Context and purpose

This study is primarily intended to be used as a background paper for the conference *Time for Action - Towards Sustainable Consumption and Production in Europe*, which is to be held in Ljubljana, Slovenia on 27-29 September 2007¹.

The overall objective was to provide information on national strategies addressing sustainable consumption and production (SCP) in the EU.

Strategies in focus of the study included dedicated SCP frameworks of programmes or action plans as well as national sustainable development strategies (NSDSs) integrating SCP as a key component.

The aim was to identify publicly available cases and to conduct a comparative review of a limited number of examples.

The more detailed objectives of the study were to provide information about the preparation of strategies, their main foci and content – in this respect particularly to which extent the strategies include actions on mobility, food and drink, and housing – as well as about targets and indicators defined for monitoring purposes and main responsibilities for implementation.

The methodology of information collection was primarily desk research, mainly in English. In a later phase of the research informal communication with SCP experts of the selected countries was also conducted.

The study focuses on the content of strategies. The evaluation of implementation was not in the scope.

SCP strategies reviewed

For the selection of examples for the review, several aspects have been considered. High level of political approval of the strategy and public availability of information were prerequisites. The most important further aspects included country representation of a wide geographical range, a variety of institutional structures etc., and representation of a good spectrum of concrete actions planned.

¹ The purpose and objectives of the conference are described in the conference paper 'Action towards Sustainable Consumption and Production in Europe' (Annex 1 of this Technical Report)

Based on these considerations the following examples have been selected for the review:

- The SCP perspective in the national sustainable development strategy of Austria, *Building our Future – a sustainable future for Austria* (2002) and its annual work programmes;
- The *Framework of Programmes on Sustainable Consumption and Production* (2005) in the Czech Republic;
- *Getting More and Better from Less*, the Finnish National Programme to Promote Sustainable Consumption and Production (2005);
- SCP as one of the identified key challenges in the national sustainable development strategy of France, *Acting in the European Dynamic* (2006);
- The UK Government programmes on sustainable consumption and production, *Changing Patterns – UK government framework for SCP* (2003) and Chapter 3 *One Planet Economy – Sustainable Consumption and Production*, in *Securing the Future* (2005), the UK national sustainable development strategy;

The above group of cases includes both dedicated SCP strategies and NSDSs integrating SCP as a key component, it represents both old and new Member States as well as small and large countries, and it includes a variety of institutional structures. It should be noted that the strategies presented here do not cover the full extent of SCP related strategies in the EU.

Main findings

Sustainable consumption and production is being addressed in national strategies in an increasing number of cases. During the period of research, up to the end of August 2007, almost a dozen of examples of dedicated SCP strategies or NSDSs integrating SCP as a key component were identified. In terms of starting points, foci of action, instruments and targeted stakeholders etc. the identified examples represent a very wide range of approaches.

In addition to the already existing strategies, there are several other examples where a relevant strategy is currently being prepared. For the list of such identified cases please refer to Chapter 1.4.

The most important findings of the comparative review are summarised as follows.

Governance of preparing the strategies

For the elaboration of strategies or at least to support the preparation of strategy by the government, a dedicated multi-stakeholder body (a committee or working group) was set up in all cases. The mechanisms of coordination and the range of involved stakeholders, however, show remarkable differences. The coordination of preparation was in general vested in the ministries of environment. In the cases of Finland and the UK the ministry of industry also played a key role. By various means and to various degrees the wider public was also consulted, mainly in the framework of Internet-based consultations.

In three out of five cases, in the Czech Republic, Finland and the UK, dedicated SCP strategies have been prepared in a first stage. In a second stage, however, in each of these countries SCP has been or is being integrated into the NSDSs. For Austria and France the entry point for SCP into the strategic planning policy arena was directly through the NSDSs.

Level of planning and novelty

The SCP strategies reviewed in this paper contain elements of both framework strategies (i.e. aimed to set out general policy directions etc.) and action plans (describing concrete objectives and detailed measures).

The level of novelty in terms of measures and actions planned also varies. With the exception of the Finnish SCP Programme, the strategies also report extensively on already implemented/ongoing activities. The strategies of Austria and the UK contain several provisions regarding the strengthening and extension of existing activities and at the same time also a good number of new initiatives. The Czech, Finnish and French strategies seem to have focused more on planning for new initiatives.

Major new initiatives have been included in the strategies in all reviewed cases.

Priority implementation areas and production-consumption systems in focus

The defined priority implementation areas represent a very broad range, including e.g. sectoral, thematic, horizontal and cross-cutting as well as overall policy coordination and integration type of topics. Nevertheless, some common implementation areas as well as preferred tools and instruments can be identified as follows:

- The improvement of eco-efficiency is the most broadly and uniformly shared overall implementation area. The focus, however, is on production processes and domestic economy.
- Commitment for setting the example in the public sector is in the forefront of most strategies and ambitions usually go beyond Green Public Procurement (GPP).
- A key role is assigned to market interventions in the promotion of SCP in all reviewed cases. Voluntary agreements also play an important role in a number of cases. There are only some sporadic examples for planned normative regulation.
- Key fields of consumption side measures are education, sensitisation for responsibility and provision of information. Only few activities go beyond these issues. At the same time research aimed at understanding the dynamics of consumption decisions is a common element of strategies.
- Promotion of research and innovation and furthering of the environmental technologies sector is a broadly shared implementation area.
- Consumer goods and/or product policy are addressed in the forefront of strategies in a good number of cases.
- Institutional innovations play a key role in some of the countries.
- It can be broadly confirmed that ‘food and drink’, ‘housing’ and ‘mobility’ are in the foci of strategies. At the same time, in most of the cases these areas are already addressed or planned to be addressed in more detail in various dedicated strategies (e.g. food sector strategy, sustainable construction strategy). Lastly, as regards the comprehensiveness of action (e.g. from the

life-cycle perspective etc.), some areas considered of key importance are not specifically addressed (e.g. consumption side impacts of food consumption, energy use of household appliances etc.).

Implementation and monitoring

Main responsibilities for the implementation of strategic SCP approaches are summarised in Annex I of this review. In most cases the overall responsibility for the coordination of implementation lies with the ministry of environment, which is supported by a larger group of committee members etc., usually the same as were involved in the development of the strategy.

In Finland and the UK, similarly to the case of the preparation of strategies, the coordination is the joint responsibility of the ministry of environment and the ministry of industry.

Most strategies specify some kind of monitoring mechanisms, typically annual or biannual evaluation reports and indicator reports.

Targets and indicators

Quantitative targets for SCP were defined by the strategies themselves very sporadically only. An exception to this is Finland.

Despite this fact there seem to be SCP-related targets set in the countries, but they are included in the sectoral (such as transport, agriculture) or thematic (e.g. climate change, energy efficiency) strategies etc. Some examples of targets set in these thematic strategies have also been collected. For an overview of identified targets please refer to Annex IV.

The most broadly and uniformly used targets are related to improvements in energy efficiency (both in general and specific e.g. to the housing sector), the share of organic farming in total arable land, furthermore the share of renewable energy in final consumption (in different categories, e.g. electricity, heat etc.). The use of various types of targets in the transport sector (e.g. specifying limits for related emissions or the share of transport modalities etc.) is also common.

As regards SCP indicators, most countries use some indicator frameworks to monitor the implementation of their SCP approach.

Two countries, France and the UK, have defined dedicated SCP sets of indicators within their larger set of sustainable development (SD) indicators.

The Czech Republic defined potential clusters of SCP indicators. Austria and Finland at the time being monitor the implementation of SCP by their general set of SD indicators.

For an overview of indicators set by the countries please refer to Annex V.

Some particular SCP considerations

Environment vs. other considerations

The main focus of the reviewed strategies lies on the ecological aspects of consumption and production.

As regards interaction between the elements of sustainability (environmental, economic and social aspects), actions which represent a win-win-situation for the environment and the economy can widely be found in the strategies.

Regarding social aspects, considerations usually do not go beyond the employment potential of planned action, and the particular social drivers (e.g. demographic trends) of contemporary consumption patterns seem not to be amongst the main issues.

Domestic issues vs. considerations from the global economy perspective

The strategies dominantly focus on domestic issues. In most of the cases they also contain an international dimension (especially the NSDSs), where some important elements are covered, such as liberalisation of trade, promotion of the SCP concept in international policy-making process etc. At the same time planned action taking the perspective of the global economy, burden shifting and the global use of resources is only very sporadic. Exceptions to this are several examples to promote the consumption of locally produced food.

SCP building blocs vs. systems approach

The overall approach of strategies seems to combine consistent planning with the 'building blocks' of SCP (e.g. labelling, GPP, education etc.) with some more holistic considerations, according to the systems approach (e.g. fostering structural changes and new modes of satisfying societal needs).

As regards holistic considerations, the most broadly shared type of action in this respect is related to overall ecological tax reform and/or system of ecological taxation. Fostering structural change in agriculture and to a lesser extent in the transport sector is also a broadly shared category of ambitions.

1. Introduction

1.1. Setting the scene – the context of strategic policy-making for sustainable consumption and production in EU Member States

In the overall context of promoting sustainable development, sustainable consumption and production (SCP) is an emerging field of targeted policy-making at all levels of governance (supranational, national and local) worldwide.

The two most emblematic **international policy commitments** giving impetus to this trend have been *Agenda 21* and the *Johannesburg Plan of Implementation* (JPOI), both calling governments and stakeholders to develop and implement policies and measures aimed at promoting sustainable patterns of production and consumption. In order to foster the elaboration of strategies and implementation mechanisms with regional and national ownership, as well as to develop an overall ‘10-Year Framework of Programmes towards SCP’, a global multi-stakeholder initiative, the so-called *Marrakech Process* was launched in 2003. For an illustrative map of SCP initiatives at the global, EU and EU Member States’ level, please refer to Figure 1.

In the European Union both the European Commission and the Member States promote the transition towards SCP in several ways. Relevant activities may or may not be labelled with the tag ‘SCP’ (i.e. implemented ‘in the name’ of SCP) and include both top-down (i.e. broader strategic frameworks and initiatives) and bottom-up approaches (i.e. pieces of legislation, thematic initiatives etc.) as well as coordination.

A major milestone in the evolution of SCP in the EU policy arena was the launch of the renewed *EU Sustainable Development Strategy* (EU SDS) in June 2006. It identifies sustainable consumption and production as one of seven key challenges to be tackled by implementation action. Amongst other provisions in the subject, it makes a commitment for the development of an *EU SCP Action Plan*, which is expected to be launched by the European Commission by the end of 2007 or early 2008. In July 2007, a consultation process was opened on the *EU SCP Action Plan*, in parallel to the consultation on an *Action Plan on Sustainable Industrial Policy*.

Furthermore, several broader EU strategic frameworks and initiatives as well as strategies and action plans also have high relevance to SCP. Examples include the *Cardiff Process*, the *Lisbon Strategy*, the *Integrated Product Policy* (IPP), the *Environmental Technologies Action Plan* (ETAP), the *Thematic Strategies*, the *Energy Policy for Europe* etc.

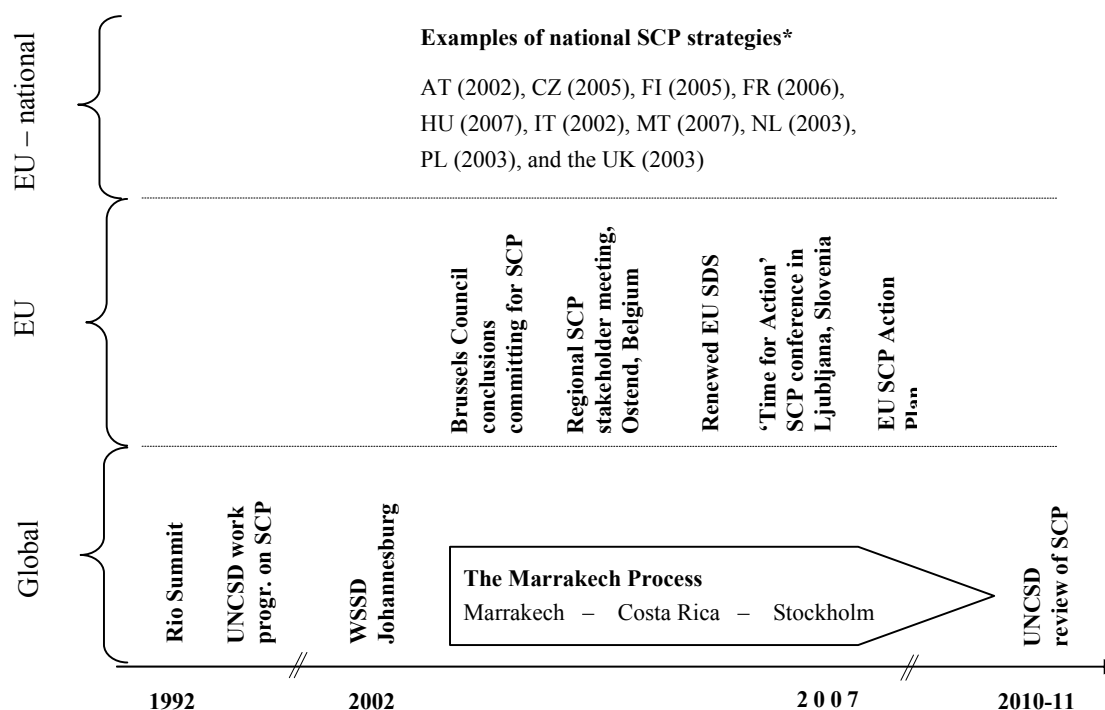
Last but not least, environmental legislation and regulation and to some extent market-based instruments are the cornerstone of the EU bottom-up approach in the broader subject. Relevant examples in this respect include the EU waste regime with a range of producer responsibility directives, the *Energy-using Products Directive* (EuP), *Green Public Procurement* (GPP), the *Eco-Management and Audit Scheme* (EMAS) and the *European Eco-label Scheme* as well as the *EU Emissions Trading Scheme* (ETS).

Two **supranational sustainability strategies** with EU relevance, namely the *Nordic Strategy of Sustainable Development* (2004) and the *Mediterranean Strategy for Sustainable Development* (2005), also integrate SCP as a key component.

In the case of the former, SCP is defined as one of the horizontal action areas. In the latter case, one of the four main objectives of the strategy is to ‘change unsustainable production and consumption patterns and ensure the sustainable management of natural resources’.

At Member State level, above the fulfilment of relevant EU obligations, SCP in a broader sense has already been addressed in a large variety of ways. The range of related action includes both explicit (i.e. SCP-labelled) and indirect measures as well as both top-down and bottom-up approaches. Due to different starting points in the subject, varying underlying assumptions etc., the width and depth and the foci of individual approaches cover a very broad spectrum.

Figure 1: Illustrative map of major SCP initiatives at global, EU and EU Member State level



* AT- Austria, CZ – the Czech Republic, FI – Finland, HU – Hungary, FR – France, IT – Italy, MT – Malta, NL – the Netherlands, PL – Poland, UK – the United Kingdom

At the highest level of strategic planning, SCP is being addressed in an increasing number of cases by dedicated 'framework of programmes' or 'action plans' and/or integrated into national sustainable development strategies (NSDSs) as a key component. For an overview of identified cases, please refer to Figure 1 and Chapter 1.4 'Identified examples of national SCP strategies in the EU'.

There is also a tendency for incorporation of an SCP-component or for making reference to SCP as a main guiding principle in relevant thematic national strategies.

Examples include national environment policies or action plans, national reform programmes (NRPs)², national consumer policies and operational programmes of national strategic reference frameworks (NSRFs)³.

² Related to the implementation of the Lisbon Strategy

³ Related to the implementation of the European Regional Policy

1.2. Purpose

This paper is primarily intended to be used as a background paper for of the conference *Time for Action - Towards Sustainable Consumption and Production in Europe*, which is to be held in Ljubljana, Slovenia on 27-29 September 2007.

The overall objective was defined as to stimulate and foster discussions at the conference by providing background information on some examples of national strategies and actions addressing sustainable consumption and production in the EU.

The more detailed objectives of the paper were defined as to provide information in the following respects:

- governance of preparing the SCP strategies in the focus of this study;
- main foci and content of strategies, particularly from the perspectives of stakeholders, the instruments of implementation and categories of production-consumption systems, especially to which extent the strategies include actions on mobility, food and drink and housing⁴;
- targets and indicators set for the monitoring of implementation and main responsibilities for implementation;
- examples of concrete measures and actions planned or being implemented or operated per main field of action.

Further to the objective of providing background information to the conference participants, the paper may also be valuable for a wider range of stakeholders. Particularly in this respect it also aimed at providing input to the joint UK / UNEP initiative to develop a non-prescriptive guideline to support the preparation of national strategies on SCP⁵.

1.3. Methodology and structure

Methods of information acquisition for the purpose of this paper included:

- desk study, and
- informal communication with experts in governments.

The term ‘national sustainable consumption and production strategy’ has been defined for the purpose of this study as follows:

⁴ These are the three sectors of production-consumption systems that have been pointed out for SCP policy making by several researches on the subject, based on their overall environmental impact. See e.g. Tukker et al. (2006) and Moll et al. (2006).

⁵ For more information please visit: http://www.unep.fr/pc/sustain/initiatives/Project_Overview_final.pdf

- dedicated national SCP framework of programmes or action plan; or
- national sustainable development strategy with SCP integrated as a key component⁶ and relevant action planned comprehensively;

In order to fulfil the objectives of the study as defined above, particularly to also provide more in-depth information on some examples, the preparation of a comparative review of selected country cases was decided.

The paper consists of the following four main parts:

- this introduction;
- presentation of country cases, where an overview of the preparation and priority implementation areas of the national strategies is provided. More detailed information about special features of the strategies is summarised in the Annexes, or in the comparative assessment section, see below;
- comparative assessment of country cases, where the results of the analysis are summarised and examples of concrete actions and measures are outlined;
- Annexes, containing more detailed information about the country cases in tabular format – in order to provide a better overview of available information.

1.4. Identified examples of national SCP strategies in the EU and case selection for the comparative review

Sustainable consumption and production is being addressed in national strategies in an increasing number of cases. A range of examples for dedicated SCP strategies or NSDSs integrating SCP as a key component have been identified in the framework of this study. However, as Member States have not been systematically contacted, there may be additional countries which have national strategies addressing SCP.

As of end August 2007, the following examples had been identified:

- **Austria** – the NSDS (2002) and its follow-up working programmes take a particular SCP-featured approach towards sustainability, with sustainable products and services as well as consumption and lifestyles amongst the central themes addressed;
- **Czech Republic** – a dedicated SCP framework of programmes was prepared in 2005. The renewed NSDS, which is expected to be launched later in 2007, also identifies SCP amongst the priority fields of action.
- **Finland** – a proposal for a national SCP programme was finalised in 2005. It was endorsed for implementation by the government by means of approval of the renewed NSDS in 2006, which also addresses SCP and makes a commitment for the implementation of the SCP programme.
- **France** – the updated NSDS (2006) identifies SCP as one of the key challenges to be tackled by implementation action.

⁶ i.e. identified as a key challenge to be tackled, or being amongst the top priority of action fields as a main cross-cutting / horizontal theme, or by other ways

- **Hungary** – the NSDS, approved by the government in June 2007 identifies SCP as one of the priority fields of action. Furthermore, a proposal for a national SCP framework of programmes was commissioned by the Ministry of Environment in 2003 and finalised in 2006. It is now being considered for implementation.
- **Italy** – the *National Environmental Strategy for Sustainable Development* (2002) identifies the addressing of ‘production-consumption cycles’ as a key field of action under the strategic priority ‘Sustainable management of the natural resources’.
- **Malta** – the promotion of SCP is one of the highlighted areas of action under *Sustainable Economic Development* in the NSDS (2007).
- **Netherlands** – an *Action Programme for Sustainable Development* was prepared in 2002-2003 and sustainable consumption and production is amongst the 12 priority ‘sustainability themes’.
- **Poland** – a *Strategy of Changing Production and Consumption Patterns* was prepared in 2003. An implementation report, also including recommendations for the preparation of a detailed action plan, is currently being drafted.
- **United Kingdom** – a framework for SCP was prepared by the government in 2003, furthermore SCP is one of four priorities set by the renewed NSDS (2005).

Several other Member States are currently on the way to prepare dedicated strategies or to integrate SCP into their NSDS, for example:

- In **Belgium**, ‘changing consumption patterns’ was already amongst the four priority themes in the first *Federal Sustainable Development Plan (2000-2004)*. By the end of 2007, a federal-level SCP strategy will be prepared, which is also planned to be included in the next *Federal Sustainable Development Plan (2009-2012)*.
- In **Greece**, an SCP section, aimed at describing a framework of actions in the subject, is included in the updated NSDS (expected to be finally endorsed by the end of 2007).
- In **Romania**, SCP is planned to be addressed in the 2007 update of the NSDS.
- In **Sweden**, an action plan for sustainable household consumption was prepared in 2005. It is, however, not endorsed by the new government for implementation. A new document describing current SCP initiatives and additional needs in the country will be published later this year.

Apart from national strategies, other types of approaches to address SCP at the national level are used by some EU Member States.

Some countries use mainly bottom-up approaches. These include for example **Denmark** and **Germany**, both with a large number of individual pieces of SCP policies and the building of a comprehensive range of national SCP policies. In Germany this approach is additionally supported by a national dialogue process on SCP, which brings together different stakeholders to promote options and solutions towards SCP.

Another example for addressing SCP at the national level, which is mainly used in some of the New Member States, is to address SCP in the framework of various EU policies and development instruments.

Lithuania, for example, addresses SCP in its national reform programme; SCP is one of the priority fields of actions in the *Environment and Energy Operational Programme* of **Hungary's National Development Plan**; a large scale SCP programme aimed at establishing SCP information centres in the **Czech Republic** is being implemented with the co-financing of the *European Social Fund*. Last but not least in **Slovenia**, the promotion of SCP is one of the strategic guidelines of the *National Environmental Action Plan 2005 – 2012* and SCP is planned to be addressed by the *National Council for Sustainable Development* in 2008.

Case selection for the comparative review

In order to be able to conduct a comprehensive and detailed comparative analysis, the selection of a limited number of examples was decided already from the outset.

For the selection of country examples several aspects have been considered. High level of political approval of the strategy and public availability of information were prerequisites. The most important further aspects included country representation of a wide geographical range, a variety of institutional structures and representation of a good spectrum of concrete actions planned in the identified strategies.

Based on these considerations the following examples have been selected for the review:

- **Austria** – the SCP perspective in the Austrian Strategy for Sustainable Development, *Building our Future – a sustainable future for Austria* (2002) and its annual work programmes;
- **Czech Republic** – the *Framework of Programmes on Sustainable Consumption and Production* (2005) in the Czech Republic;
- **Finland** – the Finnish National Programme to Promote Sustainable Consumption and Production *Getting More and Better from Less* (2005);
- **France** – sustainable consumption and production as one of the identified key challenges in the French National Sustainable Development Strategy, *Acting in the European Dynamic* (2006);
- **United Kingdom** – the UK Government programmes on sustainable consumption and production, *Changing Patterns – UK government framework for SCP* (2003) and Chapter 3 *One Planet Economy – Sustainable Consumption and Production*, in *Securing the Future* (2005), the UK national sustainable development strategy.

The above group of cases includes both dedicated SCP strategies and NSDSs integrating SCP as a key component, it represents both old and new Member States as well as small and large countries, and it includes a variety of institutional structures.

2. Presentation of country cases

2.1. SCP perspective in the sustainable development strategy of Austria, 'Building our Future – a sustainable future for Austria' and its annual work programmes

The necessity of change in current production and consumption patterns, particularly by the promotion of sustainable products and services and by change in societal values and lifestyles is one of the central themes in the Austrian national sustainable development strategy, titled *Building our Future – a sustainable future for Austria*⁷.

Although in 2002, at the time of completion of the strategy, 'sustainable consumption and production' as such was actually not yet referred to in the document, *Building our Future* takes a particular SCP-featured approach towards sustainability.

In principle the strategy has been defined as a 'learning approach' and intended to be put into concrete terms and implemented by means of so-called 'work programmes', each focussing on several specific subjects. Besides the innovative adoption of the above SCP-related perspectives in the overall strategy, 'sustainable consumption' was defined as one of the implementation priorities in the second work programme, which was launched in 2004.

Preparation of strategy

In order to work out the strategy, the federal government established a *Committee for Sustainable Austria (CSA)*, consisting of representatives of relevant ministries, interest groups and the coordinators of the provinces. Participation of a wider range of stakeholder groups was ensured through public events/workshops and an Internet platform. Furthermore, NGOs participated in expert panels. Coordination was vested in the Ministry of Agriculture, Forestry, Environment and Water Management.

Rationale for addressing SCP-related issues in the strategy

The most important specific SCP-related drivers referred to in the document include the inefficient use and overuse of natural resources and energy and at the same time the unfair distribution of resources in global dimensions, deficiencies in the ecological properties of products (energy efficiency, life span etc.), the impacts of the domestic transport sector (particularly the high level of greenhouse gas emissions) and the necessity to change consumption-related perceptions in society.

SCP-related considerations in the Austrian approach towards sustainable development

The concept of transition towards sustainable development has been defined in the strategy with particular emphasis on considerations related to the ideal of sustainable consumption:

The transition to sustainable development cannot be limited to individual and gradual improvements, but rather requires a fundamental reorientation in politics, society and economy that comprises all areas of life. [...] As a social process, sustainable development cannot be achieved with standards and technological change alone. It also requires a fundamental shift in values, goals and – as a result – in the behaviour of society with regard to how it faces the challenges of

⁷ The document is available in English at <http://www.nachhaltigkeit.at/strategie.php3>

the future.

(Building our Future, pp. 11-12).

In the same notion, the annual Work Programme 2004 also adopts the consumption perspective:

A change of consumption habits in industrialised countries is one of the most essential preconditions for achieving sustainable development. Potential for change can be found primarily with increasing the resource consumption efficiency and with the change of values and lifestyles, as well as with a broader participation of the population (e.g. separate collection of waste). [...] Taking orientation with available scientific concepts of new 'models of affluence' (e.g. 'less is more', 'elegance by simplicity', 'deceleration', 'benefits instead of possessions') it is the task to develop and enlarge strategies, measures and options for action in these areas. A further objective is to propagate the citizens' consumer awareness by showing which alternatives exist.

(Building our Future, Work Programme 2004, pp. 39)

Priority implementation areas and guiding objectives

As starting points for prioritising activities, the strategy defines altogether twenty 'guiding objectives', which are sorted under four main 'action fields'. Out of the twenty objectives eleven can directly be associated with SCP. These are listed under the four main action fields below.

I - Quality of life in Austria

- A sustainable lifestyle – by means of the reorientation of resource and energy intensive lifestyles and initiating a change in values;
- Solutions through education and research – by means of a sustainable utilisation of the opportunities offered by the knowledge society by research, training and life-long learning;

II - Austria as a dynamic business location

- Innovative structures to promote competitiveness – by means of making research, technology and development fit for sustainable change, and by aiming at innovative systemic solutions;
- A new understanding of business and administration – by means of strengthening entrepreneurial responsibility and by raising the efficiency of administrative structures and procedures;
- Correct prices for resources and energy – by internalising external costs in order to create incentives for sustainable behaviour through the right pricing signals;
- Successful management through eco-efficiency – by utilisation of cleaner production, of renewable resources and of integrated product services systems in order to increasingly decouple resource and energy consumption from economic growth and fostering the utilisation of renewable resources and energies;
- Promoting sustainable products and services – by providing the right impetus to increase the market share of sustainable products and services;

III - Living spaces in Austria

- Responsible use of land and regional development – by orientating spatial policy to the population's rising standard of living, the strengthening of regional economic cycles and to optimise/minimise distances between the home, workplace and recreation;
- Shaping sustainable mobility – by reducing mobility pressures and by meeting mobility needs in a sustainable way;

- Optimising the transport systems – by developing and disseminating alternative and energy efficient propulsion concepts, logistics' structures and transport technologies;

IV - Austria's responsibility

- Fighting poverty, creating a social and economic balance – by combating poverty and seeking social and economic balance within and among countries;

As regards SCP-related sectoral priorities, the targeted areas are mainly 'dwelling', 'food', 'leisure', 'tourism' and 'transport'. Furthermore, special attention is paid to 'consumer goods'.

Instruments and stakeholders in focus

In the course of the development of the strategy by means of the annual work programmes, up until now more than 280 measures are defined and nearly every kind of instrument is involved. Focus lies with providing information, motivation, institution building and voluntary agreements.

Main actors addressed by the strategy are the different government bodies (at local, regional and federal levels), the chamber of workers and employees, the chamber of commerce and its members. Scientific institutions are involved in the planning of the programmes and the implementation of the measures. The subject group comprises all members of the Austrian economy from bio-farmers and production industries, to commerce and service providers, from public administration and schools to pupils and private consumers.

Main responsibility for implementation

Implementation of the strategy is coordinated by the *Ministry of Agriculture, Forestry, Environment and Water Management* in cooperation with the *Committee for Sustainable Austria (CSA)*. Means of implementation are the referred annual work programmes, which are also to be approved by the *Council of Ministers*. Furthermore, a multi-stakeholder expert advisory panel, the so-called *Forum for Sustainable Austria (FSA)* was set up to support the implementation process and advise the CSA.

Targets and indicators

The strategy and the work programmes have defined several targets in the broader context of sustainable development. Furthermore a comprehensive range of sustainable development indicators have been defined for the monitoring of implementation. Targets and indicators directly SCP-related in the authors' evaluation are presented in Annexes IV and V.

Reporting and review

The CSA is responsible for preparing yearly progress reports focused on the results of implementation of the annual programmes. The FSA is mandated to come up with annual reviews on the progress made with the implementation of the strategy.

An overall external evaluation of the strategy was already carried out in 2005/2006. Based on this evaluation a plan for further steps has been developed. The new SD strategy and the related first action plan should be adopted in the course of 2008.

2.2. Framework of Programmes on Sustainable Consumption and Production in the Czech Republic

The Czech Republic summarised its approach towards SCP in a dedicated strategic document, titled *Framework of Programmes on Sustainable Consumption and Production in the Czech Republic*⁸ (2005).

The *Framework of Programmes*, according to a reference in the document itself, is based on the current national sustainable development strategy of the country⁹, as well as on other adopted strategies and policies in process, e.g. *State Environmental Policy*, *Raw Materials Policy* etc. Its overall purpose was defined as to elaborate on the principles, priorities, objectives and activities needed for achieving SCP in the country.

As regards its official status, at the time being the *Framework of Programmes* is approved by a high level governmental advisory body (see later). It should be noted here that the draft version of the updated Czech NSDS¹⁰ also recognises SCP as one of the priority areas for action and makes a commitment for its implementation.

Preparation of strategy

In order to work out the *Framework of Programmes*, under the lead of the *Ministry of Environment*, a multi-stakeholder expert and consultative body, the *Working Group for Sustainable Consumption and Production (WGSCP)* was set up within the *Government Council for Sustainable Development (GCSD)*¹¹ in October 2003. The WGSCP consists of representatives of key ministries, furthermore NGOs, research and the Confederation of Industry and Transport of the Czech Republic. A wider range of stakeholder groups were involved in the development process by means of rounds of calls for commenting by e-mails. The final version of the *Framework of Programmes* was approved by the GCSD in June 2005.

Rationale for addressing SCP and the Czech context

According to the *Framework of Programmes*, the reason for the development of an overall approach has been the ‘necessity to address sustainable consumption and production in a systematic and active way, in view of the increasing consumption of natural resources and growing environmental burden’.

Furthermore, several national characteristics have been outlined in the document as factors necessitating the addressing of SCP at a strategic level. The most important ones include the ‘unacceptably high’ material and energy intensity of domestic production processes, the ever growing consumption and the overuse of resources, uncertainty about the effects of chemicals used in large quantities and the country’s limited access to fuel energy sources.

Last but not least, according to the strategy, to attain sustainable consumption and production is an ‘essential precondition’ for achieving sustainable development.

⁸ The document is available in English at <http://www.env.cz>

⁹ The Czech Republic Strategy for Sustainable Development (2004)

¹⁰ The updated NSDS is to be adopted by the government by the end of November 2007

¹¹ The GCSD is a high level standing advisory, initiative and coordinating body of the Czech Government in the field of sustainable development and strategic management. The WGSCP is one of the designated seven working groups established within the GCSD.

The Czech SCP concept statement

The document interprets SCP as follows:

SCP is a basic precondition of sustainable development. Consumption means both the use of products and services and the use of natural resources, energy, water, land, etc. SCP is not an obstacle to economic development; on the contrary, it is a challenge and an opportunity for the private sector to optimise the production process in terms of energy and material intensity and to make products with a competitive advantage for the increasingly aware consumer market in the European Union – products with an emphasis on quality, health and protection of the environment. It also offers an opportunity to create new jobs and thus considerably contributes to finding a solution to the social problem of highest priority – unemployment.

(Framework of Programmes on SCP in the Czech Republic, pp. 4)

The strategy's two overall approaches towards achieving SCP

In order to put SCP into practice, the *Framework of Programmes* proposes that action is to be made according to the following two basic approaches¹²:

- reducing the material and energy intensity within the systems of production and consumption (by increasing their efficiency);
- optimising the systems of production and consumption (substitution of inputs, processes, products, services and requirements).

The main goal of the above optimisation approach, according to the document, is a continuous improvement in the quality of life.

Key elements of the transition towards SCP

The document defines the following key elements / preconditions necessary for the change of current production and consumption patterns:

- political will;
- a change of behaviour on the side of consumers (the state, enterprises, individual consumers, etc.);
- a change of behaviour on the side of producers and service providers;
- a change of the regulatory system and conditions in the market to motivate the key players (producers, public administration, consumers) to strive to achieve sustainable consumption and production;

Priority implementation areas

The following six strategic priorities have been defined:

- education and transfer of information;
- integration of policies, strategies and programmes;
- eco-efficiency throughout the life-cycle;
- local SCP initiatives;

¹² According to the document, these two approaches are adopted from UNEP's *Consumption Opportunities - Strategies for Change* (2001).

- sustainable public administration – green public procurement; and
- market conditions.

No sectoral priorities have been defined in the *Framework of Programmes* itself. However, as essential parts of implementation, the preparation of thematic action programmes was planned. The *National programme for the energy management and the use of renewable sources of energy for 2006 – 2009* was already launched in July 2005. An *Action Plan on Eco-agriculture and Organic Food* was finalised in May 2007 and an action plan for transport is under preparation.

Instruments and stakeholders in focus

The range of instruments planned as well as the type of key stakeholders and their role during implementation of the framework is outlined in dedicated Chapters in the document. Both lists are comprehensive and at the same time normative in their character. Practically they include all types of instruments and stakeholders typically listed in SCP literature.

As regards practical foci in the application of instruments, based on the list of proposals for specific activities, again, a wide range of instruments are referred to. Instruments particularly in the focus of planned implementation include education and training, informative instruments, integration and co-ordination, and ‘getting the prices right’.

Regarding stakeholders, no particular stakeholder groups have been prioritised. The most broadly addressed stakeholders are producers and consumers in general and the state administration.

Main responsibility for implementation

The main responsibility for implementation / coordination of implementation lies with the *Ministry of Environment*. The ministries relevant to the defined priority areas of implementation are responsible for preparing follow-up action plans. The action plans are to be approved by the WGSCP and in the next step also by the GCSD. Implementation will also be linked with the renewed NSDS.

Targets and indicators

No quantitative targets are set in the *Framework of Programmes*, however, it is to be mentioned that several thematic strategies are referred in the document, e.g. the *State Environment Policy* etc. and these strategies did set targets. The action programmes to be developed in the course of implementation will also set targets¹³.

The document proposes two clusters of potential indicators for the monitoring of implementation (see Annex V) and also formulated several goals regarding their future development.

Reporting and review

Implementation of the *Framework of Programmes* is monitored within the progress report on the implementation of the NSDS, which is prepared annually. Furthermore, the WGSCP is obliged to inform the GCSD about its activity and the achieved results (also annually) and last but not least monitoring and evaluation should also be part of the action plans. A mid-term review and revision is planned.

¹³ Some targets from the related strategies have been listed in Annex IV

2.3. Getting More and Better from Less – Finland’s National Programme to Promote Sustainable Consumption and Production

In order to address SCP-related challenges at a strategic level in Finland, a comprehensive proposal, titled *Getting More and Better from Less - proposals for Finland’s national programme to promote sustainable consumption and production*¹⁴ (2005) was elaborated.

In a first stage the proposal was first approved by a high level governmental advisory body (see later). In the second stage it was also endorsed by the government by the enacting of the country’s renewed NSDS, *Towards Sustainable Choices - a nationally and globally sustainable Finland* (June 2006), which makes a commitment for the implementation of the *Programme*.

Preparation of strategy

For the preparation of the *Programme*, a multi-stakeholder body, the so-called *KULTU Committee*¹⁵, was set up jointly by the *Ministry of Environment* and the *Ministry of Trade and Industry* in November 2003. The *Committee* consisted of officials from various ministries as well as representatives from industry, business, and environmental and consumers’ organisations. A broad range of experts and specialists, including experts from abroad, were also invited to contribute. The wider public was invited to submit ideas on the Internet. The final proposal was unanimously accepted by the *Committee* in June 2005.

Rationale for addressing SCP

According to *Getting More and Better from Less*, the necessary transition towards sustainable consumption and production represents a tremendous challenge both at the national and global levels and therefore a vision for the future and the setting of related goals with a timeframe of about twenty years is to be worked out.

Amongst environmental pressures, climate change, the levels of consumption of natural resources and the amounts of waste generated are mentioned. The increasing global impact of Finland through the globalisation of production chains is also mentioned amongst the main drivers.

A particular aspect, namely Finland’s suspected increasing vulnerability to globalisation and how it could be turned from a threat to an opportunity, e.g. by increased reliance on domestic sources, is also highlighted.

The Finnish vision of SCP

The overall vision of the future from the SCP perspective – for the year 2025 – has been defined by the *Programme* as follows:

¹⁴ The document is available in English at: <http://www.ymparisto.fi/default.asp?contentid=149254&lan=en>

¹⁵ The Committee on Sustainable Consumption and Production

In the future Finland will base its economy on forms of production that increase national wealth and well-being without depleting biodiversity or exceeding the carrying capacity of natural systems through their environmental impacts. This will give rise to new business opportunities and jobs in sectors that promote well-being and environmental innovations. The eco-efficiency of production in Finland will rise throughout the product chain, with Finland being among the world's leading countries in this respect. [...] New eco-efficient product-service systems, sustainable high-quality products and social innovations will encourage a shift away from the accumulation of material goods to more service-based consumer cultures.

(Getting More and Better from Less, pp. 3-4).

Furthermore, a vision of the future has been defined per defined main fields of action too (these main fields are listed below).

Overall objectives

The key objectives of the *Programme* have been defined as follows:

- improvement of the efficiency in the usage of materials and energy through all stages of product life cycles;
- promotion of environmental education; and
- the development and adoption of environmental technologies.

Main fields of action

There are altogether 73 action points put forward by the document, which are sorted under eleven main fields of action. The eleven main fields of action are as follows:

- forms of production that save materials and energy;
- fewer material goods, but a higher quality of life;
- building pleasant and functional communities;
- improving the quality of construction;
- getting transport on the right track;
- sustainable food production from the farm to the Table;
- promoting well-being in workplaces and leisure activities;
- setting an example in the public sector;
- values, knowledge and skills;
- an active international role for Finland.

Instruments and stakeholders in focus

The proposals listed in the *Programme* involve a large variety of instruments and stakeholders. Provision of environmental information together with education and training, coordination amongst different stakeholder groups, economic incentives and institutional innovations are the most commonly proposed types of measures. As regards stakeholders, the programme makes no special focus, all general stakeholder groups (producers, citizen-consumers, government) are addressed equally.

Main responsibility for implementation

The responsibility for the coordination of implementation is shared between the *Ministry of Environment* and the *Ministry of Trade and Industry*. Otherwise, for the implementation of particular proposals, a broad range of stakeholders have been named in the *Programme*, ranging from different ministries and state institutions (e.g. on research) to NGOs.

Targets and indicators

The *Programme* defines several targets (see Annex IV). SCP indicators have not yet been defined. However, several proposals have been made for the development of indicators and the renewed NSDS defines a comprehensive set of sustainable development indicators, several of them SCP-related.

Reporting and review

At present an informal network from different ministries follows the implementation. The *Programme* itself also made several proposals for the monitoring of implementation. A mid-term review and update is planned after a period of five years (in 2010).

2.4. SCP as one of the key challenges in the national sustainable development strategy of France, 'Acting in the European Dynamic'

Sustainable consumption and production is identified as one of the key challenges to be tackled in the updated national sustainable development strategy of France, titled *Acting in the European Dynamic*¹⁶ (November 2006).

One of the main goals of the 2006 update was to harmonise the NSDS with the renewed *EU Sustainable Development Strategy* (EU SDS), which was due in the same year. Consequently, the seven key challenges identified for top priority action in the EU SDS, amongst them sustainable consumption and production, have almost completely been adopted.

Preparation of strategy

The update of the existing NSDS was carried out during 2006 and managed by the *Ministry of Ecology and Sustainable Development*. The main body responsible for updating the strategy was the so-called *Inter-ministerial Committee for Sustainable Development* (ICSD), consisting of the ministers of the government and chaired by the prime minister. The ICSD was supported in this task by an operational body, the *Permanent Committee of Senior Officials in charge of Sustainable Development*. A stakeholder consultation body, the so-called *National Council on Sustainable Development*, which consists of the representatives of civil society, local authorities, and businesses as well as trade unions, consumers' organisations, media and scientists, also provided input. The government approved the updated strategy in November 2006.

Rationale for addressing SCP

According to *Acting in the European Dynamic*, France has been one of the countries favouring the inclusion of sustainable consumption and production amongst the key challenges to be tackled in the

¹⁶ 'Agir dans la dynamique européenne' – the document is available (in French) at <http://www.ecologie.gouv.fr>

renewed EU SDS. Furthermore, the necessity for addressing SCP is summarised in the strategy as follows:

Unsustainable patterns of production and consumption and the overexploitation of natural resources have an impact on the balance of ecosystems, biodiversity and human development. International competition and environmental problems imply that we have to search for solutions for a reduced utilisation of used resources and also to make our production systems socially more responsible. Consumers also have a major role to play by demanding producers to provide comprehensive information describing the advantages and disadvantages of consumed goods and services.

(Acting in the European Dynamic, pp. 22)

Overall and specific objectives of the strategy in the field of SCP

The overall objective of the strategy in the field of SCP is defined as ‘to gradually turn all production and consumption patterns sustainable’. Furthermore, the following five specific objectives – targeting five different implementation areas and stakeholder groups – are set:

- encourage all companies to get involved in activities related to sustainable development;
- better inform consumers and improve the environmental and social performance of products and production processes;
- accompany the development of agriculture and fisheries according to the principles of sustainable development;
- increase the share of sustainable public procurement; and
- encourage innovation and establishment of enterprises active in the field of sustainable development.

Priority areas for implementation action

The overall and specific objectives of the strategy are aimed to be achieved by the implementation of ten action programmes. Out of the ten action programmes the following five are associated with SCP:

- economic activity, companies and consumers;
- the citizen, a player in sustainable development;
- agriculture and fisheries;
- towards an exemplary State;
- international action;

No sectors other than agriculture and fishery are developed directly under the key challenge SCP.

Instruments and stakeholders in focus

Amongst the instruments of implementation particular importance is given to ‘funding and economic instruments’ and to education and training, which are also defined as transversal themes in the strategy.

A further particular lever in the general subject of sustainable development is the constitutional law on the *Environmental Charter*¹⁷, which introduces explicit reference to sustainable development in the constitution.

No particular stakeholder group is prioritised in the strategy. There are action programmes targeted directly to citizen-consumers, the public administration and businesses.

Main responsibility for implementation

The new *Ministry of Ecology, Sustainable Development and Spatial Planning* manages the implementation of the strategy. For this purpose a dedicated body, the so-called *Sustainable Development Delegation* was established within the Ministry in 2005. In order to lead and coordinate the implementation within the government, a function of the so-called 'inter-ministerial delegate' was created already in 2004. The forum for the coordination of implementation within the government is the *Inter-ministerial Committee for Sustainable Development* (ICSD) consisting of the ministers of the government. Each minister is responsible for the implementation and follow-up of the actions in the strategy that fall under that Ministry's authority. S/he nominates a senior official in charge of sustainable development who has the responsibility to 'champion' sustainable development within his/her ministry. The work of the ICSD is thus supported by the *Permanent Committee of Senior Officials in charge of Sustainable Development*, which meets regularly (every 2 months) and prepares the work of the ICSD.

Prefects coordinate the action of the government at regional and county levels. They are responsible for the implementation of the strategy at the decentralised level, promote sustainable development, including SCP actions, and advise local authorities.

The *Agency for the Environment and Energy Management* (ADEME) is responsible for promoting SCP through public awareness and habits change, eco-responsibility of State, specific support to SMEs, and support to local *Agenda 21* elaboration.

Targets and indicators

Targets directly set by the strategy or referred by the strategy in relation to SCP are listed in Annex IV.

For monitoring of the strategy a general set of sustainable development indicators have been defined. Since SCP is one of the identified key challenges to be tackled, a sub-set of SCP indicators are also defined and are listed in Annex V.

Reporting and review

The *Permanent Committee of Senior Officials* in charge of Sustainable Development prepares annual reports on implementation of the strategy to the Parliament. The NSDS is programmed for review every five years in France, with interim actualisation after 2-3 years. A new strategy will be issued in 2008.

The revision of the strategy will be carried out during 2008, although some activities, e.g. collection input for the revised strategy have already been started.

¹⁷ The Environmental Charter was adopted by parliament meeting in congress on February 28th 2005 and promulgated on March 1st 2005 by the President of the Republic. Article 6 in particular specifies that 'public policies must promote sustainable development. The charter includes references to key environmental principles concerning precaution, polluter-pays and prevention.

2.5. 'Changing Patterns' and 'One Planet Economy' – the UK Government programmes on sustainable consumption and production

Sustainable consumption and production has been addressed in the United Kingdom in two governmental strategies.

The UK Government framework for SCP, titled *Changing Patterns*¹⁸, was jointly prepared and published by the *Department for Environment, Food and Rural Affairs* (DEFRA) and the *Department of Trade and Industry* (DTI) in 2003. Notably, it was the first ever governmental strategy in Europe dedicated to the subject of SCP.

In the next stage, in 2005, SCP was selected as one of the four priority areas for UK action in the country's updated sustainable development strategy, titled *Securing the Future*¹⁹. Details of action are set out in a Chapter dedicated to SCP and titled *One Planet Economy*.

Preparation of strategies

Changing Patterns was co-authored by DEFRA and DTI and contains elements of both a report of government on SCP and a white paper on further directions of policy in the subject. The preparation of this paper was carried out without particular stakeholder participation.

The preparation of *Securing the Future*, including *One Planet Economy*, was lead by DEFRA's *Sustainable Development Unit* (SDU) in cooperation with the so-called *UK Sustainable Development Commission*²⁰. Furthermore, for the involvement of a wider range of stakeholders an Internet-based consultation as well as regional workshops and surveys were conducted.

Rationale for addressing SCP and the UK concept of SCP

One Planet Economy sets the scene by listing six noteworthy statements under the heading 'the facts', ranging from forecasts on rapidly raising global energy demand to the estimated immense saving potential which exists in the UK manufacturing industry. It continues with a symbolic explanation why addressing SCP at the strategic level is imperative:

*Current developed country patterns of consumption and production could not be replicated world-wide: some calculations suggest that this could require three planets' worth of resources.*²¹ (Securing the Future, pp. 43)

Continuing this line of thought, the most pressing issues and the necessity of a new approach to tackle the challenges are outlined as follows:

¹⁸ The document is available at <http://www.defra.gov.uk/environment/business/scp/>

¹⁹ The other three priority areas are: climate change, natural resource protection and sustainable communities. The document is available at the same link as *Changing Patterns*, above.

²⁰ The *Sustainable Development Commission* is an independent advisory body that consists of representatives of business, NGOs, local and regional administration as well as academia

²¹ World Wildlife Fund (WWF), 2004, 'Living Planet Report' at www.panda.org/news_facts/publications/general/livingplanet/index.cfm

The largest and fastest growing pressures on the global environment come from areas such as household energy and water consumption, food consumption, travel and tourism. Past environmental policy focused mainly on pollution from domestic production activities. We now need a wider and more developed approach that focuses across the whole life cycle of goods, services and materials, also includes economic and social impacts, and in particular encompasses impacts outside the UK. There would be little value in reducing environmental impacts within the UK if the result were merely to displace those impacts overseas, or close off benefits at home or abroad.

(Securing the Future, pp. 43).

Strategic objectives

Changing Patterns has defined the following four overall policy objectives:

- decoupling economic growth and environmental degradation;
- focusing policy on the most important environmental impacts associated with the use of particular resources, rather than on the total level of all resource use;
- increasing the productivity of material and energy use, as part of the broader Government commitment to increase the productivity of the nation; and
- encouraging and enabling active and informed individual and corporate consumers who practice more sustainable consumption;

One Planet Economy aims at achieving the following three overall SCP objectives:

- better products and services, which reduce the environmental impacts from the use of energy, resources, or hazardous substances;
- cleaner, more efficient production processes, which strengthen competitiveness; and
- shifts in consumption towards goods and services with lower impacts;

Priority implementation areas

The particular elements of the UK strategy towards SCP have been set out in *Changing Patterns* as follows:

- taking a holistic approach that considers whole life-cycles of products and services;
- working with the grain of markets and identifying and tackling market failures;
- integrating SCP thinking and objectives in all policy development and implementation;
- using a well-designed package of policy measures and following the principles of better regulation; and
- stimulating innovation in all its facets;

The planned measures and actions put forward in *One Planet Economy* are sorted under the following seven headline areas:

- sustainable products – cutting out problems at source;
- sustainable production – greater efficiency and value with less resource use, pollution and waste;
- sustainable consumption;
- leading by example in what we do;
- catalysing change within the economy and key sectors;
- sustainable waste management; and

- evidence and indicators;

Furthermore, the sectors which have a particularly strong influence on the sustainability of goods and services consumed in the UK, according to the strategy, are ‘retailers’, ‘tourism’, ‘construction and construction minerals’, ‘transport’, ‘food’ and ‘environmental industries’.

Instruments and stakeholders in focus

As regards the means of achieving the intended results, *Changing Patterns* is focused on market interventions and coordination and integration.

The more practical set of proposals outlined in *One Planet Economy* are particularly focused on institutional innovations and market interventions. As regards stakeholders in focus, *One Planet Economy* puts a particular emphasis on the role and opportunities with SCP to the business community.

Main responsibility for implementation

Monitoring and implementation is carried out via DEFRA, which has a joint programme with DTI on SCP. Further to the central role of the government, there are several *Delivery Bodies* being funded to implement action and undertake more day-to-day liaison with businesses and consumers.

Targets and indicators

No quantitative SCP targets as such have been set in *Changing Patterns* and *Securing the Future*. Several SCP-related targets, set elsewhere in the government’s strategic portfolio, are referred in *Securing the Future* (please refer to Annex IV). Furthermore, it is to be mentioned here that a diverse range of strategies and programmes exist, which have high/direct relevance to SCP, and these strategies and programmes did set several targets²².

The UK has chosen a comprehensive set of indicators from its general SD set of indicators to monitor the implementation of SCP²³ (see Annex V).

Reporting and review

The Department of Environment, Food and Agriculture (DEFRA) has the lead responsibility for monitoring, reporting and reviewing the process towards the objectives set out in the NSDS. The following two types of monitoring mechanisms are operated: yearly indicator reports and policy monitoring, based on the so-called Public Service Agreement (PSA) targets²⁴.

²² Some targets from the related strategies have been indicated in *Annex IV*

²³ Regional versions of the UK Government’s indicators of sustainable development were also published in December 2005 to help provide a perspective of sustainable development in each region.

²⁴ Public Service Agreements define each government department’s aims and objectives and describe how the targets will be achieved and how performance against the targets will be measured.

3. Comparative assessment of country cases

3.1. SCP in national strategies – a variety of approaches

Use of different types of strategies and political status of strategies

The five countries in the scope of this study have used either dedicated framework of programmes or action plans, or national sustainable development strategies to bring SCP to the level of strategic policy making. In some of the cases, during the course of the development of the strategic approach, SCP has already been addressed by both types of documents. Table 1 below takes stock of the SCP-relevant strategic documents produced by the five countries.

Table 1 Overview of SCP strategic documents produced by the countries

	Dedicated framework of programmes or action plan	National sustainable development strategy (NSDS)
Austria	N/A	<i>Building our Future – a sustainable future for Austria</i> (2002)
Czech Republic	<i>Framework of Programmes on SCP</i> (2005)	(The Czech Republic Strategy for Sustainable Development - renewed strategy, upcoming in November 2007)
Finland	<i>Getting More and Better from Less</i> (2005)	<i>Towards Sustainable Choices - a nationally and globally sustainable Finland</i> (2006)
France	N/A	<i>Acting in the European Dynamic</i> (2006)
UK	<i>Changing Patterns – UK government framework for SCP</i> (2003)	<i>Securing the Future – delivering UK sustainable development strategy</i> (2005)

As it appears from the Table, in three out of five cases – in the Czech Republic, Finland and the UK, - dedicated SCP strategies have been prepared in a first stage. By now in all three countries the strategic planning for SCP has entered or is in the process of entering a second stage, during which SCP is integrated into the NSDSs. For Austria and France the entry point for SCP into the strategic planning policy arena was directly via the NSDSs.

As regards the political status (approval by government etc.) of strategies, they are as follows:

- In the cases of Austria, France and the UK²⁵ the political status of strategies is government-approved NSDS.

²⁵ This is valid for *Securing the Future*. The UK Government SCP framework, *Changing Patterns* (2003), is a white paper by DEFRA and DTI.

- At present the *Framework of Programmes on SCP* in the Czech Republic bears the approval of a high-level standing committee advisory to the government. By the end of the year, through the enacting of the renewed Czech NSDS, which will make a commitment for the implementation of the *Framework of Programmes*, the status will be upgraded to government-approved strategy.
- The Finnish SCP programme, *Getting More and Better from Less*, after being in the status of a white paper for a while, is endorsed for full implementation by the renewed NSDS, which was enacted by the government end of 2006. With this act it became the official SCP programme of the country.

Levels of strategic planning and novelty

General policy directions and guidance vs. concrete objectives and measures

The strategic SCP documents reviewed in this paper contain elements of both **framework strategies** (aimed to set out general policy directions and guidance, combined with overall objectives etc.) and **action plans** (describing concrete objectives and detailed measures with short and medium term planning horizon). Table 2 describes the main character of national approaches in this respect.

Table 2 Characterisation of documents: elements of framework strategies vs. action plans

Austria	<i>Building our Future</i> is rather a framework strategy, which defines the main directions of required work and related broader lines of action. Some concrete planned measures called ‘the first steps’ are also outlined. Since the strategy has been designed as a ‘learning approach’, the priorities of implementation with more concrete objectives and measures are defined by means of annual work programmes.
Czech Republic	The <i>Framework of Programmes on SCP</i> defines the principles of future SCP policy as well as the broader priority areas of required action and, last but not least, proposals for specific activities in the short and medium terms. The detailed objectives and measures per defined priority area are intended to be defined by dedicated follow-up action programmes.
Finland	The SCP programme <i>Getting More and Better from Less</i> is rather an action plan defining an overall vision for SCP and then vision, objectives and proposed measures for eleven priority fields of action are set out.
France	<i>Acting in the European Dynamic</i> consists of three main parts. The first part, ‘objectives’ defines an overall objective and five specific objectives for SCP. The second one consists of ten action programmes of which five are associated with SCP and the third one defines indicators.
United Kingdom	The UK government SCP framework <i>Changing Patterns</i> explains the means and broader objectives along which the UK intends to implement SCP and also the main directions of future action in the short term. The SCP Chapter in the UK NSDS, <i>One Planet Economy</i> describes vision and objectives for SCP and concrete measures in the short term.

Novelty of planned action

The level of novelty in the actions also varies. With the exception of the Finnish *Getting More and Better from Less*, the strategies also report extensively on already implemented or ongoing activities. The strategies of Austria and the UK contain several provisions regarding the strengthening and extension of existing activities, at the same time also a good number of new initiatives. The Czech, Finnish and French strategies seem to have focused more on planning for new initiatives.

3.2. Governance of preparing the strategies: responsibilities, coordination and participation

For the elaboration of strategies or at least to support the preparation of strategies by the government, a dedicated body (committee or working group) was set up in all cases. Furthermore, with the exception of France, where SCP was integrated into the NSDS during its mid-term update²⁶, each of the established bodies were multi-stakeholder in their character and brought together representatives of civil society, private enterprises, academia and governments. The representatives of local governments were involved in the preparation process in all these cases. For an overview on the related bodies and their composition please refer to Annex I.

As regards overall responsibility for the content of strategies and for the coordination of their preparation, the ministries of environment played a central role.

In Finland and the UK the ministries of industry also played a key role. In Finland the coordination of preparing the strategy was the joint competence of the ministry of environment and the ministry of industry. In the UK the SCP framework, *Changing Patterns* was co-authored by the ministry of environment and the ministry of industry.

In France the update of the NSDS was led and coordinated on behalf of the government by the so-called 'inter-ministerial delegate', which is a unique structure.

Across the five countries, the most broadly involved key ministries other than the ministries for environment were the ministries of industry, ministries of transport, ministries of agriculture, ministries of education and ministries of finance (or equivalent ministries).

To various extents the wider public was also consulted in the preparation of strategies. For this purpose Internet and/or e-mail based rounds of comments were conducted in all cases. In some cases public hearings or regional consultations and surveys were also organised.

²⁶ In France, the body in charge of the mid-term update of the strategy consisted of solely governmental officials.

3.3. Content of strategies

Rationale given for addressing SCP and overall objectives

To set the scene and to argue for the necessity of addressing sustainable consumption and production at the strategic level, a large variety of environmental, social and economic factors and issues are outlined in the documents. By reviewing the key elements of their reasoning, one can gain a good insight into the concrete improvements countries expect SCP to bring about.

The most broadly and uniformly referred drivers to address SCP at a strategic level are global environment-related pressures, such as the overuse of natural resources, the depletion of non-renewable resources and climate change. In this context, however, only Finland and the UK refer explicitly to the negative environmental consequences of their domestic consumption patterns in other regions of the world²⁷. Furthermore, chemicals dispersion and particularly the uncertainties of impacts of chemicals on human health and the environment were also amongst the broadly referred drivers.

National environmental issues are listed amongst the important drivers in a fair number of countries. Examples in this respect include the country's struggle with high levels of greenhouse gas emissions in the transport sector in Austria, the 'unacceptably high' material and energy intensity of the economy in the Czech Republic, and the particularly high amounts of waste in Finland, France and the UK. Ever growing amounts of waste and final energy consumption are referred at several points. At the same time the 'rebound effect' as such, is not mentioned in the strategies.

The business case for SCP is a widely shared argument too. In this context the rhetoric of countries widely refers to the line of thought along 'new innovative products and services – new markets – more jobs and renewed competitiveness – more prosperity', with the acknowledgement that SCP is both a challenge and opportunity for businesses. Particular domestic characteristics are also referred to in this context. Finland, for instance, expects that due to globalisation pressures in order to create employment and resulting well-being it will need to turn back towards a diverse domestic market.

Social issues are mentioned sporadically, the central issue being demographic changes. In other cases they are usually connected to environmental, economic or other aspects. Examples include the countries' renewable energy sector and its job creation potential in France, or health concerns, such as obesity due to changes in lifestyles in the UK. Intra-generational inequality in the distribution of wealth is referred at sporadically only.

²⁷ Despite the fact that life-cycle considerations are also a broadly shared feature of strategies

Priority implementation areas and instruments in focus

The main directions of planned action as well as the policy tools and instruments in the focus of implementation are outlined in Chapter 2 country by country. For a better overview, the main directions of planned action are also summarised in Annex III.

Annex III demonstrates that there is a large variety in defined priority implementation areas. They include a broad range of sectoral, thematic, horizontal and crosscutting as well as overall policy coordination and integration type of topics. A close examination of the substance behind the headlines, e.g. in terms of the underlying assumptions and the particularities of planned implementation etc., reveals again a very broad range. This wide variety makes it particularly hard to make meaningful comparisons between the countries in terms of priority actions. Nevertheless, some common implementation areas as well as preferred tools and instruments can be identified as follows:

- The improvement of eco-efficiency is the most broadly and uniformly shared overall implementation area for SCP in the strategies. The focus, however, is on production processes and the domestic economy.
- Commitment for setting the example in the public sector is in the forefront of most strategies and ambitions usually go beyond Green Public Procurement (GPP).
- A key role is assigned to market interventions in the promotion of SCP in all reviewed cases and they are put either explicitly into the forefront of strategies or distinguished emphasis is made on them in other ways. Voluntary agreements also play an important role in a number of cases. There are only sporadic examples for planned normative regulation.
- The key fields of consumption side measures are education, sensitisation for responsibility and provision of information. Only few examples go beyond these issues. At the same time research aimed at understanding the dynamics of consumption decisions is a common element of strategies.
- Promotion of research and innovation and furthering of the environmental technologies sector is a broadly shared implementation area.
- Consumer goods and/or product policy are addressed in the forefront of strategies in a good number of cases.
- Institutional innovations play a key role in some of the countries.
- It can be broadly confirmed that the production-consumption categories ‘housing’, ‘food and drink’, and ‘mobility’ are in the foci of strategies, however, as regards the comprehensiveness of action (e.g. from the life-cycle perspective etc.), some important areas are not specifically addressed in the strategies (see the next Chapter).

These common implementation areas are described in more detail on the next pages.

Improvement of eco-efficiency

The improvement of eco-efficiency or resource-efficiency²⁸ is a central tenet of strategies. Table 3 provides an overview of the cases where it was put explicitly amongst the priority implementation areas²⁹.

Measures and activities most broadly planned or reported as being implemented under this common headline include **economic incentives**, **voluntary agreements** and **institutional arrangements**, the drafting of **specific action programmes to improve eco-efficiency** in general as well as in more specific fields (e.g. waste prevention) and last but not least the **enhancement of related research and innovation** and the **exchange of information** (best practices etc.). Normative regulation, i.e. in the forms of standards etc. is not in the scope of measures.

As regards economic incentives Finland, for instance, under its relevant priority area to improve efficiency refers to the necessity of working out long-term policy guidelines for an ecological tax reform with the ultimate aim to encourage favourable innovations etc. The UK refers to its climate change levy and the landfill tax, where the latter, actually, is the source of funding for a new so-called *Business Resource Efficiency and Waste Programme*, which provides funding for programmes aimed at business waste minimisation and the improvement of resource efficiency.

Voluntary agreements with industry are also a broadly planned category of activity, e.g. in Finland, France and the UK.

An emblematic example of institutional arrangements is the planned ‘material-efficiency service centre’ in Finland, the objective of which will be to give expert advisory services that promote eco-efficient production and consumption. The *National Cleaner Production Centre* of the Czech Republic is operated under the *Environmental Information Agency* (CENIA). Services offered by the *Centre* range from the development and maintenance of relevant databases (best practices etc.) to the conduction of cleaner production assessments etc.

For the elaboration of specific action programmes, the most relevant examples are Austria and the Czech Republic, both planned to work out dedicated action plans for the improvement of eco-efficiency in their strategies.

The improvement of eco-efficiency of public services is particularly highlighted in the cases of Finland, France and the UK (see also the section on ‘setting the example in the public sector’).

Table 3 Priority implementation areas – eco-efficiency / resource-efficiency

Austria	‘Successful management through eco-efficiency’
Czech Republic	‘Eco-efficiency through the life-cycle’
Finland	‘Forms of production that save materials and energy’
UK	‘Sustainable production – greater efficiency and value with less resource use, pollution and waste’

²⁸ Eco-efficiency in the strategies of Austria, the Czech Republic and Finland, and resource-efficiency in the UK

²⁹ In the French NSDS it is addressed indirectly in the action programmes ‘*Economic activity, companies and consumers*’ and ‘*Preventing risks, pollution and other threats to health and the environment*’

Last but not least, regarding the overall approach of strategies, it is to be remarked that even if life-cycle considerations are broadly mentioned in the documents at various points, concrete action planned or referred as being implemented seem to focus on the eco-efficiency of production processes and particularly in the domestic context³⁰. Global supply chains or particular consumption side measures in this respect are not highlighted.

Setting the example in the public sector

All reviewed countries address the exemplary role of the public sector and four of them put it explicitly in the forefront of their SCP activities (see Table 4).

By reviewing the range of measures planned or being implemented by the countries in this field, it stands out that that **in most of the cases ambitions go beyond green public procurement (GPP)**.

As regards GPP, the EU's *IPP Communication* seems to have given an impetus for planning on this front: all four countries listed in the Table have made a commitment in their strategy to prepare a national GPP action plan³¹.

Broadly shared related objectives include in this field the **widening of the range of product categories falling under national measures already in place**, measures to foster the **exchange of information and best practices** in the subject as well as **education and capacity building for state officials**. In the UK, for instance, the *Strategic Supply Chain Group* (SSSG) offers a series of one-day 'sustainable procurement training' for businesses and public sector organisations. Forms for GPP practitioners to share experiences, information and good practices have already been established or planned in most reviewed cases.

Further examples, going beyond the scope of GPP, include various plans or current activities and/or criteria in place, which are already being implemented with the overall objective to improve **eco-efficiency in the public sector** (Finland, France and the UK). In this respect for instance in France a wide range of performance targets and other criteria have already been set (see also Annex IV).

Another area of practical activity is **planning for sustainable development at the organisational level in government and related reporting**: e.g. in the UK, all government departments are to produce sustainable development action plans for their policy area, furthermore, an annual report on environmental and sustainable development issues covering the entire central government is to be published³².

There are plans for introducing a similar scheme in France at the level of ministries and two pilot cases are currently being implemented (in the ministry of the interior and spatial planning and the ministry of agriculture and fisheries).

Table 4	Priority implementation areas – the exemplary role of the public sector
Czech Republic	'Sustainable public administration – green public procurement'
Finland	'Setting an example in the public sector'
France	'Towards an exemplary State'
UK	'Leading by example in what we do'

³⁰ The wording used is e.g. 'increase the productivity of resources in Austria' or 'eco-efficiency of production in Finland'. In the UK action aimed at improving resource efficiency takes place in the context of ambitions to increase domestic productivity (UK output per worker).

³¹ Actually, Austria, Finland and the UK are amongst the seven EU Member States which, according to a report published in 2006, implemented the 'most elements of GPP'.

In Austria Green Public Procurement is addressed under 'Promoting sustainable products and services' in the strategy. At the time being a pilot phase for GPP is being implemented with aims of adopting a final national action plan in 2010 based on experience/evidence gathered.

By this time several of the other four countries have finalised their action plans and started the implementation.

³² The so-called *Sustainable Development in Government Report (SDiG)*

Last but not least, in the programmes of the Czech Republic, Finland and France, reference is made to the intended **inclusion of social considerations in the purchasing practices and other activities of the government**.

Market interventions

All strategies reviewed attribute a key role to market interventions in the promotion of SCP. Table 5 provides an overview of the priority implementation areas defined in the forefront of strategies in this respect³³.

The necessity of **correcting externalities or market failures** is broadly and uniformly recognised by the strategies. Measures and activities planned or reported as being implemented in this area cover a very broad range.

The most uniformly addressed overall implementation area in this respect is **ecological tax reform or a system of ecological taxation**, which has already been started or is under preparation in all countries. The strategies uniformly reflect commitment to the continuation of activities in this front.

The application of **economic instruments** is a vast area of implementation. A very broad range of particular instruments are reported/planned in the strategies (taxes, rebates, subsidy schemes etc.) with application of various fields (mainly energy savings and renewable energy, waste, transport, agriculture). **Differentiation in value added tax (VAT) rates and tradable permits** are emerging fields of application. Examples include the introduction of a pilot phase for a reduced rate of VAT on micro combined heat & power (mCHP) and ground source heat pump investments in the UK. The introduction of white certificate schemes for energy savings is a broadly shared field of application related to the implementation of the *Energy Use Efficiency and Energy Services Directive*.

The **phasing out of environmentally harmful subsidies** (Austria, Czech Republic, Finland) and the **assessment of externalities in the transport sector** (Austria, Czech Republic), or the identification of ‘most damaging environmental externalities’ (France) is also on the agenda.

Last but not least, most of the strategic documents reviewed reflect that **the coordination of related activities and long-term planning in the subject** has become a norm and furthermore innovative economic instruments are being used / planned in a large number.

Table 5	Priority implementation areas – market interventions
Austria	‘Correct prices for resources and energy’
Czech Republic	‘Market conditions’
France	‘Funding and economic instruments’ is one of the defined transversal implementation areas
UK	‘Working with the grain of markets and identifying and tackling market failures’

³³ Several major measures are also planned in the Finnish SCP programme, e.g. the development of long-term policy guidelines for an ecological tax reform, etc. However, market intervention related initiatives are dispersed amongst the Chapters of the strategy (and not addressed under a single headline).

Key consumption side measures of education, sensitisation for responsibility and provision of information

Major implementation areas of education, provision of information and/or the promotion of lifestyle changes are uniformly in the forefront of strategies (see Table 6).

The strategies are equally progressive in planning for **education, awareness raising and the provision of better environmental information** to consumers, as well as for **motivating smaller changes in everyday purchasing choices** etc.

Research aimed at understanding the dynamics of consumption and purchasing decisions is also a common element of strategies.

Measures promoting more substantial lifestyle

changes (e.g. switch to public transport) and the tackling of excessive levels of material consumption (i.e. the question of ‘sufficiency’), with a few exemptions, are very sporadic only.

Diverse **education and capacity building campaigns** are planned targeting different groups of stakeholders in all strategies, however, the main focus is on schools and young people. The integration of sustainable development into state curricula is a common component of approaches. Another example for education for SCP, is a large scale SCP programme in the Czech Republic, the so-called *Partnership for Sustainable Consumption and Production* (SCP) aimed at establishing several information centres and an education centre on SCP in five parts of the country.

Another **major stakeholder group addressed in this respect in some cases is public servants** (Finland, France), in the framework of activities ‘to set the example in the public sector’. An example of relevant activity could be the so-called *Behaviour Change Forum* in the UK, the goal of which is to familiarise the public sector with the topic of necessary behavioural change and eventually to develop skills in this field.

Major campaigns to the wider public in specific subjects e.g. energy efficiency, recycling, composting, the EU Flower etc. are also common. In Austria and in the Czech Republic, for instance, so-called ‘Sustainable Weeks’ are organised annually. The goal is to raise consumer awareness and thus to enhance the sale of sustainable products, in co-operation with retailers. France conducts major media campaigns, e.g. in the subjects of energy saving, waste reduction and biodiversity.

A **deliberation forum on SCP** in the UK, the so-called *Sustainable Consumption RoundTable* (SCR) was the joint initiative of the *National Consumer Council* and the *Sustainable Development Commission*. The objective was to build wide ownership of sustainable consumption, and producing practical advice to Government for actions and policies to create a shift to more sustainable lifestyles.

Provision of information to consumers is another typical area of activities and most countries have concrete plans, e.g. either laws or regulations for the compulsory disclosing of information to consumers or the development of tools for citizens to evaluate their personal environmental impact.

For related research the Austrian *Network of Sustainable Lifestyles* project could be mentioned, the objective of which is to find effective ways of promoting lifestyle change.

Table 6	Priority implementation areas – consumption side measures
Austria	‘A sustainable lifestyle’
Czech Republic	‘Education and transfer of information’
Finland	‘Values, knowledge and skills’
France	‘Education and training ‘ & ‘The citizen as an actor of sustainable development’
UK	‘Sustainable Consumption’

Research and innovation and furthering of the environmental technologies sector

Promotion of research and innovation as well as of the environmental technologies sector is a key element of most strategies. Four countries have put the broader subject specifically into the forefront of their strategies (see Table 7).

Various types of research are planned on a wide spectrum of particular areas. The range includes **materials research, energy research, socio-economic research** etc.

The **fostering of the environmental technologies sector** is also a broadly shared priority by the countries, again in most cases (Austria, Finland, France and the UK) explicitly in the focus of strategies. For the promoting of innovation, **various types of incentives are referred from the broader category of ecological tax reform to subsidies and even tax rebate and reduced VAT for eco-design.**

An emblematic example of related research programmes in the subject is the initiative of the *Austrian Federal Ministry of Transport, Innovation and Technology* (BMVIT), which sets out for research in three specific subjects: the ‘Building of Tomorrow’, the ‘Energy Systems of Tomorrow’ and the ‘Factory of Tomorrow’. The sub-programmes foster research and development of new concepts and technologies as well as systems innovations and strategies in their particular subject.

Consumer goods and/or product policy for the promotion of SCP have explicitly been addressed by Austria, France and the UK in their strategies (see Table 8).

Austria and France put special emphasis on ensuring the **availability of eco-products in the mass markets** and to make information on products’ environmental performance available to the consumer. Targeted measures include plans to enforce **compulsory labelling of product groups** (France) and the **mainstreaming of eco-labelled products from niche to mass markets** by several means in all countries.

An example for a planned comprehensive approach is the UK, which intends to work out a coherent product policy and a range of relevant new initiatives, with the ultimate goal of reducing the environmental impacts of everyday products across their life cycle. Its so called *Market Transformation Programme* (MTP) in the subject has been operational for years. The overall objective is to collect information (e.g. on sales, usage and resource consumption of household and industrial products) and then to building evidence (i.e. how products will evolve in the market place) in order to estimate future environmental impacts.

Table 7 Priority implementation areas – research and innovation, and environmental technologies

Austria	‘Promoting Austria’s competitiveness by innovative structures’
Finland	‘Increasing sustainability through new technologies and innovations’
France	‘Research and development’ & ‘To stimulate innovation and the development of businesses active in the field of sustainable development’
UK	‘Stimulating innovations in all its facets’

Table 8 Priority implementation areas – consumer goods and/or product policy

Austria	‘Promoting sustainable products and services’
France	‘To reinforce supply and demand for eco-products in the mass-consumption areas’
UK	‘Sustainable Products – cutting out problems at source’

Institutional innovations

Various forms of institutional innovations are a particular feature of SCP implementation in most cases. The most typical forms of new institutions established in order to foster the implementation of strategy include the outsourcing of specific governmental initiatives (e.g. waste minimisation in industry) to newly established government-funded bodies, so called ‘delivery bodies’, or the establishment of various coordination structures within government for the implementation of the strategy (e.g. inter-ministerial groups) and last but not least the establishment of multi-stakeholder advisory panels, forums etc. to support the implementation and monitoring of the strategy (see also above).

Production-consumption categories of ‘food and drink’, ‘housing’ and ‘mobility’

It can be broadly confirmed that ‘food and drink’, ‘housing’ and ‘mobility’ are in the foci of strategies. At the same time, in terms of comprehensiveness of action (e.g. from the life-cycle perspective etc.), some areas considered of key importance are not specifically addressed. Below is a summary of main findings of the assessment per production-consumption category.

Food and drink

All countries associate food and drink consumption with SCP directly. The overwhelming focus under this broader category, however, is put on agriculture, that is on the production stage in the life-cycle. Agro-environmental programmes and biodiversity preservation, the issues of fertilisers, pesticides and externalities, as well as organic food action programmes are broadly referred in the strategies either in the form of ongoing activities or as planned measures.

The life-cycle stage of distribution and retail of food is addressed only in Austria, Finland and the UK, but only sporadically.

Environmental impacts at the final consumption stage associated with e.g. the use of energy (refrigeration, preparation of food at home etc.) and the generation of packaging waste etc. are in most cases not addressed directly by the strategies. Exceptions to this are some related initiatives in the Finnish SCP programme, furthermore an overall sectoral sustainability strategy was planned to be prepared in the UK, the overall objective of which is (to foster) ‘economic, environmental and social improvements in the wider food industry’³⁴.

Global food chains (i.e. the question of food miles) and corresponding impacts are addressed in the strategies only indirectly, through some initiative to promote local food.

Neither the consumption of meat and meat products nor food wastes in retail and in households is addressed in the strategies. At the same time, public health aspects of food consumption are referred to, and sometimes specifically addressed, in all cases reviewed.

Housing

The production-consumption category ‘housing’ covers a broad range of environmental issues with ‘hot-spots’ at various stages of the life-cycle. The reviewed strategies focus on several particular issues in the broader subject.

In the case of national sustainable development strategies, however, the subject is not necessarily associated with SCP, but addressed under different main headings (e.g. climate change and energy).

In France, for instance, the general subject area of housing is addressed extensively in the NSDS under the specific action programmes of *Territories* and *Climate change and energy* (and not directly ‘in the name of’ SCP). Similarly, the NSDSs of Austria and the UK address several housing-related issues

³⁴ The strategy was delivered in 2006 (*Food Industry Sustainability Strategy*)

under different main headings, not necessarily under SCP. Consequently, it was decided to also review these related headings.

The construction phase of the life-cycle is broadly addressed in the strategies of Austria, Finland, France and the UK, however, at a varying level of detail. The focus is on the management of minerals, thermal insulation, voluntary standards for resource efficiency and in some cases construction-related waste management / reuse of used goods and building components. The NSDS of France refers to a separate strategy dedicated to the subject. A dedicated strategy is currently being finalised in the UK. In the Czech Republic, although the overall objective of improving the eco-efficiency of economy and the planned action plan in this respect is relevant, construction as such is not specifically addressed in the strategy³⁵.

As regards the use phase of the life-cycle of buildings and associated environmental impacts, the overwhelming majority of initiatives are made under the headings climate change and energy. Most of the countries refer to already existing dedicated climate change strategies and/or energy efficiency strategies. As regards the provision of heat, a large number of initiatives are related to both the improvement of energy efficiency and the switching to alternative energies. The most broadly shared examples include the promotion of combined heat and power (CHP) and heat from renewables (biomass, heat pumps), which are addressed directly or indirectly (e.g. via the relevant thematic strategies) in most cases.

Electricity use of appliances is broadly addressed under measures aimed at providing consumer information and in some cases in connection with product policy. The influencing of final consumption behaviour in households, however, is not in the focus of strategies.

Mobility

All strategies have a strong component on transport with activities referred as being either underway or planned. The existence of related thematic strategy / transport policy or plans to devise dedicated strategies is also referred in most cases. The approach of strategies, however, covers a very wide range.

In the NSDSs of Austria and France transition towards a more sustainable transport is identified amongst the key challenges / main objectives, therefore related issues are addressed extensively. Planned action and provisions in this respect, however, are not made ‘in the name of SCP’.

In the Czech Republic, the SCP Framework has been prepared with due attention, amongst other relevant policies, to the Czech transport policy. As one of the follow-up activities of the *Framework of Programmes*, an action plan is being prepared in the subject.

In Finland transport is one of the primary implementation areas of the strategy (*Getting transport on the right track*).

In the UK strategy transport is most extensively addressed under the priority implementation area of climate change, but at the same time a lot of references and contextual provisions are made under the SCP as well as other priorities (e.g. communities, behavioural change) as well.

Personal mobility and the use of cars, the priority issues under the production-consumption category mobility, are broadly in the focus of strategies. Another common area is the provision of public transport services. The particular addressing of cycling in this respect is also on the agenda, e.g. the Czech Republic and the UK having dedicated strategies in the subject.

³⁵ The country, however, has a relevant dedicated strategy too, ‘*The Raw Material Policy of the Czech Republic*’

As regards aviation, Finland and France and the UK make statements in their strategies supporting the extension of the *EU Emissions Trading Scheme* to this field and/or finding global solutions in the subject.

Quantification of SCP: targets and indicators

Quantitative targets for SCP were defined by the strategies themselves very sporadically only. An exception to this is Finland. (For an overview of targets set by the countries please refer to Annex IV.)

Despite this fact there are SCP-related targets set in the countries, but they are included in the sectoral (such as transport, agriculture) or thematic (e.g. climate change, energy efficiency) strategies and in some cases defined by a governmental decree or similar legal act.

Taking stock of the relevant strategies and the SCP-related targets set in these sectoral etc. strategies goes beyond the scope of this paper. Nevertheless, for inspiration, some example indicators from these strategies are also shown in the Annex IV.

In some cases reference is made to targets which were set elsewhere in the government's strategic portfolio, but it is far from universal nor comprehensive. The most references in this respect were made in the French NSDS.

The most broadly and uniformly used targets are related to improvements in energy efficiency and the share of organic farming in total arable land, furthermore the share of renewable energy in final consumption (in different categories, e.g. electricity, heat etc.). The use of various types of targets in the transport sector (e.g. specifying limits for related emissions or the share of transport modalities etc.) is also common.

It is also to be mentioned in the context of targets that there are several related 'objectives' set or referred in the strategies, which can be regarded as first steps towards setting targets³⁶. These statements, however, are made at various levels of concreteness and commitment according to the context in which they are used.

As regards SCP indicators, all countries use some indicator frameworks to monitor the implementation of their SCP approach. The number of indicators used for this purpose and their scope varies to a large extent, however. The indicators already in use are summarised, together with the most important statements by the countries regarding their continued work in Annex V.

Two countries, France and the UK, have defined dedicated SCP sets of indicators within their larger set of sustainable development (SD) indicators. The Czech Republic defined potential clusters of SCP indicators in its *Framework of Programmes* and a set of SCP indicators was also defined for inclusion in the updated NSDS where they will constitute the integral part of the general set of SD indicators (the updated NSDS is expected to be approved in November 2007).

In Austria and Finland at present there are no specific SCP indicators defined, however, amongst the general SD set of indicators developed for the monitoring of the NSDS several are directly SCP related. In the Table listing the indicators (Annex V) the authors' selection of SCP-related indicators from the general set of SD indicators is indicated.

Last but not least it is to be remarked here that all countries have made statements about their ongoing work with indicators and set out the main direction of necessary work.

³⁶ Objectives are general statements like 'increase in the share of' or 'the levels' or the 'amount of' something 'should increase' or 'should decrease' etc. setting the direction of expected development in a particular area.

Particular SCP considerations

Environment vs. other considerations

The principal focus of the reviewed strategies clearly lies on the ecological aspects of consumption and production.

As regards interaction between the elements of sustainability (environmental, economic and social aspects), actions which represent a win-win-situation for the environment and the economy can widely be found in the strategies. There are ample initiatives in this respect e.g. for the improvement of business resource efficiency as well as for the mainstreaming of green(er) products etc.

Regarding social aspects, considerations usually do not go beyond the employment potential of planned action, and the particular social drivers of contemporary consumption patterns seem not to be amongst the main issues. For instance demographic trends (e.g. smaller households, ageing etc.), and the distribution of wealth within society and their impacts on consumption patterns are addressed by some indirect measures only. Gender issues, with the exception of Austria, are not dealt with in the scope of strategies. Corporate Social Responsibility (CSR) is referred to in many cases, but it does not constitute the main element of strategies.

Domestic issues vs. considerations from global economy perspective

The strategies dominantly focus on domestic issues. In most of the cases they also contain an international dimension (especially the NSDSs), where some important elements are covered, such as liberalisation of trade, the promotion of the SCP concept in international policy-making processes etc. At the same time planned action from the perspectives of the global economy and the global use of resources is very sporadic only. Exceptions to this are several examples to promote the consumption of locally produced food. Global supply chains as well as import of resources both directly and as embedded into products are not addressed as such.

SCP building blocs vs. systems approach

The overall approach of strategies seems to combine consistent planning with the ‘building blocks’ of SCP (e.g. labelling, GPP, education etc.) with some more holistic considerations, according to the systems approach (e.g. fostering structural changes and new modes of satisfying societal needs).

As regards holistic considerations, there are already a good number of examples. The most broadly shared type of action in this respect is related to overall ecological tax reform and/or system of ecological taxation. Fostering structural change in agriculture and to a lesser extent in the transport sector is also a broadly shared category of action. There are some signs of addressing the question of investments too, e.g. by encouraging socially responsible investment (SRI) schemes. Other examples include the ‘enable – engage – exemplify – encourage’ model for influencing behaviour of actors in the UK, integrated transport, urban and regional planning and also aims in some countries, but mainly in Finland, to foster the development of product-service systems.

Finally, despite the inherent dominance of planning for production side measures, there are several attempts to understand and interfere in the dynamics of consumption decisions better, mainly in the form of research.

3.4. Main responsibility for implementation

Main responsibilities for the implementation of strategic SCP approaches are summarised in Annex I. In most cases the overall responsibility for the coordination of implementation lies with the ministry of

environment, which is supported by a larger group of committee etc., usually the same which was involved in the development in the strategy (see Annex I).

An exception to this is France, where the coordination of implementation (of the NSDS) is managed at the highest level by the *Inter-ministerial Delegate for Sustainable Development* (further to the overall coordinator role of this delegate, a unit has also been set up for the coordination in the ministry of environment). Furthermore, in France all ministers were members of the coordination body in charge for implementation.

In the case of NSDSs additional stakeholder forums were set up to advise the government in the course of implementation. In Finland and the UK the coordination is the joint responsibility of the ministry of environment and the ministry of industry.

Ministries other than the environment involved in the implementation are the same as the ones involved in the preparation of the strategy. Further to the coordination and implementation responsibilities within the government, in some of the countries several specific implementation roles are ‘outsourced’ to bodies founded by the government, but with independent management.

In the cases of national sustainable development strategies (Austria, France and the UK) regional and local authorities also have some sort of defined role in implementation. One of the priority implementation areas of the Czech SCP Framework is ‘local SCP initiatives’. A dedicated action plan is planned to be worked out in this field. The regional authorities and/or their association are specified several roles in the range of actions planned in the Finnish SCP programme.

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Annexes

Annex I – Overview of preparation, implementation, and the monitoring of the analysed national strategies

	Austria	Czech Republic	Finland	France	United Kingdom ³⁷
National strategy	<i>Building our Future – a sustainable future for Austria – the national sustainable development strategy of Austria</i>	<i>The Czech Framework of Programmes on Sustainable Consumption and Production</i>	<i>Getting More and Better from Less – Finland's National Programme to Promote Sustainable Consumption and Production</i>	<i>Acting in the European Dynamic – the updated French national sustainable development strategy</i>	<i>Securing the Future – the national sustainable development strategy of the UK</i>
Preparation					
Coordinators of the preparation process	Federal Ministry of Agriculture, Forestry, Environment and Water Management	The Ministry of Environment	Ministry of the Environment with close cooperation with the Ministry of Trade and Industry	Inter-ministerial delegate for sustainable development	Department for Environment, Food and Rural Affairs (DEFRA)
Bodies in charge for the development of strategy	Committee for a Sustainable Austria (CSA)	The Ministry of Environment & The GCSD's ³⁸ Working Group for Sustainable Consumption and Production (WGSCP)	Committee on Sustainable Consumption and Production (KULTU Committee)	Inter-ministerial Committee for Sustainable Development (ICSD)	DEFRA's Sustainable Development Unit (SDU) & The UK Sustainable Development Commission

³⁷ Most of the cells are not relevant for 'Changing Patterns – UK government framework for SCP', which is a white paper by the Department for Environment, Food and Rural Affairs (DEFRA) and the Department of Trade and Industry (DTI). Therefore it is not included here.

³⁸ Government Council for Sustainable Development (GCSD)

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	Austria	Czech Republic	Finland	France	United Kingdom ³⁷
Composition of bodies in charge for development	40 experts from key federal ministries, regional administrations, interest groups from industry, commerce, agriculture, employees and local communities	19 members including key ministries, confederation of industry and transport, national educational fund, UNEP national committee and key NGOs	31 members including officials from various ministries as well as representatives from industrial, business, environmental and consumers' organisations	All ministers of the government supported by the ministers, senior officials for sustainable development	22 members including representatives of business, NGOs, local and regional administration as well as academia
Participation of wider civil society	Public events/workshops and an Internet platform. NGOs also participated in expert panels.	Rounds of comments by e-mail	Internet consultation and public hearings	N/A ³⁹	Large-scale Internet consultation, regional consultations, surveys
Development period	June 2001 – April 2002	October 2003 – June 2005	November 2003 – June 2005	During 2006 ⁴⁰	During 2005 ⁴¹
Approved by	Federal Government of Austria (April 2002)	Government Council for Sustainable Development (June 2005) ⁴²	KULTU Committee (June 2005) & Endorsement by the renewed Finnish Sustainable Development Strategy (Dec. 2006)	Government of France (November 2006)	UK Government (March 2005)
Implementation, monitoring and revision					
Main responsibility for / coordination of implementation	Federal Ministry of Agriculture, Forestry, Environment and Water Management & The Committee for a Sustainable Austria	Ministry of Environment & key ministries relevant to the defined priority areas of implementation	Ministry of Environment & The Ministry of Trade and Industry	Inter-ministerial Committee for Sustainable Development & The new Ministry of Ecology, Sustainable Development and Spatial Planning	DEFRA's Sustainable Development Unit (SDU) ⁴³ & the UK Sustainable Development Commission
Monitoring and reporting	Annual progress reports and indicator reports.	To be defined by the action plans, which are to be developed for the priority areas ⁴⁴	An informal network from different ministries follows the implementation	Annual evaluation reports	Annual The UK Sustainable Development Commission is responsible for issuing progress reports

³⁹ The preparation of the 2003 strategy and the Environment Charter adopted in 2005 was conducted with extensive public involvement.

⁴⁰ It was the revision of existing strategy (the initial NSDS was launched in 2003).

⁴¹ It was the revision of existing strategy (the initial NSDS was launched in 1999).

⁴² The Framework will also be endorsed by the updated NSDS, which is expected to be approved by end of November 2007.

⁴³ The implementation of SCP-related action is the joint competence of DEFRA and DTI.

	Austria	Czech Republic	Finland	France	United Kingdom³⁷
	External evaluation (2005)				
Indicators ⁴⁵	General set of sustainable development indicators	Two general areas of SCP indicators are described, however, no concrete indicators are defined	No indicators are defined in the Programme The NSDS defines a general set of sustainable development indicators	A set of SCP indicators, embedded into sustainable development indicators	A set of SCP indicators, embedded into sustainable development indicators
Implementation period / revision	Not specified / a revised strategy will be adopted in 2008	Until 2010 / a mid-term revision is planned	Until 2010 ⁴⁶ / in 2010	Until 2008 / a revised strategy will be adopted in 2008	Not specified

Annex II – Objective framework of national strategies

⁴⁴ It is also covered in the annual progress reports on sustainable development. Furthermore, the WGSCP prepares reports on its activity and achieved results.

⁴⁵ See more details in Annex V.

⁴⁶ However, some of the actions will not start before the end of 2008 and will continue after 2010.

Austria	Czech Republic	Finland	France	United Kingdom
<p>Specific objectives</p> <p>Altogether 20 specific objectives have been formulated, the following 11 of which are of high relevance to SCP:</p> <ul style="list-style-type: none"> → A sustainable lifestyle; → Solutions through education and research → Innovative structures to promote competitiveness; → A new understanding of business and administration; → Correct prices for resources and energy; → Successful management through eco-efficiency; → Promoting sustainable products and services; → Responsible use of land and regional development → Shaping sustainable mobility; → Optimising the transport systems; → Fighting Poverty, Creating a Social and Economic Balance 	<p>Overall objectives</p> <p>Absolute decoupling of environmental degradation from economic growth and continuous improvement in the quality of life.</p> <p>Specific, horizontal objectives</p> <ul style="list-style-type: none"> I Reducing the material and energy intensity within the systems of production and consumption (by increasing their efficiency). II Optimising the systems of production and consumption (substitution of inputs, processes, products, services and requirements) as follows: <ul style="list-style-type: none"> - changed consumption; - responsible consumption; - adequate consumption. 	<p>Overall objectives</p> <ul style="list-style-type: none"> → Improvement of the efficiency in the usage of materials and energy through all stages of product life cycles; → Promotion of environmental education; and → The development and adoption of environmental technologies <p>Specific objectives</p> <p>Numerous specific objectives have been formulated under the 11 main fields of action defined by the Programme.</p>	<p>Overall objective</p> <p>To gradually turn all production and consumption patterns sustainable.</p> <p>Specific objectives</p> <ul style="list-style-type: none"> → Stimulate all companies to make efforts towards sustainable development; → Better inform the consumers and improve environmental and social performance of products and ways of production; → Ensure that development in agriculture and fisheries follows a sustainable path; → Increase the share of sustainable public procurement; → To stimulate innovation and the development of businesses active in the field of sustainable development; 	<p>Overall objectives</p> <ul style="list-style-type: none"> → Better products and services, which reduce the environmental impacts from the use of energy, re-sources, or hazardous substances; → Cleaner, more efficient production processes, which strengthen competitiveness, and → Shifts in consumption towards goods and services with lower impacts

Annex III – Overview of main directions of required action in the national strategies

Austria ⁴⁷	Czech Republic ⁴⁸	Finland ⁴⁹	France ⁵⁰	United Kingdom
<p>1) <u>Quality of life in Austria</u> → A sustainable lifestyle; → Solutions through education and research</p> <p>2) <u>Austria as a dynamic business location</u> → Innovative structures to promote competitiveness; → A new understanding of business and administration; → Correct prices for resources and energy; → Successful management through eco-efficiency; → Promoting sustainable products and services;</p> <p>3) <u>Living spaces in Austria</u> → Shaping sustainable mobility; → Optimising the transport systems;</p> <p>4) <u>Austria's responsibility</u> → Fighting Poverty, Creating a Social and Economic Balance</p>	<p>1) Education and transfer of information;</p> <p>2) Integration of policies, strategies and programmes;</p> <p>3) Eco-efficiency throughout the life-cycle;</p> <p>4) Local SCP initiatives;</p> <p>5) Sustainable public administration – green public procurement;</p> <p>6) Market conditions;</p>	<p>1) Forms of production that save materials and energy;</p> <p>2) Fewer material goods, but a higher quality of life;</p> <p>3) Building pleasant and functional communities;</p> <p>4) Improving the quality of construction;</p> <p>5) Getting transport on the right track;</p> <p>6) Sustainable food production from the farm to the Table;</p> <p>7) Promoting well-being in workplaces and leisure activities;</p> <p>8) Setting an example in the public sector;</p> <p>9) Increasing sustainability through new technologies and innovations;</p> <p>10) Values, knowledge and skills;</p> <p>11) An active international role for Finland.</p>	<p>1) Economic activity, companies and consumers;</p> <p>2) The citizen, a player in sustainable development</p> <p>3) Agriculture and fisheries;</p> <p>4) Towards an exemplary State, international action;</p> <p>5)</p>	<p>I) Taking a holistic approach that considers whole life-cycles of products and services;</p> <p>II) Working with the grain of markets and identifying and tackling market failures;</p> <p>III) Integrating SCP thinking and objectives in all policy development and implementation;</p> <p>IV) Using a well-designed package of policy measures and following the principles of better regulation;</p> <p>V) Stimulating innovation in all its facets⁵¹</p> <p>1) Sustainable Products – cutting out problems at source;</p> <p>2) Sustainable Production – greater efficiency and value with less resource use, pollution and waste;</p> <p>3) Sustainable Consumption;</p> <p>4) Leading by example in what we do;</p> <p>5) Catalysing change within the economy and key sectors;</p> <p>6) Sustainable Waste Management;</p> <p>7) Evidence and indicators⁵²;</p>

⁴⁷ The four main fields of action and the corresponding nine SCP-related guiding objectives defined in *Building our Future*

⁴⁸ The six 'strategic priorities' of the *Czech SCP Framework*

⁴⁹ The eleven main fields of action defined by *Getting More and Better from Less*

⁵⁰ The five action programmes, which have been associated with SCP in *Acting in the European Dynamic*

⁵¹ The five main guiding principles defined by *Changing Patterns*

⁵² The seven main areas of action defined in *One Planet Economy*

Annex IV – Overview of the targets set by the national strategies

	Targets
Austria	<p>Eco-efficiency</p> <ul style="list-style-type: none"> → On the short term the resource throughput should be stabilised, on the long term increase the productivity of resources by factor 4 by the year 2015; → Improvement of energy intensity by 1,6 %/year; <p>Food and drink</p> <ul style="list-style-type: none"> → To increase the organically managed farming surfaces by 50% within a period of 5 years; <p>Housing</p> <ul style="list-style-type: none"> → reduction in the increase of permanently sealed surfaces to a maximum of one tenth of the current growth rate should be achieved by the year 2010; <p>Mobility</p> <ul style="list-style-type: none"> → Decoupling of growth of traffic from economic growth; → Improvements in energy-efficiency and energy saving must halt the rising trend in energy use within a decade;
The Czech Republic	<p>Eco-efficiency⁵³</p> <ul style="list-style-type: none"> → 3,7 PJ per year average energy savings in the manufacturing industry; <p>Food and drink⁵⁴</p> <ul style="list-style-type: none"> → Ca. 10% of agricultural land in the Czech Republic must be farmed ecologically or in transition to eco-farming till the end of 2010; → Raise awareness about eco-agriculture: in the year 2010, min. 80 % of consumers know the brand „BIO“, know the differences between bio-products and conventional products and can define the principles of eco-agriculture; → Support development of the market with organic food and increasing the proportion of Czech organic food within it; → By the end of 2010 1% of the total food consumption in the Czech Republic is organic food; → Min. 25 % of the Czech citizens buy organic food regularly (at least once a week); → By the end of 2010 at least 60 % of the total organic food consumption is produced domestically; → By the end of 2010 min. 80 % of consumers know organic food and min. 25 % of consumers buy them regularly;

⁵³ Targets set in the 'National programme for the energy management and the use of renewable sources of energy for 2006 – 2009'

⁵⁴ Targets set in the 'Action Plan on Eco-agriculture and Organic Food'

	<p>Housing⁵⁵</p> <ul style="list-style-type: none"> → Average energy savings: 5,3 PJ per year in the housing sector; <p>Mobility⁵⁶</p> <ul style="list-style-type: none"> → Stabilization of greenhouse gas emissions derived from transport classified as fossil fuel sources and sources based on biomass to 2010 and reduction by 5% to 2013; → Reduction in emissions of sulphur dioxide from transport by 3% to 2010 and by 5% to 2013; and → Reduction in nitrogen oxide emissions from transport by at least 10% to 2010;
<p>Finland</p>	<p>Eco-efficiency</p> <ul style="list-style-type: none"> → Improvements in energy-efficiency and energy saving must halt the rising trend in energy use within a decade; → Systems designed to reduce material and energy consumption (such as the WWF's Green Office system) should be set up by 2015 in all workplaces with more than 50 staff; <p>Setting the example in the public sector</p> <ul style="list-style-type: none"> → The proportion of environmentally favourable public procurements must increase annually; → All ministries and the municipal sector should by 2010 draft procurement strategies that stress the importance of sustainable development; <p>Food and drink</p> <ul style="list-style-type: none"> → Some 10% of arable land must be farmed organically by 2010, and 25% by 2025. Organic ingredients must be used more widely in processed foods, and organically produced choices must be available in almost all product areas; → The proportions of organic and locally produced foodstuffs used in the canteens of public sector organisations and firms must be increased by 10-15% a year; <p>Mobility</p> <ul style="list-style-type: none"> → Traffic-related environmental problems are reduced, ensuring that CO₂ emissions from traffic in Finland in 2010 do not exceed 1990-levels, and that traffic-related emissions of both nitrogen oxides (NO_x) and volatile organic compounds (VOCs, including hydrocarbons HC(s)) are reduced to 25 % of their 1990-levels by 2010;

⁵⁵ Targets set in the 'National programme for the energy management and the use of renewable sources of energy for 2006 – 2009'

⁵⁶ Targets set in the 'Czech Transport policy for 2005 – 2013'

<p>France</p>	<p>Eco-efficiency</p> <ul style="list-style-type: none"> → Reduced energy intensity by 2 % per year by 2015 and 2.5 % per year by 2030 (referred, law of 13th of July 2005); → 54 TWh of energy savings by energy providers between 1 July 2006 and 30 June 2009 (referred, decree of 23rd May 2006); <p>Setting the example in the public sector</p> <ul style="list-style-type: none"> → To reduce CO2 emissions in the public sector by 20% by 2008 from transport activities (10%) and related to buildings (10%); → 20 % savings in water, 10% reduction of energy consumption, recycling rate of 60 % for white paper; → 20 % of new vehicle fleet in the form of clean vehicles (emergency vehicles excluded) of which, if possible 5% electrical vehicles; → 20 % of new state construction works must conform to the procedure of 'high environmental quality' (HQE) or the high energy performance label (HPE) or to a similar reference, and as from 2008 this must be 50 %; → All state purchasing of wood should be certified by 2010 (referred, circular of the prime minister dated the 5th of April 2005); → For administration's and public companies' vehicles use one third of biofuels by 2007 (referred); <p>Food and drink</p> <ul style="list-style-type: none"> → 5% of farms are qualified according to ago-environmental management schemes by 2008 <p>Housing</p> <ul style="list-style-type: none"> → The use of a minimum level of wood in housing has been set (referred); → The proportion of heat produced from renewable energy should rise to 50% by 2010 (referred, law of 13th of July 2005); <p>Mobility</p> <ul style="list-style-type: none"> → Become a leader in the market for 'clean and energy-efficient vehicles' by 2010-2013; → 1800 pumps delivering of E85 are announced by 2008; → Share of biofuels is to be increased to 5,75 % by 2008 and to 10 % by 2015 (beyond EU targets); <p>Waste</p> <ul style="list-style-type: none"> → Reduce the quantity of household waste sent for landfills to 250 kg/year per capita by 2010 and then to 200 by 2015 (referred, Waste Prevention Plan); → 100% of bags are made from biodegradable plastics by 2010;
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United Kingdom ⁵⁷	<p>Eco-efficiency</p> <ul style="list-style-type: none"> → Demonstrate further progress by 2008 on the Government's long-term objective of raising the rate of UK productivity growth over the economic cycle, improving competitiveness and narrowing the gap with our major industrial competitors (referred DTI PSA 1)⁵⁸ <p>Food and drink</p> <ul style="list-style-type: none"> → halting the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole (referred DH PSA 3)⁵⁹ <p>Housing</p> <ul style="list-style-type: none"> → improve the average energy efficiency of the domestic housing stock by 20% compared with 2000 (referred 'Community Action 2020 – Together We Can') → Eliminate fuel poverty in vulnerable households in England by 2010 (referred, DEFFRA PSA 7)⁶⁰ <p>Mobility</p> <ul style="list-style-type: none"> → By 2010, increase the use of public transport (bus and light rail) by more than 12% in England compared with 2000 levels, with growth in every region (referred, DfT PSA 3)⁶¹ <p>Waste</p> <ul style="list-style-type: none"> → Enable at least 25% of household waste to be recycled or composted by 2005-06, with further improvements by 2008 (referred, DEFFRA PSA 6)
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⁵⁷ Most of the examples referred in the strategy are related Public Service Agreements (PSAs). Only the most relevant ones are listed.

⁵⁸ Department of Trade and Industry (DTI)

⁵⁹ Department of Health (DH)

⁶⁰ Department for Environment, Food and Rural Affairs (DEFFRA)

⁶¹ Department for Transport (DfT)

Annex V – Use of SCP indicators for the monitoring of national strategies

	Indicators for SCP in the monitoring system
Austria⁶²	<ul style="list-style-type: none"> - Material input (DMI); - Energy consumption absolute and relative to GDP; - Share of renewable energy sources in total primary energy consumption; - Net import tangent of energy supply; - Waste amounts; - Number of products with eco-label; - Number of EMAS and ISO 14001 sites; - Share of bio-farming on agriculturally used area - Share of sealed area - Length of high order roads and railway tracks - Traffic kilometres - External costs of transport; - Emission of hazardous substances from traffic - Share of alternative motor fuels; - Energy efficiency of means of transport (fleet consumption); - Access to mobility (availability of public transport); - Number of traffic deaths and casualties;
The Czech Republic	<p>The following two indicator clusters are defined for the monitoring of the strategy:</p> <ul style="list-style-type: none"> - decline in material and energy consumption and in the generation of waste, furthermore pollution per unit of production or service; - tax revenues in the private sector or savings of public expenditure in the public sector achieved through reduction of production costs (lower material and energy requirements).

⁶² This is the authors' own selection of indicators which seem to be of highest relevance for SCP. The indicator report of the NSDS in total lists 48 types of indicators.

Finland ⁶³	<ul style="list-style-type: none"> - Access to mobility (availability of public transport); - Environmental Sustainability Index; - Human Development Index; - Greenhouse gas emissions; - Total energy consumption; - Use of renewable energy sources; - Environmental loading in relation to economic growth; - Energy and natural resource consumption in relation to economic growth; - The development in use of Finland's natural resources; - Proportion of household expenditure on services; - Relative change in population across different regional types in continental Finland; - Development of public and passenger car transport;
France	<p><u>Economic activities, enterprises and consumers</u></p> <ul style="list-style-type: none"> - Number of companies' annual management reports including social and environmental information; - Number of French enterprises having a national or European eco-label; <p><u>Agriculture and fishing</u></p> <ul style="list-style-type: none"> - Total area of agricultural land certified or committed under schemes related to sustainable agriculture practices; - State of fishing resources exploited by French ships; <p><u>Exemplary state, research and innovation</u></p> <ul style="list-style-type: none"> - Number of staff given training on sustainable development; - Number and size of subsidy projects sponsored by the National Research Agency on the topic of sustainable development; <p><u>International Action</u></p> <ul style="list-style-type: none"> - Size of renegotiated debt; - Number of HIV-infected people who have been treated; <p><u>The citizen, a player in sustainable development</u></p> <ul style="list-style-type: none"> - Rate of people declaring having heard about sustainable development - Rate of school academic plans dedicated to Environmental Education for Sustainable Development (EESD)

⁶³ This is the authors' own selection of indicators which seem to be of highest relevance for SCP. The indicator report of the NSDS in total lists 34 indicators.

United Kingdom	
	<p><u>Decoupling indicators</u></p> <ul style="list-style-type: none"> - Greenhouse gas emissions (Kyoto target and CO2 emissions); - Carbon dioxide emissions by end user (CO2 emissions from industry, domestic, transport sectors - excluding international aviation and shipping); - Aviation and shipping emissions (greenhouse gases from UK-based international aviation and shipping fuel bunkers); - Household energy use (domestic CO2 emissions, domestic energy consumption and household spending); - Road transport (CO2, NOx, PM10 emissions from road transport and Gross Domestic Product); - Private vehicles (CO2 emissions, car-kilometres and household spending); - Road freight (Heavy Goods Vehicle (HGV) CO2 emissions, kilometres, tonnes and Gross Domestic Product); - Manufacturing sector (CO2, NOx, SO2, PM10, emissions and output); - Agriculture sector (fertiliser input, farmland bird population, ammonia and methane emissions and output); - Service sector (CO2, NOx emissions and output); - Public sector (CO2, NOx emissions and output); - Emissions of air pollutants (NH3, NOx, NOx, PM10 and SO2 emissions and GDP); - River quality (rivers of good biological quality and rivers of good chemical quality); <p><u>Resource use</u></p> <ul style="list-style-type: none"> - Resource use (Domestic Material Consumption and Gross Domestic Product, and Construction output and extraction of construction materials); - Fish Stocks (sustainability of fish stocks around the UK); - Water resource use (total abstractions from non-tidal surface and ground water, leakage losses and Gross Domestic Product); - Domestic water consumption (litres per person per day); - Land recycling (new dwellings built on previously developed land or through conversions and all new development on previously developed land) <p><u>Waste</u></p> <ul style="list-style-type: none"> - Waste (waste arisings by sector and disposal); - Household waste per person (arisings and recycled or composted); <p><u>Other contextual indicators</u></p> <ul style="list-style-type: none"> - Economic output (Gross Domestic Product); - Productivity (UK output per worker); - Investment (total investment and social investment relative to GDP); - Demography (population and population of working age); - Households and dwelling (households, single person households and dwelling stock);

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