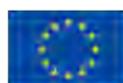
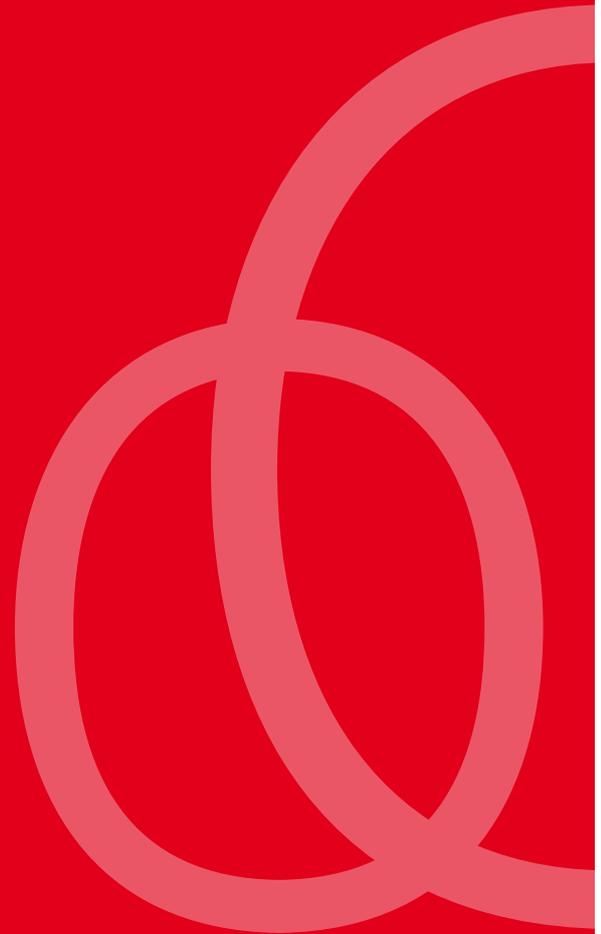




Sustainable Production  
through Innovation in SMEs

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# SCP in the Baltic Sea Region– Supporting SCP and eco-innovation in SMEs



Project part-financed by the  
European Union (European  
Regional Development Fund)



**Baltic Sea Region**  
Programme 2007–2013

## » Imprint

### » Imprint

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Federal Ministry for the Environment, Nature Protection and Nuclear Safety (BMU) Germany

#### FUNDED BY:

EU Baltic Sea Region Programme 2007–2013

#### DESIGN:

design\_idee\_erfurt GbR, Erfurt

#### PRINTING:

BMU

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# » Table of Contents

|   |           |
|---|-----------|
| <b>Executive Summary</b>  | <b>4</b>  |
| <hr/>   |           |
| <b>1 Introduction</b>   | <b>6</b>  |
| 1.1 Eco-innovation for SCP in SME   | 6         |
| <hr/>   |           |
| <b>2 Regional Initiatives in the BSR Region</b>                           | <b>10</b> |
| 2.1 EU BSR Strategy   | 10        |
| 2.2 Baltic 21 Action Programmes   | 12        |
| 2.3 EU SCP Action Plan  | 13        |
| 2.4 Marrakech Process   | 14        |
| <hr/>   |           |
| <b>3 SCP in the Project Partner Countries</b>                             | <b>16</b> |
| 3.1 Denmark   | 18        |
| 3.2 Estonia   | 20        |
| 3.3 Finland   | 21        |
| 3.4 Germany   | 24        |
| 3.5 Lithuania   | 25        |
| 3.6 Poland  | 27        |
| 3.7 Russia  | 30        |
| 3.8 Sweden  | 32        |
| 3.9 Summary of the country findings                                       | 33        |
| 3.10 The relationship between national strategies and regional activities | 35        |
| <hr/>   |           |
| <b>4 Recommendations</b>  | <b>36</b> |
| 4.1 Recommended actions for the Baltic 21 Strategy 2010–2015              | 36        |
| 4.2 Recommendations for National Governments                              | 37        |

## » Executive Summary

This paper is a part of the project SPIN, which is aimed at identifying and testing appropriate incentives for small and medium sized enterprises to apply eco-innovations and increase the exploitation of the innovation potential. The SPIN Project is labelled a Baltic 21 Lighthouse Project and it is financed by the EU Baltic Sea Region Programme 2007–2013. The SPIN project is also highlighted as a flagship project in the EU Strategy for the Baltic Sea Region. The German Federal Environment Agency is the Lead Partner of the project and the German Ministry of Environment (BMU) is a co-financer and partner in SPIN.

This paper assesses regional and national initiatives and their support for advancing eco-innovation for sustainable consumption and production (SCP) in SME. Unsustainable consumption and production patterns are root causes of climate change and other forms of environmental degradation and changing these patterns is a key response to achieving sustainable development. Eco-innovation in SME is an important vehicle to advance SCP. Eco-innovation addresses the whole life-cycle of a product and shouldn't be understood as merely technical solutions to specific problems in the production process. In other words, eco-innovation can also support behavioural and lifestyle changes.

The regional initiatives assessed are EU BSR strategy and the Baltic 21 action programmes. It was found out that a key motivator behind the EU BSR strategy has been the deteriorating state of the Baltic Sea. Following from this fact, the focus of the environmental aspect of the strategy is on pollution control and ecosystem management issues and not on SCP. The work of Baltic 21 is focused on seven economic sectors agriculture, energy, fishery, forestry, industry, tourism and transport as well as on spatial planning and education. Each of these nine sectors has developed its own action programme on how to support sustainable development in the BSR. Even though the programmes haven't taken an SCP approach as such, many of the actions listed under the sectors are related to SCP.

In addition to the regional initiatives, the SCP policy frameworks of SPIN project partner countries – Denmark, Estonia, Finland, Germany, Lithuania, Poland and Sweden – and Russia were assessed. The assessment concentrated on policies aimed at raw material use, leaner and cleaner production, better products and smarter consumption. From the findings of the country analysis it can be concluded that the countries mostly address the same themes most actively. For example, in all the countries, some strategies related to leaner and cleaner production are in place, but in the field of better products, only few policy instruments and overall strategies were found. It was also found out that most countries take quite a traditional view on eco-innovation, defining it as only technological innovation.

Based on the regional initiatives and country analysis, recommendations for national governments and Baltic 21 were made. The recommendations for Baltic 21 include: 1) developing training and tools for SMEs, 2) supporting CSR in SME, 3) using existing networks to disseminate information on eco-innovation for SCP to SMEs in the region, 4) creating demand for sustainable innovations through creative instruments, 5) demonstrating the role of retailers in creating demand for eco-innovation, 6) demonstrating the potential of eco-innovation for sustainable housing, 7) giving input to the revision of the EU SCP action plan 8) Becoming a regional platform for implementation of Marrakech process and 9) Making BSR a global leader in eco-design. The recommendations for national governments are 1) creating a helpdesk on eco-innovation for start-up companies, 2) financing eco-innovation in SME, 3) taking sustainable business model innovation seriously, 4) integrating SCP knowledge in the work of institutions working with SMEs, 5) strengthening GPP activities, 6) encouraging eco-innovation through local policy frameworks and 7) Education for sustainable entrepreneurship

## Baltic Sea Region Programme area 2007 – 2013



- *EU Member States*
- *non-EU States*

# » 1 Introduction

Unsustainable consumption and production patterns are root causes of climate change and other forms of environmental degradation. Changing these patterns is a key response to achieving sustainable development in the national, regional and global level. Sustainable consumption and production (SCP) takes a holistic view on our lifestyles, structure of economies and methods of production. SCP integrates separate environmental problems in to the overall framework of consumption and production patterns and identifies solutions to achieve changes to these patterns to decrease our environmental impacts.

Small and medium sized enterprises (SMEs) are important actors in changing unsustainable patterns of consumption and production as they constitute a large share of production worldwide. For SME, eco-innovations in the field of SCP create competitiveness advantages and new business opportunities that at the same time reduce negative environmental impacts. In this process, public policy has an important role as an enabler and facilitator of eco-innovation.

This paper is a part of the project SPIN, which is aimed at identifying and testing appropriate incentives for SMEs to apply eco-innovations and increase the exploitation of the innovation potential. The SPIN Project is labelled a Baltic 21 Lighthouse Project and it is financed by the EU Baltic Sea Region Programme 2007–2013. The SPIN project is also highlighted as a flagship project in the EU Strategy for the Baltic Sea Region. The German Federal Environment Agency is the Lead Partner of the project and the German Ministry of Environment (BMU) is a co-financer and partner in SPIN. Based on the project results, project partners will compile information on SME needs, barriers and incentives for the implementation of eco-innovations, which will feed into the development of a strategy to promote eco-innovations among SMEs (see page 9 for more information on SPIN).

The objective of this background paper is to assess current regional and national initiatives on SCP in BSR and give recommendations on how they can be strengthened. A particular focus is placed on assessing how the existing policy landscape supports the role of SMEs and eco-innovation in achieving more sustainable production and consumption patterns. The recommendations in this paper will contribute both to the SPIN project and to the development of the Baltic 21 Strategy 2010 to 2015.

## 1.1 Eco-innovation for SCP in SME

A widely used definition states that eco-innovation is "the creation of novel and competitively priced goods, processes, systems, services, and procedures designed to satisfy human needs and provide a better quality of life for everyone with a whole-life-cycle minimal use of natural resources (materials including energy and surface area) per unit output, and a minimal release of toxic substances."<sup>1</sup>

According to a definition by EU commission, SMEs are enterprises that have fewer than 250 employees and a business volume of up to Euro 50 million. Micro, small and medium-sized enterprises are socially and economically important, since they represent 99 % of all enterprises in the EU. They provide around 65 million jobs and contribute to entrepreneurship and innovation. Source: [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm)

This definition is comprehensive compared to some other definitions in use because it gives emphasises to the whole life-cycle of a product and isn't confined to merely technical solutions to specific problems in the production process. In other words, eco-innovation can also involve behavioural and lifestyle changes and not just technological innovation.

Eco-innovation can be divided into *process* innovation, *product* innovation and *system* innovation<sup>2</sup>. A process innovation is the implementation of a new or significantly improved production or delivery method. In *product* innovation the whole product, not only the production process, is changed or significantly improved so that its overall impact on the environment is minimised. *System* innovation includes radical technologies that alter the market conditions (such as hydrogen and fuel cells) as well as all types of system changes such as societal or behavioural changes. This can mean for example the application of new business models relying on providing services and solutions instead of selling products. System innovation can also be called innovation in business models. This kind of innovation poses great opportunities for reduced consumption of

1 Sectoral Innovation Watch Eco-Innovation expert panel (2006). Executive Summary of the First Session of the Eco- Innovation Panel. URL: <http://archive.europe-innova.eu/servlet/Doc?cid=5950&lg=EN>.

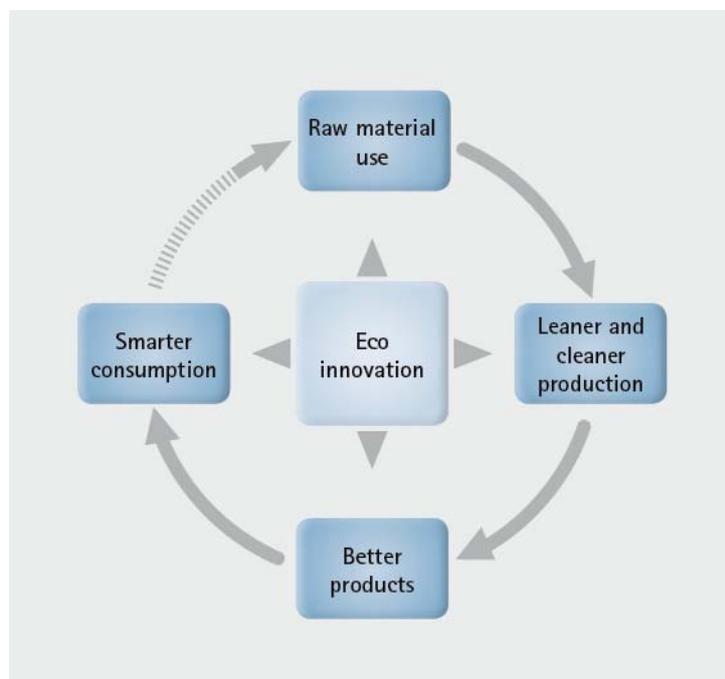
2 ITRE (2008). Eco-innovation - putting the EU on the path to a resource and energy efficient economy.

energy and raw materials, but according to a recent study by the European Commission, policy makers are not yet taking these possibilities seriously<sup>3</sup>.

The other concept central to this background paper is sustainable consumption and production (SCP). SCP is an attempt to reconcile the increased demand for goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, in order not to jeopardize the needs of future generations. In SCP, the root causes of environmental degradation are viewed through the lens of the ways that we produce and consume products and services, instead of focusing on individual environmental problems.

Sustainable production (SP) includes innovation in the design, development and reengineering of products and/or production processes towards meeting the aim mentioned above. Sustainable consumption (SC) refers to adopting an alternative way of consuming that result in reduced material and energy use. In developing countries, SC has a bit different focus. Because there are often insufficient resources available or accessible in developing countries to meet basic needs, SC implies making more efficient and less polluting use of resources, thereby expanding the resource base to meet human needs.

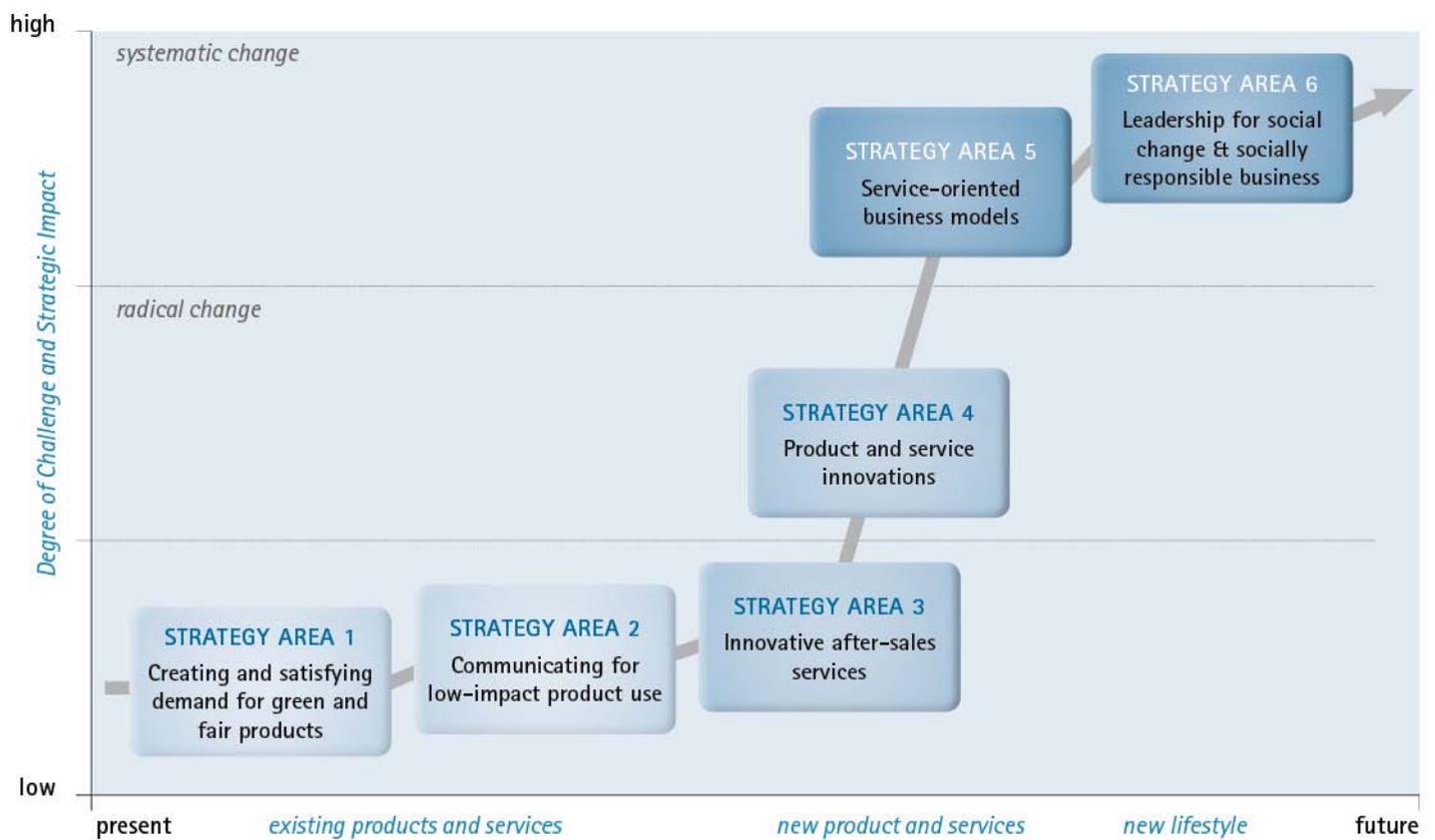
Sustainable production and eco-innovation are closely linked concepts. The difference is that most commonly SP refers only to the production process of a company, as eco-innovation entails innovation in other life-cycle stages as well, as discussed above (see picture 1. The life-cycle stages of raw material use, leaner and cleaner production, better products and smarter consumption are explained in more detail in chapter 3). Thus, eco-innovation combines both sustainable production and consumption which makes it an important vehicle for achieving SCP.



Picture 1. Eco-innovation for SCP.

The relationship between SCP and SME is two-way. Eco-innovation for SCP is helpful for SME to foster their competitiveness and sustainability through innovative products and services, cost savings, market expansion and price premiums. On the other hand, SME are in a central role in advancing sustainable consumption and production patterns. SME can have a huge impact by greening their production processes, but the focus shouldn't be confined to the in-house operations of SMEs. SME can also adopt and develop eco-innovation aimed at the consumption phase and thus support sustainable consumer choice and sustainable lifestyles, as expressed in picture 2. The picture provides an overview of strategy areas for sustainable consumption. The strategies' focus moves from existing to new (more sustainable) products and services. Finally, new lifestyles are considered. With raising number, the degree of challenge and strategic impact on the business model increase.

<sup>3</sup> EU Commission (2008). Promoting Innovative Business Models with Environmental Benefits. URL: [http://ec.europa.eu/environment/enveco/innovation\\_technology/pdf/nbm\\_report.pdf](http://ec.europa.eu/environment/enveco/innovation_technology/pdf/nbm_report.pdf)



Picture 2. Strategy areas for sustainable consumption (CSCP 2009).

Due to the similarities between the two concepts – SCP and eco-innovation – the barriers and drivers for them are also similar. Barriers and drivers can stem from the supply side, demand side or from the institutional and political set-up. The general sources of barriers and drivers are summarised in the following table.

The demand side refers to the actions of consumers and their demand for sustainable solutions. The drivers and barriers in this category result from individual choice of consumers. Consumer choice is a very complex question, as the decisions of consumers are shaped by habits, routines, identity and social norms<sup>5</sup>.

Table 1. Sources of potential barriers and drivers for eco-innovation <sup>4</sup>

|  |   |
|--|---|
| Supply side                            | <ul style="list-style-type: none"> <li>&gt; Technological and management capabilities</li> <li>&gt; Appropriation problem and market characteristics</li> <li>&gt; Path dependencies (inefficient production systems, knowledge accumulation)</li> </ul>  |
| Demand side                            | <ul style="list-style-type: none"> <li>&gt; (Expected) market demand (demand pull hypothesis): state, consumers and firms</li> <li>&gt; Social awareness of the need for new products, environmental consciousness and preference for system innovation</li> </ul>  |
| Institutional and political influences | <ul style="list-style-type: none"> <li>&gt; Environmental policy (incentive based instruments or regulatory approaches).</li> <li>&gt; Fiscal systems (pricing of eco-innovative goods and services)</li> <li>&gt; Institutional structure: e.g. political opportunities of environmentally oriented groups, organization of information flow, existence of innovation networks</li> <li>&gt; International agreements</li> </ul> |

In the supply side the drivers and barriers include issues such as high costs, perceived economic risks and lack of capacity. Eco-innovation might be perceived as a risky business, because market conditions are uncertain and it is not definite that customers will be interested in the product or service. Lack of management capabilities has to do with the fact that SMEs sometimes see environmental issues as something that will only add to costs. They find it difficult to access information about SCP strategies and eco-innovation, relevant tools, and information about best practices. Therefore, there is a need to present SCP and eco-innovation as a business opportunity to make it attractive for SMEs where "survival" is the key issue.

The institutional and political aspects include the policy frameworks in place. This includes things such as are public authorities taking action to support the market of sustainable products through e.g. product standards and green public procurement. Institutional aspects also include existing funding possibilities for sustainable production and eco-innovation. The lack of funding, or the lack of information about funding possibilities, is quite often a constraint especially for SME.

<sup>4</sup> Picture adapted from Horbach (2005). Referred to in Kuhdnt et al. (2008). Eco-innovation – Current status and opportunities. In Eco-innovation – putting the EU on the path to a resource and energy efficient economy (2008). IP/A/ITRE/ST/2008-06 & 14.

<sup>5</sup> See e.g. the following overview: Policy studies Institute et al (2009). Designing policy to influence consumers. URL: <http://ec.europa.eu/environment/enveco/pdf/RealWorldConsumerBehaviour.pdf>

## » 2 Regional Initiatives in the BSR Region

This chapter takes a look at how the EU BSR strategy and the Baltic 21 action programmes address SCP and eco-innovation. The EU SCP action plan and the Marrakech process are also briefly presented.

### 2.1 EU BSR Strategy

The EU Baltic Sea Region (BSR) Strategy<sup>6</sup> is aimed at creating more intensive cooperation between the BSR countries and shaping the region into a regional cooperation model for the whole EU. The strategy is accompanied with an action plan that describes a first set of 15 priority areas to be addressed and lists flagship projects under each priority area. The European commission launched the strategy and action plan in June 2009 and the strategy was adopted by the European Council in October 2009. A review of the implementation of the action plan is foreseen in 2011. The implementation of the strategy is financed from different EU funds in the area including the Baltic Sea Region Programme.

The strategy recognises four key challenges for the region: 1) to enable a sustainable environment, 2) to enhance the region's prosperity, 3) to increase accessibility and attractiveness and 4) to ensure safety and security in the region. From the perspective of eco-innovation, the most interesting topics among these four are the first two. This chapter first takes a look at the 'to enable sustainable environment' topic and after that 'to enhance the region's prosperity' topic.

A key motivator behind the strategy has been the deteriorating state of the Baltic Sea. Following from this fact, the focus of the environmental aspect of the strategy is on pollution control and ecosystem management issues. Even

though unsustainable consumption and production patterns are the drivers for the deteriorating state of the Baltic Sea, SCP issues are not in the centre of the strategy. The more detailed themes under the sustainable environment-topic are the following: 1) To reduce nutrient inputs to the sea to acceptable levels; 2) To preserve natural zones and biodiversity including fisheries; 3) To reduce the use and impact of hazardous substances; 4) To become a model region for clean shipping and 5) To mitigate and adapt to climate change.

Although SCP is not on the central stage of the strategy, under the fifth theme concerning climate change, some SCP aspects can be found. It is stated that the region has the potential to become a model region in the field of climate change. The cooperative actions listed in this section include 'Promoting the whole Baltic Sea region as a green region' and 'promoting efficient heating systems'. The flagship projects include implementing EU-Russia energy efficiency initiative and creating a network of sustainable cities and villages to exchange knowledge and good practices on environmentally friendly city management practices. Cities and villages are important actors in advancing SCP, because their decisions directly affect the framework where SMEs and other companies and private consumers make their decisions.

Eco-innovation or SCP in SMEs is not mentioned in the strategy document itself, even though it highlights the importance of innovation and supporting SMEs in general. In the more detailed action plan, these topics are addressed, mostly under the 'enhancing region's prosperity' -theme. The most relevant points (flagship projects or strategic actions listed in the strategy) are summarised in table 2.

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<sup>6</sup> Documents can be found in [http://eu.baltic.net/Baltic\\_Sea\\_Region\\_Strategy.7428.html?](http://eu.baltic.net/Baltic_Sea_Region_Strategy.7428.html?)

| To Enhance the Region's prosperity                               |  |  |  |
|--|--|--|--|
| Remove hindrances to the internal market in BSR                  | Exploit the full potential of the region in research and innovation  | Implementing the small business act: To promote entrepreneurship, strengthen SMEs and increase efficient use of human resources  | To reinforce sustainable agriculture, forestry and fishing   |
| Eco-innovation or SCP not explicitly mentioned under this topic. | Flagship project: Developing a common Baltic Sea Region strategy to promote services innovation. The strategy would cover also the field of <b>eco-innovation</b> .  | Flagship project: Develop deeper cooperation on environmental technology to create new business opportunities. To strengthen SMEs in the environmental technology sector a stronger critical mass in knowledge and technology has to be created.                                 | flagship project: Sustainable rural development projects must be developed that bring together people in the region to develop <b>sustainable rural tourism</b> , agriculture, forestry and aquaculture. |
|  | Flagship project: Developing a regional foresight programme, which would help identifying desirable directions of cooperation in R&D and innovation. The programme would entail mapping innovation potential on major themes including climate and renewable energies. | Flagship project: Implement the project Sustainable Production through Innovation in Small and Medium sized Enterprises. (This is the <b>SPIN project</b> , which this background paper is part of.)   |  |
|  | Strategic action: Jointly developing entrepreneurship in offshore renewable energy, particularly wind, to make the Baltic Sea Region a lead region in this field. Pioneer work and the development of innovative technologies have been done by SMEs.                  | flagship projects: Make the Baltic Sea an Eco-efficient region e.g. by establishing a network on green public procurement where good practice and experience are exchanged. (The <b>Eco-region project</b> , see page 9, implemented by Baltic 21 is a part of this initiative.) |  |

Table 2. Actions aimed at eco-innovation and SME in the EU BSR strategy.

## 2.2 Baltic 21 Action Programmes

The work of Baltic 21 is focused on seven economic sectors agriculture, energy, fishery, forestry, industry, tourism and transport as well as on spatial planning and education. Each of these nine sectors has developed its own action programme on how to support sustainable development in the BSR. The action programmes are included in the Agenda 21 for the Baltic Sea Region from 1998<sup>7</sup>; except the education sector action programme, which was initiated in 2000.

Even though the programme hasn't taken an SCP approach as such, many of the actions listed under the sectors are related to SCP. Sustainable agriculture, fishery, energy and forestry are all parts of sustainable production, even though this kind of sectoral approach is not typically used in the field of SCP. However, for example in the field of energy use, the production and consumption patterns behind energy usage are not highlighted.

The joint actions listed in the programme are cross-sectoral and close to SCP topics. The joint actions include 1) Increased production and use of bioenergy and other renewable energy, 2) Use of regional fora and networks for sustainable development, 3) Establishment of demonstration areas and pilot projects for proving sustainable development in practice, 4) City co-operation and sustainable development issues in cities and communities, 5) Procurement of technologies for sustainable development, 6) Information for sustainable development and 7) Increasing consumers awareness of sustainable development. For example, green public procurement is perceived to be a central tool to encourage SCP. GPP is presented in more detail in chapter 3.

The industry sector action programme<sup>8</sup> is the most interesting one from the viewpoint of eco-innovation for SME. The action programme states that designing policies that combine progress in economic (industrial), social and environmental factors in a sustainable way is a challenge but also a 'golden opportunity' for the region, a view that is central also in the field of SCP and eco-innovation.

The measures suggested include things such as setting up and running training programmes in eco-efficiency and environmental management systems and development of eco-efficiency tools for industries. In many instances it is highlighted that the special needs of SME need to be taken into consideration. However, eco-innovation as such is not mentioned in the programme. Sustainable consumption is also addressed in the industry sector programme and it is noted that consumer awareness is key for creating demand and markets for sustainable products.

The sector programmes most relevant for sustainable consumption are tourism, transport and education. However, the tourism and transport sectors don't really address changing consumption patterns on these fields. For example, promoting sustainable local tourism in the BSR (instead of long-haul flights to other continents) could present a great possibility for both business in the region and the global environment.

The goal of the education sector action programme<sup>9</sup> is to 'to ensure that people in the Baltic Sea Region have the knowledge, skills, attitudes and values needed to contribute actively towards sustainable development'. The starting point and the measures listed focus on raising the awareness of consumers and one of the underlying principles is that educating consumers will make it possible for them to take responsibility for choices as critical and conscious consumers. Even though education activities are an important part of furthering sustainable consumption, the view in recent consumption research is that consumers are not rational decision makers in the traditional sense that will change their behaviour if enough information is given<sup>10</sup>. For this reason, the measures aimed at sustainable consumption should be broadened towards making sustainable consumption easy and attractive, i.e. creating favourable framework conditions for sustainable choices.

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7 Baltic 21 (1998). An Agenda 21 for the Baltic Sea Region – Baltic 21. Baltic 21 Series No 1/98 URL: <http://www.baltic21.org/?a,108>

8 Baltic 21 (1998). Sustainable Development of the Industrial Sector in the Baltic Sea Region. Baltic 21 Series No 6/98. URL: [http://www.baltic21.org/attachments/report\\_no\\_6\\_98\\_\\_industry.pdf](http://www.baltic21.org/attachments/report_no_6_98__industry.pdf)

9 Baltic 21 (2002). Agenda 21 for the Baltic Sea Region Sector Report – Education. Baltic 21 Series No 02/2002. URL: [http://www.baltic21.org/attachments/no22002\\_education\\_sector\\_report.pdf](http://www.baltic21.org/attachments/no22002_education_sector_report.pdf)

10 See e.g. the following overview: Policy studies Institute et al (2009). Designing policy to influence consumers. URL: <http://ec.europa.eu/environment/enveco/pdf/RealWorldConsumerBehaviour.pdf>

In addition to the Agenda 21 from 1998, lighthouse projects could be highlighted from the current activities of Baltic 21. The term, "Lighthouse project" is used to denote projects "designed to demonstrate sustainable development in action". The concept encompasses the ideas of ensuring high-visibility in the region, the engagement of as many participating countries and sectors as possible and the involvement of the broader implementation of existing solutions, in addition to the demonstration of new solutions.

From the current lighthouse projects (a list of them can be found in <http://baltic21.org/index.php?lhp>) especially SPIN (a part of which this background paper is) and Eco-region are relevant for SCP and eco-innovation. SPIN aims at identifying and testing appropriate incentives for SMEs to apply eco-innovations and increase the exploitation of the innovation potential. This will help companies to create public benefits and private profits whilst reducing economic and environmental costs. SPIN is financed by the EU Baltic Sea Region Programme 2007–2013 and it is also highlighted as a flagship project in the EU Strategy for the Baltic Sea Region. The German Federal Environment Agency is the Lead Partner of the project. The German Ministry of Environment (BMU) is a co-financer and partner in SPIN.

SPIN will establish a network of over 200 outstanding institutions in the field of eco-innovations. In each country, relevant institutions are involved directly as project partners, which will reach out to SMEs and provide them with information on best solutions and tools to implement eco-innovations. Throughout the project, trainings and workshops will be conducted for SMEs and a best practice data base on over 1000 examples of best available technologies, management systems and support tools for eco-efficiency will be established, in which information is shared and accessible to SMEs. Based on these results, project partners will compile information on SME needs, barriers and incentives for the implementation of eco-innovations, which will feed into the development of a strategy to promote eco-innovations among SMEs.

The objective of the Eco-region project is to develop the Baltic Sea Region into the world's first EcoRegion, where economical growth goes hand in hand with environmental integrity and social justice. The project activities include among others a capacity building programme on integrated sustainability management systems and preparing strategic plans showing sustainable development targets for different regions.

## 2.3 EU SCP Action Plan

The EU Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan was endorsed by the European council in 2008. The core topics of the action plan are leaner production, better products, smarter consumption and global markets<sup>11</sup>. Picture 3 presents the topics and the main instruments related to them.

The action plan includes a series of proposals on SCP aimed at improving the environmental performance of products and increasing the demand for more sustainable goods and production technologies. It also seeks to encourage EU industry to take advantage of opportunities to innovate.

As a result of the proposals set out in the action plan, the EU Eco-Label Ordinance is now being revised and a retailer forum was set up in spring 2009. The forum aims to reduce the environmental impact of the retailer sector and its supply chain and to promote sustainable products and raise consumer awareness on green purchasing opportunities. Furthermore, advancing Green Public Procurement is a key priority of the EU action plan. The Commission will review progress and report on the implementation of the Action Plan in 2012.



Picture 3. Core topics of EU SCP Action Plan<sup>12</sup>.

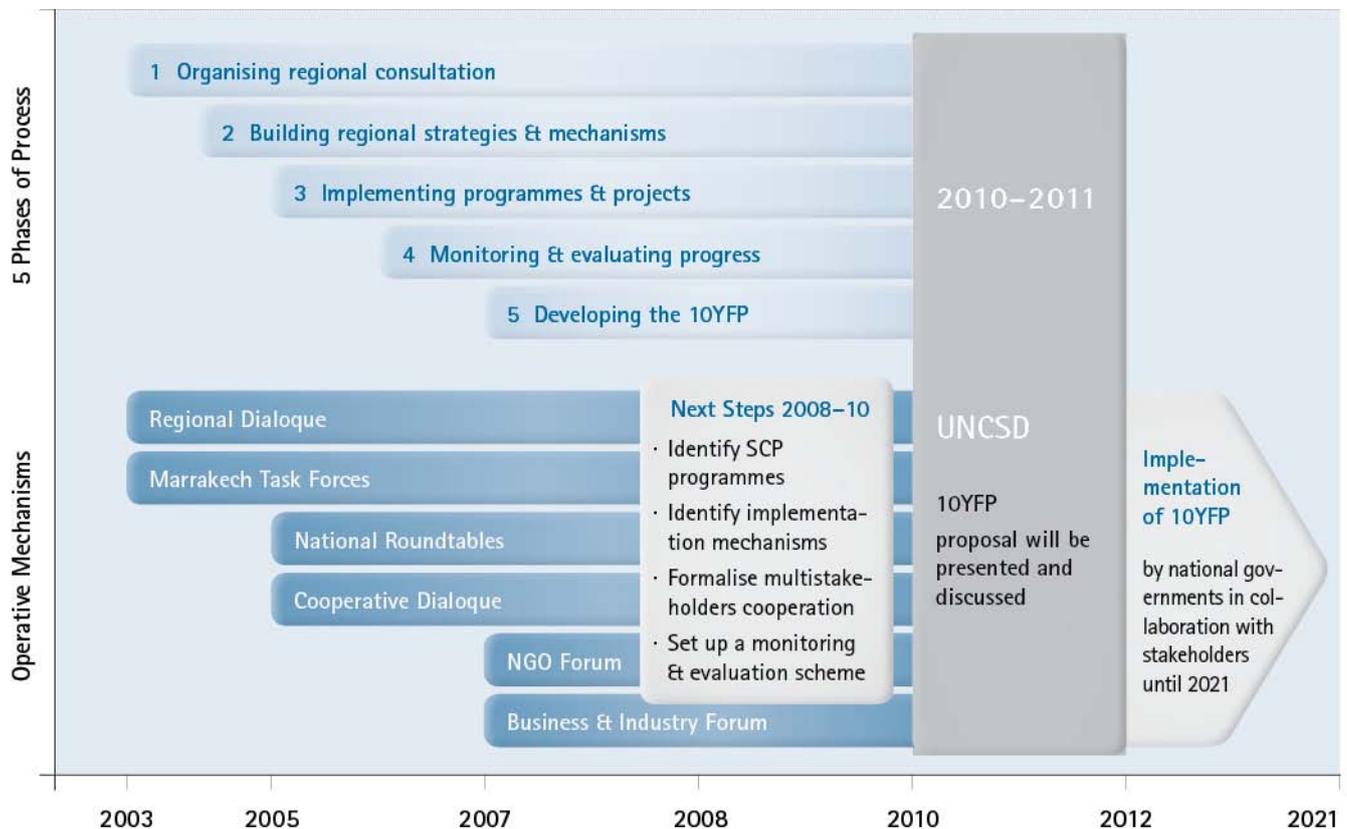
<sup>11</sup> EC (2008). Communication from the commission on the SCP/SIP Action plan. URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0397:FIN:EN:PDF>

<sup>12</sup> Adapted from EEA, CSCP and Slovenian Ministry of Environment and Spatial Planning (2008). Time for action – towards sustainable consumption and production in Europe Summary report of the conference held on 27–29 September 2007, Ljubljana, Slovenia.

## 2.4 Marrakech Process

The approach adopted in the EU SCP action plan represents the foundation for SCP approach in Europe. Thus, the same framework is also the basis of the country analysis in this paper (the framework is described in more detail in chapter 3), complemented with the theme of 'use and management of raw materials'. At the EU level, raw material use is addressed in a separate strategy called the Thematic Strategy on the Sustainable Use of Natural Resources.

The 2002 World Summit on Sustainable Development in Johannesburg called for the development of a 10-Year Framework of Programmes (10YFP) to accelerate the shift towards SCP and to promote social and economic development within the carrying capacity of the ecosystem. The call led to the launching of the Marrakech Process, which is a multi-stakeholder platform to i) support the implementation of policies, projects and strategies on SCP and to ii) contribute to the elaboration of the 10 YFP. The United Nations Environment Programme (UNEP) and the UN Department of Economic and Social Affairs (UNDESA) are the leading agencies for this global process with active participation of many national governments, development agencies and other stakeholders. The proposal of the 10YFP will be reviewed by the Commission on Sustainable Development (CSD) during the 2010/11 two-year cycle (see picture 4).



Picture 4. SCP is now in the global policy agenda: Timeline of the Marrakech process.

The 10YFP should provide incentives for all stakeholders to engage in and support concrete SCP-related actions. Specific objectives could be considered to guide the 10YFP development, such as the following:

- Decouple economic growth from environmental degradation while preventing a rebound effect<sup>13</sup> (e.g., increase resource and energy efficiency, dematerialize, move to a sustainable low-carbon economy)
- Couple economic development with the creation of decent jobs and increase in welfare
- Mainstream the sustainable use and management of natural resources in the decision-making process of governments, private sector and civil society organizations;
- Stimulate demand for and supply of sustainable products and services in the market which would involve creation of new economic activities and decent jobs, within the carrying capacity of ecosystems;
- Promote more sustainable and low-carbon lifestyles; and
- Enhance social development through sustainable investment in people and communities as highlighted in e.g. a Global Green New Deal<sup>14</sup>.

The main activities within the Marrakech process are to build regional and national SCP programmes – that set the framework and targets for SCP – and to develop implementation mechanisms in order to turn these programmes into projects on the ground. The Process has supported the development of regional SCP programmes or action plans in Africa, Europe, Latin America and the Arab Region with the institutional support of the regional intergovernmental organizations. Furthermore, over 30 countries worldwide have developed or are in the process of developing their national SCP programmes<sup>15</sup>.

The Marrakech process demonstrates the SCP priorities of the global community and sets the framework for SCP in the international, regional and national level. The agenda of SCP was initiated in 2002, but it is constantly under development. The Baltic Sea Region should be a part of the process where the future agenda of SCP is being formulated. Participating in the Marrakech process and being aware of the developments inside it is crucial for the competitiveness and prosperity of the Baltic Sea Region.

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<sup>13</sup> Technological improvements that increases energy and resource efficiency might not efficient in itself because lower costs increase overall consumption. The rebound effect is expressed as a ratio of the lost benefit compared to the expected environmental benefit when holding consumption constant.[http://en.wikipedia.org/wiki/Rebound\\_effect\\_\(conservation\)](http://en.wikipedia.org/wiki/Rebound_effect_(conservation)) – cite\_note-Grubb-0#cite\_note-Grubb-0 For instance, if a 5 % improvement in vehicle fuel efficiency results in only a 2 % drop in fuel use, there is a 60 % rebound effect. The ‚missing‘ 3 % might have been consumed by driving faster or further than before because it is cheaper to drive with the new technology.

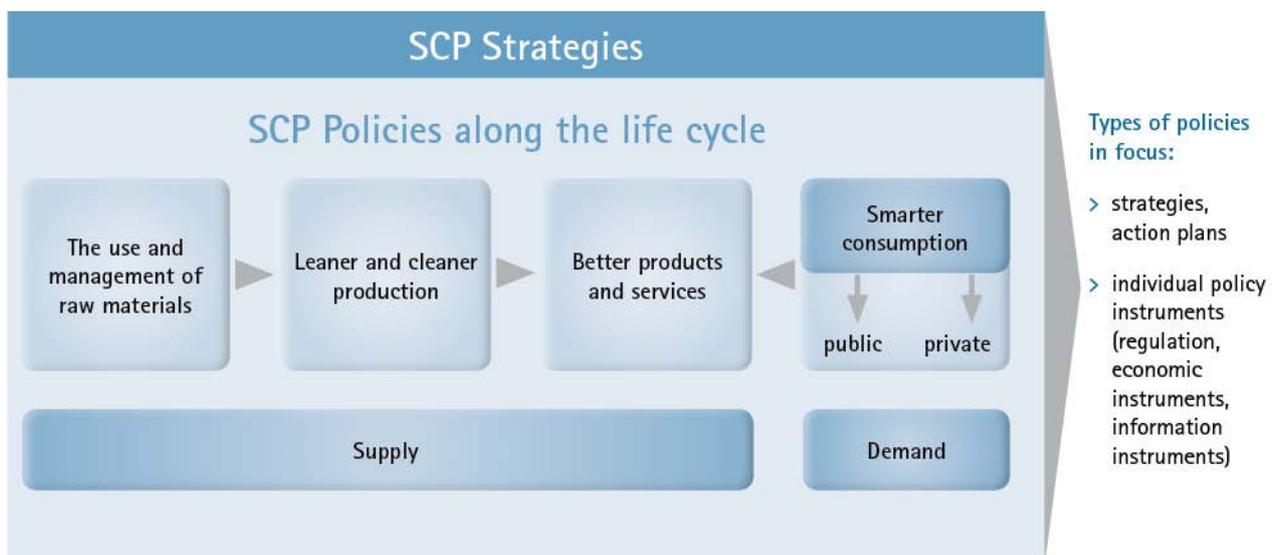
<sup>14</sup> <http://www.un.org/esa/policy/policybriefs/policybrief12.pdf>

<sup>15</sup> UNEP's clearinghouse for national SCP programmes: <http://www.unep.fr/scp/nap/clearinghouse/>

## » 3 SCP in the Project Partner Countries

The SCP policy landscape in the SPIN project partner countries is presented in this chapter. The aim of the chapter is not to give an exhaustive overview of all the policy instruments in place in the field of SCP and eco-innovation, but to give an overview on how thoroughly different fields are covered. In the country analysis the same framework as in the EU SCP action plan (see section 2.3.1) is used. Furthermore, this approach is relevant due to the definition of eco-innovation. As discussed in chapter 1, eco-innovation is a vehicle to achieve SCP and eco-innovation can target each phase of a products lifecycle. If measures would be aimed only at cleaning the in-house operations of a company, the great potential for sustainability increases in other life-cycle stages would be lost. Furthermore, measures aimed at creating demand for sustainable products and services are an essential part of an effective SCP policy framework. The analysis framework thus addresses all these lifecycle stages.

The framework used (see picture 5) categorises SCP policies in four main themes: 1) The use and management of raw materials, 2) leaner and cleaner production, 3) better products and services and 4) smarter consumption. The third and fourth topic has been divided into two sub-categories: suppliers & retailers and public consumption & private consumption respectively. Inside these themes, this chapter takes a look at national strategies and other policy instruments in place in each of the countries. Looking at the national strategies is important because they demonstrate the importance of the field in the national policy agenda. However, even though a country hasn't got a strategy on a certain topic, there might be individual policy instruments in place. The analysis concentrates on public policies and initiatives in place at the administrative level of central governments.



Picture 5. Analysis framework<sup>16</sup>.

The content of the four themes<sup>17</sup> and their relevance for eco-innovation for SCP in SME is presented in the following. In addition to these four themes, also the overall national SCP strategies are described for those countries where such strategy is in place.

<sup>16</sup> Adapted from ETC/SCP 2009, un-published draft.

<sup>17</sup> Based on ETC/SCP (2009), un-published draft.

## Management and Use of Raw Materials

This section takes a look at the extraction, use and management of raw materials (such as metals, construction minerals and wood). Almost all SCP policies eventually affect the use of raw materials but here the focus is restricted to policies aimed specifically at this topic. Examples of policies in the focus include overall raw material strategies as well as related market based instruments and quotas and the promotion of alternative materials (e.g. bio-based materials).

Raw material use policies are important from the point of view of eco-innovation in SME because regulating the use of raw materials drives economy to a more resource efficient direction, which has implications also to the action of SMEs. If resource efficiency policies become stricter, also SMEs need to figure out ways to reduce the resource intensity of their products. Stricter policies should be accompanied with support activities aimed at SMEs, to increase their capacity to implement resource efficiency measures.

## Leaner and Cleaner Production

This component of the framework is most directly linked to the production process of SME. The primary focus of this section is on strategies aimed at developing and implementing eco-innovation in the production process, i.e. cleaner production measures and other preventive approaches and the promotion of more efficient and environmentally sound technologies. The strategies in this category include National cleaner production strategy, Industrial strategy (relevant parts); Innovation strategy (relevant parts), National ETAP roadmap and National SME strategy.

## Better products

This section takes a look at the policies in place aimed eco-innovative products, i.e. promoting supply as well as the re-tailing and selling of more sustainable products and services. Examples of overall national policies in this respect include support to sustainable design initiatives and to product LCA, as well as the promotion of sustainability labels amongst suppliers, the development of markets for recycled materials etc. The strategies inventoried include National Integrated Product Policy (IPP) strategies, National eco-label programmes, National environmental product declaration (EPD) programmes and Strategies addressing the retail sector. Policies aimed at better products encourage the production of more sustainable products and services that take into account the whole life-cycle also by SME.

## Smarter consumption

The topic of smarter consumption is divided into two sub-categories: private consumption and public consumption. Private consumption refers to the consumption choices made by individual consumers and public consumption to purchasing decisions of public authorities, i.e. public procurement.

From the point of view of eco-innovation for SCP in SME the consumption choices of consumers are important because demand and market pull is needed to increase the production of sustainable products and services. To alter individual consumption choices towards more sustainable patterns, governments can either influence the consumer choice directly (e.g. encouraging the use of eco-labelled products, switching to public transport instead of own car, use of renewable energy etc.) or change the framework conditions of consumption so that consumers are enabled to make better choices. Framework conditions include, inter alia, the availability of sustainable alternatives and their price.

Green public procurement (GPP) is an important topic, while governments as one of the largest purchasers of goods and services in the world can use GPP as a concrete tool to create markets for sustainable products and environmental technology, facilitate eco-innovation and help domestic developers to achieve economies of scale and compete globally. GPP means that the acquisition of goods or services by the public sector takes environmental elements into account. GPP can among others include purchasing energy-efficient technology and recycled paper for state offices, offering sustainable food (organic, fair trade, vegetarian) in school and office canteens as well as in hospitals and using eco-electricity in public buildings.

The following descriptions have been reviewed by country experts.

## 3.1 Denmark

### SCP Strategy

In Denmark there isn't an SCP strategy in place. A national sustainable development strategy 'A Shared Future – Balanced Development' was presented by the Danish government in 2002.

### Use and Management of Raw Materials

There isn't a special strategy on raw materials in Denmark but the National Waste Strategy 2009–2012 includes resource efficiency aspects<sup>18</sup>. Furthermore, there is a special economic instrument, duty on raw materials, in place<sup>19</sup>.

### Leaner and Cleaner Production

Four governmental strategies related to leaner and cleaner production in Denmark were found: Denmark's National Reform Programme<sup>20</sup>, Danish Business Strategy on Climate Change<sup>21</sup>, The Governments Action Plan for Promoting Eco-efficient technologies<sup>22</sup> (national ETAP road map) and Action Plan on Environmental Technology – Benefitting the Environment and Growth<sup>23</sup>. The ETAP road map (2007–2009) is called "Danish solutions to Global Challenges and presented nine initiatives with the aim to create new technologies that benefit the environment, welfare, exports, competitiveness and Denmark's brand as a country with an innovative and knowledge-intensive business environment. Especially one of the initiatives "Consultancy, information and knowledge building" was aimed at supporting eco-innovation and sustainable pro-

duction in SME. However, the link to sustainable consumption was not very strong and eco-innovation was seen mostly as technological innovation. The new Government action plan for promoting eco-efficient technologies (2010–2011) called "Environmental technology – benefitting the environment and growth" was launched in March 2010. The new action plan follows up on many of the initiatives from the first action plan, but has prioritised the efforts in a number of key areas – water, waste and air.

The Denmark's National Reform Programme from 2008 is Denmark's contribution to the EU's Growth and Employment Strategy. One part of the programme concentrates on advancing the use of environmental technologies, but supporting SME is not at a centre stage in the strategy.

The most recent initiative is the "Danish Business Strategy on Climate Change"<sup>24</sup>. The policy plans to create a program for clean tech incubation and market maturity, support start-up entrepreneurs in the field and create a 'Green Alliance' between clean tech entrepreneurs and the established business environment.

In addition to the Danish Business Strategy on Climate Change, there is a series of other reforms and strategies aimed at establishing a green growth economy in Denmark. The Danish Government has forged agreements on a green transportation package and on Green Growth in the environmental and agricultural sectors. The Government has also presented a business package that aims to enhance the financing options for the Danish business community and boost the market for venture capital.

18 Regeringens Affaldsstrategi 2009–12 (2009). URL: <http://www.mst.dk/NR/rdonlyres/747FBCE2-A3D4-444F-BF60-D1747C36516D/0/Endelig1delafAffaldsstrategi200912.pdf> (in Danish)

19 Van der Voet, Ester et. al (2005). Policy Review on Decoupling: Development of indicators to assess decoupling of economic development and environmental pressure in the EU-25 and AC-3 countries. URL: [http://ec.europa.eu/environment/natres/pdf/fin\\_rep\\_natres.pdf](http://ec.europa.eu/environment/natres/pdf/fin_rep_natres.pdf)

20 The Danish Government (2008). Denmark's National Reform Programme. URL: [http://uk.fm.dk/Publications/2008/1642-Denmarks%20National%20Reform%20Programme/~/\\_media/Publikationer/Imported/2008/1642-Denmarks%20National%20Reform%20Programme/978-87-7856-891-5.pdf.ashx](http://uk.fm.dk/Publications/2008/1642-Denmarks%20National%20Reform%20Programme/~/_media/Publikationer/Imported/2008/1642-Denmarks%20National%20Reform%20Programme/978-87-7856-891-5.pdf.ashx)

21 Danish Government (2009). Danish Business Strategy on Climate Change. URL: <http://www.denmark.dk/NR/rdonlyres/C14F421F-F33E-4EB4-BF9E-786086019C3F/0/SingleTheDanishBusinessStrtegyonClimateChange.pdf>

22 Danish Government (2008). Danish solutions to global environmental challenges - The government's action plan for promoting eco-efficient technology. URL: [http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/denmark\\_en.pdf](http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/denmark_en.pdf)

23 [http://www.ecoinnovation.dk/NR/rdonlyres/B45AEB2E-4ABD-4A2A-9A8F-6DFECC73C6BC/0/miljoeteknologi\\_print.pdf](http://www.ecoinnovation.dk/NR/rdonlyres/B45AEB2E-4ABD-4A2A-9A8F-6DFECC73C6BC/0/miljoeteknologi_print.pdf)

24 Danish Government (2009). Danish Business Strategy on Climate Change. URL: <http://www.denmark.dk/NR/rdonlyres/C14F421F-F33E-4EB4-BF9E-786086019C3F/0/SingleTheDanishBusinessStrtegyonClimateChange.pdf>

In addition to these strategies, a secretariat for eco-efficient technology has been established in the Danish Environmental Protection Agency. Amongst other things, the Secretariat offers guidance to enterprises about environmental focus areas, future legislation and opportunities for subsidies. A website, [www.ecoinnovation.dk](http://www.ecoinnovation.dk), has been established as a single point of access to seek information.

According to a Pro INNO Europe country report, around 20 % of the innovation policy measures in Denmark are targeted especially to the environmental sphere, as opposed to the average share in EU countries, which is 5 %. Furthermore, 20 % of innovation support measures target SME directly, the average figure for all EU countries being 22 %<sup>25</sup>.

### Better Products and Services

Denmark is the only country in the group which is in the process of developing a National Environmental Product Declaration Programme<sup>26</sup>. The final programme will be anchored at Danish Standards, a private commercial foundation dealing with standardisation. The Danish programme is financed by the Danish Environmental Protection Agency and its purpose is to get new and uniform information available about the environmental performance of products especially for business to business communication. Furthermore, an LCA-Centre, which promotes product-oriented environmental strategies in private and public companies by assisting them in implementing life-cycle thinking, has been set up<sup>27</sup>. Eco-labelling schemes used include the EU eco-label and the Nordic Swan<sup>28</sup>.

Denmark doesn't have a specific programme directed to the retail sector, but the government is involved in different initiatives with the aim to make it easier for the retail sector to become more environmentally friendly. At the moment the Danish government is carrying out a project on behalf of the Nordic Council of Ministers. The aim of the project is to describe various successful 'green' initiatives taken by retailers including an analysis of why the initiatives have been successful. Secondly the project will provide recommendations on what would work in a Nordic context.

### Smarter Consumption

Denmark doesn't have an action plan on sustainable private consumption in place, but individual instruments such as awareness raising methods have been used. One example that could be highlighted is the "One tonne less" -campaign by the Danish Energy Agency. The campaign, concluded in 2009, was an information campaign targeted at consumers to cut down their CO<sub>2</sub> emissions, with a large variety of activities such as a CO<sub>2</sub> calculator, competitions and games, exhibitions and the involvement of celebrities and artists<sup>29</sup>.

In the field of sustainable public consumption the Danish action plan on GPP was endorsed in 1994<sup>30</sup> and a panel for professional environment-conscious buyers was set up in 2003<sup>31</sup>. Furthermore, an independent information centre on the environment, health and consumption is established and funded by the Danish Ministry of the Environment. The purpose of the centre is to provide the consumers with tools to make their everyday life more environmentally friendly and healthy<sup>32</sup>.

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25 EC (2009). INNO-Policy TrendChart – Innovation Policy Progress Report Denmark. [http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country\\_Report\\_Denmark\\_2009.pdf](http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country_Report_Denmark_2009.pdf)

26 <http://www.mvd.dk/default.asp?mId=120&tald=214>

27 <http://www.lca-center.dk/cms/site.aspx?p=4441>

28 <http://www.ecolabel.dk/>

29 [http://www.ens.dk/en-US/ClimateAndCO2/climate\\_campaign\\_1tonneless/Sider/Forside.aspx](http://www.ens.dk/en-US/ClimateAndCO2/climate_campaign_1tonneless/Sider/Forside.aspx)

30 [http://ec.europa.eu/environment/gpp/pdf/national\\_gpp\\_strategies\\_en.pdf](http://ec.europa.eu/environment/gpp/pdf/national_gpp_strategies_en.pdf)

31 [www.ski.dk/greennet](http://www.ski.dk/greennet)

32 (<http://www.miljoegsundhed.dk/default.aspx?node=281>)

## 3.2 Estonia

### SCP Strategy

There isn't a governmental strategy aimed at SCP in Estonia. National Sustainable Development Strategy 'Sustainable Estonia 21' was approved by the Estonian parliament in 2005, but SCP themes are not very central in the NSDS<sup>33</sup>. However, some SCP themes have been introduced in many laws, regulations, and guidelines, including Public Procurement Act, Water Act, Sustainable Development Act, Integrated Pollution Prevention and Control Act, Nature Conservation Act, Environmental Impact Assessment and Environmental Management System Act. The research, development and innovation (R&D&I) strategy "Knowledge-based Estonia", approved in 2001 and significantly amended and updated in 2007, concentrates on ensuring the society's sustainable development by research and development activities.

### Use and management of raw materials

There isn't a special strategy in place aimed at raw materials, but economic instruments are used. The drafting and implementation of ecological tax reform (ETR) was started in 2005. The primary objective of ETR is to use the taxation system to create basis for sustainable use and fair pricing of natural resources<sup>34</sup>. For example, the use of minerals is managed through a tax on mineral extraction<sup>35</sup>.

In 2008 the Strategy for Oil Shale Utilization was accepted by Parliament (Riigikogu) and elaboration of special strategies

for use of other georesources for example for natural building resources and also for peat is currently in process<sup>36</sup>.

### Leaner and cleaner production

In Estonia, the most relevant innovation and enterprise policies are the following: "Knowledge-based Estonia – Estonian Research and Development and Innovation Strategy 2007–2013"<sup>37</sup>, "Estonia Enterprise policy 2007–2013", "Action Plan for Growth and Jobs"<sup>38</sup> and "Estonian Strategy for Competitiveness 2009–2011"<sup>39</sup>. Yet, eco-innovation is only briefly mentioned in these documents. The situation is going to change in the near future however, as the Strategy for Competitiveness from 2009 states that in the coming years, the Government plans to design a broader policy of green economic growth.

In the field of individual policy instruments, information dissemination (organisation of seminars and publication of best practice) has been identified as a good way to promote sustainable practices in SME. Actors in this field in Estonia are the Responsible Entrepreneurship Forum, the Open Estonia Foundation, the Benevolent Acts Foundation and the Chamber of Commerce and Industry of Estonia<sup>40</sup>. Furthermore, the Estonian report for UN Division for sustainable development states that in the field of financing, the National Environmental Action Plan of Estonia for 2007–2013 allocates approximately 650 million kroons for R&D in the environment sphere (incl. sustainable development, consumption and production), which amounts to roughly 0.62 % of entire cost of the environmental action plan<sup>41</sup>.

33 Estonian Ministry of Environment (2005). URL [http://www.riigikantselei.ee/failid/Estonia\\_SDS\\_2005.pdf](http://www.riigikantselei.ee/failid/Estonia_SDS_2005.pdf)

34 Estonia UN CSD18: National Reporting on 10 year Framework of Programmes on Sustainable Consumption and Production. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/estonia/ESTONIA\\_SCP10YearCSD18.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/estonia/ESTONIA_SCP10YearCSD18.pdf)

35 Van der Voet, Ester et. al (2005). Policy Review on Decoupling: Development of indicators to assess decoupling of economic development and environmental pressure in the EU–25 and AC-3 countries. URL: [http://ec.europa.eu/environment/natres/pdf/fin\\_rep\\_natres.pdf](http://ec.europa.eu/environment/natres/pdf/fin_rep_natres.pdf)

36 Personal communication from Ms. Ülle Vaht (Counsellor, Environmental Management Department, Ministry of the Environment) and Mr. Raul Allikivi (Director of Economic Policy Division, Economic Development Department, Ministry of Economic Affairs and Communications)

37 <http://www.hm.ee/index.php?0&popup=download&tid=6175>

38 [http://www.riigikantselei.ee/failid/MTTK\\_2008\\_2011\\_EN\\_kujundusega.pdf](http://www.riigikantselei.ee/failid/MTTK_2008_2011_EN_kujundusega.pdf)

39 [http://www.riigikantselei.ee/failid/Estonian\\_Strategy\\_for\\_Competitiveness\\_2009\\_2011.pdf](http://www.riigikantselei.ee/failid/Estonian_Strategy_for_Competitiveness_2009_2011.pdf)

40 Estonia UN CSD18: National Reporting on 10 year Framework of Programmes on Sustainable Consumption and Production. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/estonia/ESTONIA\\_SCP10YearCSD18.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/estonia/ESTONIA_SCP10YearCSD18.pdf)

41 Estonia UN CSD18: National Reporting on 10 year Framework of Programmes on Sustainable Consumption and Production. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/estonia/ESTONIA\\_SCP10YearCSD18.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/estonia/ESTONIA_SCP10YearCSD18.pdf)

## Better products

Similar to the situation in the other countries, there are no specific strategies in place aimed at better products and services. An individual policy instruments used is eco-labelling, with the EU eco-label in place.

To meet the needs of environmental protection and economic growth, the Estonian Ministry of the Environment has signed 'Good Will Contracts' with several companies in which both parties express a common understandings in the field<sup>42</sup>. According to these contracts the Estonian Ministry of Environment takes responsibility to inform the partner about the upcoming changes in legislation and invites the partner to participate in the preparation of strategic documents in the field. The partner on the other hand takes responsibilities which are not stated in legislation but which significantly improves the environmental performance of the company and its products.

## Smarter Consumption

For private sustainable consumption there is no specific strategy in place in Estonia, but many awareness raising initiatives have been conducted. Since 2000, approximately 3,000 projects have been supported within the EIC (Environmental investment centre) environmental awareness programme worth 241.6 million kroons.<sup>43</sup>

On GPP, the Estonian Ministry of the Environment has published an informative document "Environmental and Sustainable Public Procurement Priorities for 2007–2009". In 2006 the Ministry of the Environment established an Estonian GPP Working Group, a cross-ministry group of specialists that is engaged in popularisation of environmentally sound and sustainable public procurement, and compilation of GPP criteria for products and services<sup>44</sup>.

## 3.3 Finland

### SCP Strategy

Finland's SCP programme "Getting more and better from less", endorsed in 2006 was one of the first national SCP programmes in the world. The programme addresses 11 themes: 1) Forms of production that save materials and energy, 2) Fewer material goods, but a higher quality of life, 3) Building pleasant and functional communities, 4) Improving the quality of construction, 5) Getting transport on the right track, 6) Sustainable food production from the farm to the table, 7) Promoting well-being in workplaces and leisure activities, 8) Setting an example in the public sector, 9) Increasing sustainability through new technologies and innovations, 10) Values, knowledge and skills, and 11) An active international role for Finland. Inside these themes the importance of supporting sustainable production in SMEs is mentioned couple of times, but the topic is not taken as a focus and measures on how exactly to support SCP and eco-innovation in SME are not very clearly defined.

The main measures implemented so far are the following<sup>45</sup>: 1) A Material Efficiency Centre has been set up (the centre provides advice and tools for the private sector on how to increase resource efficiency), 2) Many research projects on SCP have been conducted, 3) A strategy for sustainable public procurement has been developed and endorsed in 2009, 4) Finnish Cleantech cluster has been set up, with an objective to boost environmental technology business in Finland<sup>46</sup>. Even though the measures stated in the strategy are not very concrete, from these main results so far, especially the Cleantech cluster, material efficiency centre and the strategy for sustainable public procurement are relevant for supporting eco-innovation in SME.

<sup>42</sup> <http://www.envir.ee/99233>

<sup>43</sup> Estonia UN CSD18: National Reporting on 10 year Framework of Programmes on Sustainable Consumption and Production. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/estonia/ESTONIA\\_SCP10YearCSD18.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/estonia/ESTONIA_SCP10YearCSD18.pdf)

<sup>44</sup> Estonia UN CSD18: National Reporting on 10 year Framework of Programmes on Sustainable Consumption and Production. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/estonia/ESTONIA\\_SCP10YearCSD18.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/estonia/ESTONIA_SCP10YearCSD18.pdf)

<sup>45</sup> <http://www.ymparisto.fi/default.asp?contentid=62075&tlan=en>, <http://www.ymparisto.fi/default.asp?node=21662&tlan=fi>

<sup>46</sup> <http://www.cleantechcluster.fi/en/>

## Use and Management of Raw materials

Finland's priorities for the use and management of raw materials have been summarised in the natural resource strategy 'A Natural Resource Strategy for Finland – Using Natural Resources Intelligently'<sup>47</sup> prepared in 2009. The strategy concentrates on creating viable business operations and increasing well-being through sustainable use of resources.

The strategy is quite unique as it examines natural resource use across sector borders and both natural resource use and conservation are considered in the long-term. The strategy has a strong link to business opportunities and it highlights issues such as improving resource efficiency and creating business opportunities through sustainable production patterns, innovative technologies and high levels of know-how and increasing the resource efficiency of businesses with the help of advice, subsidies or taxation incentives. The strategy also states that steps should be taken to promote services based on nonmaterial natural resources and related expertise, innovations, product development, marketing and business activities and that a national network of expertise on product-centred environmental management should be set up to bring together Finnish expertise in this field.

The measures listed in the strategy don't specifically take into account the needs of SMEs. However, even though SMEs are not directly tackled, the strategy represents an important first step in setting up a coherent policy framework which integrates resource efficiency with business opportunities.

## Leaner and Cleaner production

The national strategies related to leaner and cleaner production in Finland include Finland's National Innovation Strategy, ETAP road map, and Competitive edge for SME through responsibility –strategy. The Finnish National Innovation Strategy mentions 'sustainable development' as a driver for innovation, but is otherwise not focused on eco-innovation<sup>48</sup>. The ETAP road map is aimed at advancing the use of environmental technologies<sup>49</sup>. The road map identifies the special needs of SMEs and lists measures how to support the adoption of environmental technologies in SMEs (i.e. developing a national database, equity investments in SMEs, developing business know-how and promoting exports etc). The "Competitive edge for SME through responsibility –strategy", is an interesting strategy, as it is directly aimed at improving the competitiveness of SMEs through corporate social responsibility (CSR) practices<sup>50</sup>.

A new tool for advancing cleaner production in Finland has recently been developed by the Finnish Material Efficiency Centre. The tool is a material efficiency auditing tool and it is aimed at identifying the potential for material efficiency increase in companies. A prototype of the tool has been developed through a pilot project and at the moment the tool is being further developed by testing it in companies<sup>51</sup>.

According to a Pro INNO Europe country report, 10 % of the innovation policy measures in Finland are targeted especially to the environmental sphere, as opposed to the average share in EU countries, which is 5 %. Furthermore, 10 % of innovation support measures target SME directly, the average figure for all EU countries being 22 %<sup>52</sup>.

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47 <http://www.sitra.fi/julkaisut/muut/A%20Natural%20Resource%20Strategy%20for%20Finland.pdf>

48 Government's communication on Finland's national innovation strategy to the parliament (2009).  
URL: [http://www.tem.fi/files/21010/National\\_Innovation\\_Strategy\\_March\\_2009.pdf](http://www.tem.fi/files/21010/National_Innovation_Strategy_March_2009.pdf)

49 Finnish National Roadmap for the implementation of ETAP (2005). URL: [http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/finland\\_en.pdf](http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/finland_en.pdf)

50 Ministry of Employment and the Economy (2008). Vastuullisuudesta kilpailuetua pk-yrityksille.  
URL: [http://www.tem.fi/files/19782/TEM\\_pk\\_vastuullisuusstrategia.pdf](http://www.tem.fi/files/19782/TEM_pk_vastuullisuusstrategia.pdf) (in Finnish)

51 Brochure of the tool (in Finnish) and interview with Taina Nikula, Senior adviser, Finnish Ministry of Environment, 25th of March, 2010

52 EC (2009). INNO-Policy TrendChart – Innovation Policy Progress Report Finland. URL: [http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country\\_Report\\_Finland\\_2009.pdf](http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country_Report_Finland_2009.pdf)

## Better products

In the field of better products, no specific strategies are aimed at either the retailer or the supplier sector. Eco-labelling schemes are the most visible tool and in addition to the EU eco-label, the Nordic Swan scheme is in place<sup>53</sup>.

A new initiative currently being launched is a network for product oriented environmental management ("Tuotelähtöisen ympäristöjohtamisen verkosto" in Finnish). The initiative is lead by the Ministry of Environment and it will bring together experts in the field of better products and a wide range of companies in order to integrate design for the environment -principles into environmental management practices of companies. It is envisaged that the network will strengthen national and international cooperation in the field and disseminate information and best practices through projects, seminars and web pages. The efforts of the network should eventually lead to more sustainable products coming to the market<sup>54</sup>.

## Smarter Consumption

Finland doesn't have a separate strategy aimed at sustainable household consumption, but the topic is covered in the national SCP strategy (see page 17). In addition, the Strategy for Consumer Policy has a separate section on sustainability. The section is focused on awareness raising and it is said that campaigns on material and energy efficiency, targeted at consumers, shall be promoted alongside the development of illustrative models and user-friendly tools and that more resources will be allocated to enhancing the awareness of consumers<sup>55</sup>.

Sustainable public consumption was institutionalised when GPP targets were endorsed by the government in 2009<sup>56</sup>. The quantitative targets of the programme are that by 2010 70 % of Central Government procurement is sustainable and by 2015 100 %. For municipalities and local government the respective targets are 25 and 50 %. More specific measures and targets have been defined for five sectors: electricity generation, housing, transport, food and energy- and eco-labels.

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<sup>53</sup> <http://www.svanen.nu/Default.aspx?tabName=StartPage>

<sup>54</sup> Interview with Taina Nikula, Senior adviser, Finnish Ministry of Environment, 25th of March, 2010.

<sup>55</sup> TEM (2008). Consumer Policy Programme for the years 2008–2011. URL: [http://www.tem.fi/files/20019/TEMjul\\_23\\_2008\\_konserni.pdf](http://www.tem.fi/files/20019/TEMjul_23_2008_konserni.pdf)

<sup>56</sup> Sustainable public procurement – Public sector becomes a pioneer in sustainable procurement.  
URL: <http://www.ymparisto.fi/download.asp?contentid=103507&lan=fi>

## 3.4 Germany

### SCP Strategy

Germany hasn't formalised its SCP activities in the form of an SCP strategy, but an inventory of existing numerous activities, instruments and policies in the field of SCP has been made<sup>57</sup>. In addition, The Federal Ministry for Environment (BMU) initiated a national dialogue process on the topic in February 2004, with the objective to strengthen the SCP related dimension of the national SD strategy.

The national sustainable development strategy "Perspectives for Germany" was elaborated in 2002. The strategy covers some SCP issues as well, for example "Innovative enterprises – successful economy" is one of the topics in the strategy<sup>58</sup>.

### Use and Management of Raw Materials

Germany is one of the two countries in the group which has done strategic work on the field of raw material use. A paper called 'Elements of a Raw Material Strategy of the German Government' was elaborated in 2007<sup>59</sup>. Furthermore, Germany has also made a separate biomass action plan 'National Biomass Action Plan for Germany – Biomass and Sustainable Energy Supply' in 2009<sup>60</sup>.

### Leaner and Cleaner Production

In the field of cleaner production many strategies are in place. These strategies include "Master Plan on Environmental Technology", "Germany's ETAP Roadmap: Speeding up innovation – protecting the environment"<sup>61</sup> and "Future technologies in SMEs – High-Tech Master plan"<sup>62</sup>. The first two

strategies include the aspects of SME and eco-innovation quite comprehensively, but the SME high tech master plan doesn't mention eco-innovation or sustainable production at all. It seems that the importance of SME in the field of eco-innovation is known, but this knowledge is not translating into practice in all cases, when specific strategies for SMEs are being developed.

An example of a separate policy instrument in use is the KMU-innovativ funding scheme, which is aimed at simplifying the application procedure of funding for SMEs. One of the technology areas under the scheme is technologies for efficient use of resources and energy<sup>63</sup>.

According to a Pro INNO Europe country report, nearly 20 % of the innovation policy measures in Germany are targeted especially to the environmental sphere, as opposed to the average share in EU countries, which is 5 %. Furthermore, around 17 % of innovation support measures target SME directly, the average figure for all EU countries being 22 %<sup>64</sup>.

### Better products and services

For better products and services no overall strategies could be found, but in Germany there is a product specific Charta on Wood- strategy. The strategy is aimed at competitive and sustainable production of wood products and their increased use<sup>65</sup>.

In the countries studied the retailer sector is quite rarely addressed, but Germany is an exception in the group. Retailers are one of the priorities of Germany's SCP policies and a special project aimed at retailers "The Sustainable retail initiative" has been implemented.

57 SCP - Inventory of Relevant Policies, Activities and Instruments in Germany. URL: [http://www.unep.fr/scp/nap/clearinghouse/documents/GER\\_inventorySCPEN.pdf](http://www.unep.fr/scp/nap/clearinghouse/documents/GER_inventorySCPEN.pdf)

58 [http://www.ewc2.org/upload/downloads/national\\_strategy\\_germany.pdf](http://www.ewc2.org/upload/downloads/national_strategy_germany.pdf)

59 <http://lexikon.bmw.de/BMWi/Navigation/Presse/pressemitteilungen,did=191938.html?view=renderPrint>

60 [http://www.bmelv.de/cln\\_154/cae/servlet/contentblob/750066/publicationFile/41337/BiomassActionPlan.pdf](http://www.bmelv.de/cln_154/cae/servlet/contentblob/750066/publicationFile/41337/BiomassActionPlan.pdf)

61 BMU (2004). URL: [http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/germany\\_en.pdf](http://ec.europa.eu/environment/etap/policy/pdfs/roadmaps/germany_en.pdf)

62 <http://www.bmw.de/BMWi/Redaktion/PDF/E/english-high-tech-masterplan,property=pdf,bereich=bmw,sprache=de,rwb=true.pdf>

63 <http://www.hightech-strategie.de/en/423.php>

64 EC (2009). INNO-Policy TrendChart – Innovation Policy Progress Report Germany. URL: [http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country\\_Report\\_Germany\\_2009.pdf](http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country_Report_Germany_2009.pdf)

65 BMWL (2004). Verstärkte Holznutzung. URL: <http://www.bmelv.de/cae/servlet/contentblob/383636/publicationFile/22184/ChartaFuerHolz.pdf> (in German)

The sustainable retail initiative is a cooperative project between The Federal Ministry of Environment (BMU) the German Environmental Protection Agency (UBA) and the

Sustainable Consumer Initiative. The national initiative brings together consumers and retailers with the aim of increasing market opportunities of sustainable products. So far four projects have been implemented as a part of the initiative: Guiding systems for sustainable products (Leitsysteme für nachhaltige Produkte), Action weeks on sustainable consumption (Aktionswochen zum nachhaltigen Konsum), Promotion of energy-efficient appliances at point of sale (Förderung stromeffizienter Geräte am Point of Sale) and CSR in the retail sector (Umwelt- und Sozialverantwortung von Handelsunternehmen, on-going project)<sup>66</sup>.

### Smarter Consumption

Germany doesn't have a specific strategy aimed at sustainable consumption, but the national dialogue process on SCP (see page 20) includes also sustainable consumption issues. SC is also addressed in the "Nachhaltigkeit konkret" strategy by the Federal Ministry of Food, Agriculture and Consumer Protection, launched in 2009. The strategy specifies political action in 10 different areas, one of which is sustainable consumption. Within this strategy SCP related instruments like consumer information and education became a central part. The name of the sustainable consumption part is in English "Responsibility of the consumer – Sustainable Consumption", and the approach adopted is quite traditional and focused on the responsibility of individual consumers and their education.

In the field of GPP, Germany is an interesting case. The Federal Government of Germany regards the promotion of GPP important, but at the same time it takes a critical view of the preparation of action plans for it, especially where they are to include quantitative targets. The German government states that it is impossible to produce a national action plan in view of the way that Germany is organised, because the

inclusion of federal states and municipalities would be difficult in a country organised on a federal basis. Another reason given is that the Federal Government sees a conflict between quantitative targets for GPP and the priority purpose of procurement law, namely economic purchasing by the public sector<sup>67</sup>.

## 3.5 Lithuania

### SCP Strategy

Lithuania hasn't so far elaborated a specific SCP strategy. The first National Sustainable Development Strategy (NSDS) "Efficient economy, healthy environment, prosperous society" was approved in 2003<sup>68</sup> and renewed in 2009<sup>69</sup>. The renewed NSDS has been amended with a new chapter on sustainable consumption. The long term goals for sustainable consumption are to achieve a situation where increasing consumption will not worsen environmental quality and to give priority for environmental friendly products and services which require less energy and other resources. The main long term objectives to achieve this goal are: ■ to achieve that green procurement will cover the whole public sector and reach the same level as the most advanced countries;

- to promote green procurement and use of ecoproducts;
- to support organizations and society with regard to green procurement issues;
- to get the state and municipal institutions to follow sustainable consumption standards;

Inclusion of this chapter in NSDS was possible after the conference "Sustainable consumption and production... how to make it possible? Towards Sustainable Consumption and Production in Lithuania and Europe" which took place in Vilnius, 19–20 of March, 2008 organized in cooperation with CSCP.

<sup>66</sup> ETC/SCP (2009). National Policies to Promote Sustainable Household Consumption – Policy examples Germany. Un-published draft, and <http://www.nachhaltig-einkaufen.de/projekt/vorgaengerprojekte/initiative-zeigen-nachhaltig-handeln>

<sup>67</sup> Web page of the Umweltbundesamt: <http://www.umweltbundesamt.de/produkte-e/beschaffung/informationen/recht/umweltaspekte/einfuehrung.html>

<sup>68</sup> Government of the Republic of Lithuania (2003). Resolution No. 1160 on the approval and implementation of the national strategy for sustainable development. URL: <http://www.am.lt/VI/en/VI/files/0.901665001073997792.pdf>

<sup>69</sup> Government of the Republic of Lithuania (2009). Resolution No. 1247 on the amendment of Governmental Resolution No. 1160 on the approval and implementation of the national strategy for sustainable development (in Lith.). URL: <http://www.am.lt/VI/files/0.816819001255418152.doc>

Other chapters of NSDS also address some aspects of SCP such as efficient use of natural resources, sustainable transport, housing and tourism. However the aspect of economic development is quite a central aspect in the NSDS as it states that the main challenge of sustainable development in Lithuania is to achieve the present developmental level of EU countries by 2020, according to indicators of economic and social development as well as the efficiency in consumption of resources, and not to exceed allowable EU standards on pollution.

### Use and Management of Raw Materials

Lithuania doesn't yet have a raw material strategy in place, but a strategy is under development at the moment. The use of raw materials is regulated by the Underground Law and through mining taxes<sup>70</sup>. The Underground Law defines the basic rights and obligations in exploration, exploitation and protection of the mineral resources. The law determines that the raw materials exploitation sector is obliged to implement principles of sustainable development.

### Leaner and Cleaner production

The main strategies in Lithuania concerning innovation policy and industrial development are Lithuanian National Lisbon Strategy Implementation Programme for 2008–2010, Innovation in Business Programme for 2009–2013<sup>71</sup> and High technologies development programme for 2007–2013. The aspect of eco-innovation could be stronger in these strategies, as only the Lisbon Strategy Implementation Programme includes environmental issues at all. One of its priorities is to promote efficient use of energy resources as well as the development of renewable energy resources. It is also

said that a more supportive environment for SMEs should be created<sup>72</sup>. The key objectives of the Innovation in Business –programme are to increase the share of innovative businesses, increase the share of high technology enterprises and to increase the share of exports. The high technologies development programme concentrates on supporting R&D in biotechnologies, ICT and other fields, but not specifically R&D in the environmental field.

There is no special financial mechanism in Lithuania to support investments in cleaner and leaner production in SME. In principle nationally available innovation support mechanisms can be applied for support of eco-innovations in SME, but due to lack of interest from SMEs and insufficient promotion from governmental institutions it is not currently the case<sup>73</sup>.

European Cohesion and Regional Development Funds as well as national financial schemes dedicated to improve environmental performance are mainly used to minimize pollution levels and to improve solid waste management. Also the Lithuanian Environmental Investment Fund (LEIF) provides support through subsidies and loans mainly for pollution minimization and waste management projects. 46 projects were approved for financing in 2008, of which 10 are waste management projects, 25 are on reduction of air pollution, and 11 are on reduction of water pollution<sup>74</sup>. Since there are no approved criteria for support of pollution prevention measures, it is unlikely that LEIF could support SMEs going to invest in cleaner production. It is expected that starting from 2011 LEIF will be restructured and it will offer the SMEs the grants, subsidized loans as well as equity investments for projects aiming at improved environmental performance<sup>75</sup>.

70 For Republic of Lithuania the Underground Law. URL: [http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_1?p\\_id=101711](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_1?p_id=101711);

Van der Voet, Ester et. al (2005). Policy Review on Decoupling: Development of indicators to assess decoupling of economic development and environmental pressure in the EU-25 and AC-3 countries. URL: [http://ec.europa.eu/environment/natres/pdf/fin\\_rep\\_natres.pdf](http://ec.europa.eu/environment/natres/pdf/fin_rep_natres.pdf)

71 According to EC (2009). INNO-Policy TrendChart – Innovation Policy Progress Report Lithuania. URL: [http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country\\_Report\\_Lithuania\\_2009.pdf](http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country_Report_Lithuania_2009.pdf)

72 A presentation by Rainys Gediminas (2008). URL: <http://www.ukmin.lt/lisabona/UserFiles/File/2008-2010/Updating.ppt>

73 Interview with Liutauras Stokus, Environmental Protection Agency of Lithuania, 26th of March, 2010

74 EC (2008). Commission staff working document accompanying the communication from the commission – 2008 Environment Policy Review part two. URL: [http://ec.europa.eu/environment/pdf/EPR%202008\\_SWP%20part%202.pdf](http://ec.europa.eu/environment/pdf/EPR%202008_SWP%20part%202.pdf)

75 Interview with Liutauras Stokus, Environmental Protection Agency of Lithuania, 26th of March, 2010

## Better products and service

Lithuanian eco-label "Vandens lelija" "Water lily" was created in 2001, based on the criteria of the EU eco-label. Because of small internal market the role of this eco-label is quite limited<sup>76</sup>.

## Smarter Consumption

There isn't a specific strategy addressing sustainable consumption in Lithuania. However, a governmental initiative close to the topic is "National programme for education for sustainable development 2007–2015"<sup>77</sup>. The programme is aimed at integrating sustainable development topics at all levels of education.

In 2007, the Lithuanian government approved the National Green Procurement implementation programme and set a goal that by 2011 environmental criteria are to be applied to at least 25 % of public procurement tenders. In 2009, measures were taken to strengthen the green procurement capacity of contracting authorities, partly through new training sessions<sup>78</sup>.

## 3.6 Poland

### SCP Strategy

Poland has expressed its commitment to sustainable development in its Constitution from 1997. Art. 5 of the Constitution addresses this issue very specifically: "The Republic of Poland shall safeguard the independence and integrity of its territory and ensure the freedoms and rights of persons and citizens, the security of citizens, safeguard the national heritage and shall ensure the protection of the natural environment pursuant to the principles of sustainable development."<sup>79</sup>

Polish SCP strategy "Strategy of changing production and consumption patterns to favour the implementation of sustainable development principles"<sup>80</sup> was adopted by the Polish Government in 2003. The key goal of the strategy is to decouple economic growth in Poland from the use of natural resources and environmental degradation, and to improve the quality of life. The main objectives are to limit the resources input per production unit, to restrain industry's negative impact on the environment and to avoid negative interdependencies between the energy sector development and environmental impacts. The strategy highlights the importance of SMEs in the process of pursuing the set goals. Thus, the need of mobilizing and supporting SMEs in achieving the environmental standards, reduction of waste production, energy efficiency, waste management and eco-labelling are emphasized. Among the suggested instruments, the priority is given to environmental management systems (ISO 14 000, EMAS), cleaner production programmes and including the Life Cycle Analysis and Environmental Product Declaration into the impact analysis of goods and services.

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<sup>76</sup> Interview with Liutauras Stokus, Environmental Protection Agency of Lithuania, 26th of March, 2010

<sup>77</sup> <http://www.unece.org/env/esd/GoodPractices/Submissions/Countries/Lithuania/MoEdNatIESDProgramme.pdf>

<sup>78</sup> EC (2008). Commission staff working document accompanying the communication from the commission – 2008 Environment Policy Review part two. URL: [http://ec.europa.eu/environment/pdf/EPR%202008\\_SWP%20part%202.pdf](http://ec.europa.eu/environment/pdf/EPR%202008_SWP%20part%202.pdf)

<sup>79</sup> Polish Ministry (1997): The Constitution of The Republic of Poland, Dziennik Ustaw No. 78, item 483, URL: <http://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm>

<sup>80</sup> Ministerstwo Gospodarki, Pracy i Polityki Społecznej, Departament Konkurencyjności Gospodarki (2003): Strategia zmian wzorców produkcji i konsumpcji na sprzyjające realizacji zasad trwałego, zrównowalonego rozwoju. URL: <http://www.mg.gov.pl/Gospodarka/Zrownowazonyrozwoj/>

Three years after the SCP strategy was approved, a progress report was elaborated<sup>81</sup>. The progress report and Polish "National Development Strategy 2007–2015"<sup>82</sup> are basis for development of further measures on SCP. Connected to this, the "Plan of systematizing the national development strategy"<sup>83</sup> which was adopted by Polish Government in 2009 sets out plans to develop nine strategies, two of which: "The strategy of innovation and economy efficiency" and "The strategy of energy security and environment" will address SCP issues in particular<sup>84</sup>.

## Use and Management of Raw Materials

There is no specific strategy in Poland focusing on use and management of raw materials. However, "National Reform Programme for 2008–2011 to implement the Lisbon Strategy"<sup>85</sup> reflects actions in the environmental sphere aiming at enhancing the synergy between environmental protection and economic growth through sustainable use of natural resources and development of eco-industry. Furthermore, the need for sustainable use of resources is amongst the main priorities of Poland's "National Environmental Policy for 2009–2012 with a perspective to 2016"<sup>86</sup>.

## Leaner and Cleaner Production

There are many national policies and initiatives addressing the aspect of leaner and cleaner production in Poland. Poland has been a signatory to the UNEP International Declaration on Cleaner Production since 1999. In 2006 the Polish Ministry of Environment adopted the national ETAP roadmap: "Roadmap of the Implementation of the Action Plan for Environmental Technologies in Poland"<sup>87</sup>. In 2007 "The Executive Programme for the 2007–2009 National Action Plan for Environmental Technologies with a perspective for 2010–2012"<sup>88</sup> was elaborated. These are the main policies aiming at fostering eco-innovation and environmental technologies in Poland.

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81 Ministerstwo Gospodarki (2006): Raport 2003–2006. Wzorce zrównowazonej konsumpcji i produkcji. Stan i rekomendacje. URL: <http://www.mg.gov.pl/NR/rdonlyres/B8E7B110-5EEA-4F7C-9A89-C6DFC2A39855/49225/Raportzrównowazonaprodukcjaikonsumpcja1.pdf>

82 Ministry of Regional Development, Department of Structural Policy Coordination (2006): National Development Strategy 2007–2015. URL: [http://www.mrr.gov.pl/rozwoj\\_regionalny/poziom\\_krajowy/strategia\\_rozwoju\\_kraju\\_2007\\_2015/strony/srk\\_0715.aspx](http://www.mrr.gov.pl/rozwoj_regionalny/poziom_krajowy/strategia_rozwoju_kraju_2007_2015/strony/srk_0715.aspx)

83 Ministerstwo Rozwoju Regionalnego (2009): Plan uporządkowania strategii rozwoju, URL: [http://www.zdp.kprm.gov.pl/userfiles/Plan\\_uporzadkowania\\_strategii.pdf](http://www.zdp.kprm.gov.pl/userfiles/Plan_uporzadkowania_strategii.pdf)

84 An information received from Adameczyk, B. (Head of Economic Policy Unit, Polish Ministry of Economy) during an interview on Polish SCP issues conducted by CSCP on March, 30 2010.

85 Polish Ministry of Economy (2008): National Reform Programme for 2008–2011 to implement the Lisbon Strategy, URL: <http://www.mg.gov.pl/NR/rdonlyres/ED3609C2-1747-4125-98B1-C23D09115D94/50245/NRP20082013.pdf>

86 Ministerstwo Środowiska (2008): Polityka Ekologiczna Państwa w latach 2009–2012 z perspektywą do roku 2016. URL: [http://www.mos.gov.pl/g2/big/2009\\_05/71ab76240aa779f13f53c62229651f10.pdf](http://www.mos.gov.pl/g2/big/2009_05/71ab76240aa779f13f53c62229651f10.pdf)

87 Ministry of Environment (2006): Roadmap of the Implementation of the Action Plan for Environmental Technologies in Poland. URL: [http://www2.mos.gov.pl/2strony\\_tematyczne/etap/wdrazanie/mapa\\_drogowa\\_ANG.pdf](http://www2.mos.gov.pl/2strony_tematyczne/etap/wdrazanie/mapa_drogowa_ANG.pdf)

88 Ministerstwo Środowiska (2007): Program wykonawczy do krajowego planu działań na rzecz technologii środowiskowych na lata 2007–2009 z uwzględnieniem perspektywy na lata 2010–2012. URL: [http://www.mos.gov.pl/g2/big/2009\\_06/41bc0291315b5983e41eb935982f6df6.pdf](http://www.mos.gov.pl/g2/big/2009_06/41bc0291315b5983e41eb935982f6df6.pdf)

There are two centres coordinating the implementation of cleaner production programmes in Poland: The National Centre for Implementation of Cleaner Production at the Central Mining Institute<sup>89</sup> and The Polish Cleaner Production Centre<sup>90</sup>. They help to increase environmental and economic opportunities on local and regional scale via the implementation of cleaner production projects and Environmental Management Systems, based on ISO 14000 and EMAS. Besides, The Polish Cleaner Production Centre organizes the "Programme of Cleaner Production in Poland"<sup>91</sup> and coordinates the activities of the national association "The Polish Movement for Cleaner Production"<sup>92</sup>. The strategic activity of this association is facilitation, under the patronage of the Minister of the Economy, of "Polish Register of Cleaner Production and Responsible Entrepreneurship" which is a register of Polish enterprises and governmental institutions implementing cleaner production strategies.

An individual national scheme that could be highlighted is a programme "Clean Business in Poland"<sup>93</sup> developed by The Partnership for the Environment Foundation. It aims at fostering the principles of sustainable development, and in particular the efficient production and management of natural resources in Polish SMEs. Within the framework of this programme, The Foundation organizes annually "Clean Business Award" promoting Polish enterprises involved in eco-innovation.

## Better Products and Services

In the field of better products the "Strategy of Implementation of Integrated Product Policies in Poland"<sup>94</sup> and the "Executive Programme for Implementation of an Integrated Product Policy in Poland"<sup>95</sup> were adopted by the Ministry of Environment in 2005. The National Environmental Policy in force also addresses the issue of eco-friendly products very specifically. Regarding eco-labelling in Poland, the EU Eco-label and a national eco-label are in place. In order to ensure the cohesion of integrated product policy, there has been currently one main governmental body – The Ministry of Economy – responsible for integrated product policy in Poland.

## Smarter Consumption

As for sustainable private consumption, no specific strategy has been elaborated so far. Yet, "The Strategy for Consumption Policy for the 2007–2009"<sup>96</sup> in force emphasizes the importance of promotion of sustainable individual consumption patterns. Thus, many schemes aiming at increasing consumers' environmental awareness have been initiated in the recent years. Among the most important initiatives are: "Buy responsibly!"<sup>97</sup> – a scheme of the Polish Green Network, "Local Brand"<sup>98</sup> initiated by The Partnership for the Environment Foundation and "The useful guide to sustainable consumption"<sup>99</sup> developed by Polish Green Network and the eFTE Group.

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89 <http://cp.gig.katowice.pl>

90 [www.programcp.org.pl/polpcp.htm](http://www.programcp.org.pl/polpcp.htm)

91 <http://www.programcp.org.pl/polccp.htm>

92 <http://www.programcp.org.pl/polpcp.htm>

93 <http://czystybiznes.pl/pl/>

94 Ministerstwo Srodowiska (2005): Strategia wdrazania w Polsce zintegrowanej polityki produktowej.  
URL: [http://qcm2.quicksilver.pl/img/20/strategia\\_ZPP.pdf](http://qcm2.quicksilver.pl/img/20/strategia_ZPP.pdf)

95 Ministerstwo Srodowiska (2005): Program wykonawczy do strategii wdrazania w Polsce zintegrowanej polityki produktowej.  
More information: [http://www.mos.gov.pl/zintegrowana\\_polityka\\_produkcyjna](http://www.mos.gov.pl/zintegrowana_polityka_produkcyjna)

96 Urzad Ochrony Konkurencji i Konsumentow (2007): Strategia polityki konsumenckiej na lata 2007–2009.  
URL: <http://www.uokik.gov.pl/szukaj.php?szukaj=strategia+polityki+konsumenckiej&tx=21&ty=8>

97 <http://www.ekonsument.pl/>

98 <http://www.markalokalna.pl/>

99 <http://www.ekonsument.pl/spacerownik/?lng=en>

Regarding public consumption policy in Poland, "The National Action Plan for Green Public Procurement (GPP NAP) for 2007–2009"<sup>100</sup> was adopted in 2007. The strategic goals of the action plan are: enforcing the consideration of the environmental aspects in public procurement, development of environment-friendly products market and promotion of SCP patterns. The updated GPP NAP for 2010–2012 is being prepared<sup>101</sup>. Furthermore, another important document in this field is the "New Approach to Public Procurement: Procurement versus small and medium sized enterprises, innovation and sustainable development"<sup>102</sup> which was adopted by the Polish Council of Ministers in 2008.

## 3.7 Russia

### SCP Strategy

There isn't a specific SCP strategy in place in Russia. A draft strategy for sustainable development, which discussed also sustainable consumption and production issues, was made in 1997. The draft was widely discussed in various fora, including meetings of non-governmental organisations (NGOs), parliamentary and ministerial hearings. However, the document never received official status and has now been abandoned as outdated<sup>103</sup>.

Presently, Sustainable development is addressed in the Ecological doctrine of the Russian Federation from 2002<sup>104</sup> and in the Climate doctrine adopted in 2009<sup>105</sup>. The Ecologi-

cal doctrine identifies the following priorities in the field of 'environmental protection': 1) Sustainable use of (renewable and non-renewable) natural resources, 2) Reduction of pollution and sustainable use of resources, 3) Conservation of biodiversity, 4) Ensuring environmental safety of hazardous activities and in emergencies, 5) Improvement of the quality of life and public health by improving environmental quality, and 6) Minimisation of environmental risks caused by natural and technological disasters. The Climate doctrine describes the goal, principles, substance, and ways of implementation of the climate policy of Russian federation. In the doctrine, the most important measure mentioned is increasing energy efficiency.

### Use and Management of Raw Materials

There isn't a specific strategy in place aimed at the use and management of raw materials, but one of the objectives of the Ecological Doctrine is the "Organization of the nature resources sustainable use", as mentioned previously, but under this theme for example resource efficiency is not mentioned.

Raw material use is addressed to some extent also in waste legislation. Federal Law "On Production and Consumption of Waste" was adopted by State Duma and approved by the Council of Federation in 1998. The law created legal basis for household and industrial waste management and its recycling and reuse as secondary raw material<sup>106</sup>.

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<sup>100</sup> Urząd Zamówień Publicznych (2007): Krajowy plan działań w zakresie zielonych zamówień publicznych na lata 2007–2009. URL: [http://www.kape.gov.pl/glp/Plan\\_Dzian-ZZP\\_4.pdf](http://www.kape.gov.pl/glp/Plan_Dzian-ZZP_4.pdf)

<sup>101</sup> ITCILO (January, 2010): EU Green Public Procurement Policy: Dissemination and awareness raising newsletter. URL: [http://gpp.itcilo.org/UserFiles/File/1\\_Newsletter.pdf](http://gpp.itcilo.org/UserFiles/File/1_Newsletter.pdf)

<sup>102</sup> Ministry of Economy & Public Procurement Office (2008): New Approach to Public Procurement: Procurement versus small and medium sized enterprises, innovation and sustainable development. URL: <http://www.mg.gov.pl/NR/rdonlyres/2776CA90-55D5-45B3-80C8-B9A5D-F0078ED/50209/NowePodejscieENG.pdf>

<sup>103</sup> Martinenco, Olga (2008). Evaluation of Russia's Progress in Promoting Sustainable Consumption Policies. Proceedings: Sustainable Consumption 2008. 8th October 2008, Budapest, Hungary

<sup>104</sup> Russian Ecological Doctrine. URL: [http://www.urbanworks-toolkit.eu/lt/documents/Russian\\_Ecological\\_Doctrine\\_summary\\_en.pdf](http://www.urbanworks-toolkit.eu/lt/documents/Russian_Ecological_Doctrine_summary_en.pdf)

<sup>105</sup> Russian Climate Doctrine. URL: <http://eng.kremlin.ru/text/docs/2009/12/223509.shtml>

<sup>106</sup> Solovieva et al. (2006). Report on Sustainable Production and Consumption: Policy of the Russian Federation. Report for UNEP.

## Leaner and Cleaner Production

Leaner and cleaner production is also addressed in the already mentioned ecological doctrine, under the theme of "Providing for the ecological safety of the industry development". The main policy directions under this theme include among others support of the development and introduction of energy and resource-saving technologies; support for the low level waste producing technologies, forming industrial groups providing for closed cycle production; refuse to place "dirty technologies" threatening country health and environment within the country; and introduction of the producers responsibility for the product during all its cycle of life.

The Programme of Socio-Economic Development of the Russian Federation for the medium-term (2006–2008) includes some aspects close to cleaner production, as it introduces the reform of environmental regulation including environmental quality standards, permitting system, support for environmental projects and mechanisms to promote resource efficiency and use of renewable energy<sup>107</sup>. Furthermore, there are also two Cleaner production Centres working in the field of promoting clean production<sup>108</sup>.

According to a report of three Russian Ministries in 2002 (the Ministry of Economic Development and Trade, the Ministry of Foreign Affairs and the Ministry of Natural Resources)

es) the innovation potential of the country is high but the volume of innovative goods in the total volume of industrial production does not exceed 7 per cent. This means that support for new technologies is still insufficient, and financing of innovation projects is low compared to other industrialised countries<sup>109</sup>.

## Better Products

For better products, there is an eco-labelling scheme 'Vitality leaf' in place!<sup>110</sup> However, the scheme is not managed by the state but by an environmental NGO Saint-Petersburg Ecological Union (SPEU). Recently, environmental certificates are also issued by the Ministry of Natural Resources of the Russian Federation. This certificate confirms that this good is "ecologically-clean"<sup>111</sup>.

## Smarter Consumption

There aren't specific strategies aimed at private consumption or GPP in place in Russia. Russia does not have any separate SC strategy. In fact, the Russian version of the term itself "sustainable consumption" has not been officially adopted in environmental discourse. The field of environmental education is however well recognised at different levels of education in Russia<sup>112</sup>.

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<sup>107</sup> OECD (2007) Policies for a Better Environment. Progress in Eastern Europe, Caucasus and Central Asia.

URL: <http://www.oecd.org/dataoecd/33/12/39274836.pdf>

<sup>108</sup> <http://www.nwicpc.ru/>, <http://www.ncpc.gubkin.ru/>

<sup>109</sup> Referred to in Martinenco, Olga (2008). Evaluation of Russia's Progress in Promoting Sustainable Consumption Policies.

Proceedings: Sustainable Consumption 2008. 8th October 2008, Budapest, Hungary

<sup>110</sup> <http://www.ecounion.ru/ru/site.php>

<sup>111</sup> Solovieva et al. (2006). Report on Sustainable Production and Consumption: Policy of the Russian Federation. Report for UNEP.

<sup>112</sup> Solovieva et al. (2006). Report on Sustainable Production and Consumption: Policy of the Russian Federation. Report for UNEP.

## 3.8 Sweden

### SCP Strategy

In Sweden a cross-ministry working group, with a mandate from the Ministry of the Environment, has developed a national report on SCP, containing description of ongoing activities, new initiatives and additional needed measures<sup>113</sup>. The report states that its focus is on sustainable growth and the opportunities for new enterprise, jobs and exports, as well as increased welfare and good health, which can be created by a conversion to sustainable consumption and production patterns.

The strategy is categorised according to the consumption clusters food, housing and mobility. Under these themes, on-going initiatives and additional needs are listed. These include things such as increased promotion of life cycle analysis in the building and property sector and dissemination of associated knowledge, increased requirements for declarations of contents in building products and a tax relief to stimulate public transport.

### Management and Use of Raw Materials

Sweden doesn't have a specific raw material strategy in place, but many economic instruments are used in this field. These include the excavation charge, licence fee for exploitation of peat, mineral act charge and natural gravel tax<sup>114</sup>.

### Leaner and Cleaner Production

The Swedish strategies related to leaner and cleaner production are "Swedish strategies and initiatives for promotion of environmental technology – A National Roadmap for the implementation of ETAP"<sup>115</sup> and "Innovative Sweden – A strategy for growth through renewal"<sup>116</sup>. Both of these strategies address SMEs and eco-innovation quite comprehensively. The understanding of eco-innovation is wider than in many of the other countries strategies: also systemic innovation and not just technological innovation is addressed.

A concrete measure aimed at supporting eco-innovation is SME is the Environment Driven Markets –programme of the Swedish Agency for Economic and Regional Growth (Tillväxtverket). The programme is aimed at increasing the competitiveness of SMEs, assisting them in finding sustainable business models and increasing the sales of sustainable goods and services<sup>117</sup>.

Furthermore, another good initiative is the Programme for energy efficiency (PFE) in energy intensive industry, which promotes greater efficiency i.a. in production processes. Industry companies which participated in this programme between 2004–2009 have increased the efficiency in their use of electricity by 1,4 TWh<sup>118</sup>.

Another interesting initiative linked to clean technology and also to sustainable urban development is the Delegation for Sustainable Cities<sup>119</sup>. The delegation works for sustainable development in cities, urban communities and housing areas. The purpose of the initiative is to encourage sustainable urban development projects that contribute to reducing greenhouse gas emissions with applied environmental technology. Through the Delegation, funds are available for projects in the field.

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113 Swedish Ministry of the Environment (2007). URL: [http://www.unep.fr/scp/nap/clearinghouse/documents/SWE\\_SummaryProgressReportSCPEN.pdf](http://www.unep.fr/scp/nap/clearinghouse/documents/SWE_SummaryProgressReportSCPEN.pdf)

114 Van der Voet, Ester et. al (2005). Policy Review on Decoupling: Development of indicators to assess decoupling of economic development and environmental pressure in the EU-25 and AC-3 countries. URL: [http://ec.europa.eu/environment/natres/pdf/fin\\_rep\\_natres.pdf](http://ec.europa.eu/environment/natres/pdf/fin_rep_natres.pdf)

115 SWENTEC (2008). <http://swentec.se/Documents/Swentec/Bibliotek/Swedish%20strategies%20and%20initiatives%20for%20promotion%20of%20environmental%20technology%20-%20A%20National%20Roadmap%20for%20the%20implementation%20of%20ETAP.pdf>

116 The Ministry of Industry, Employment and Communications and The Ministry of Education (2004). <http://www.sweden.gov.se/content/1/c6/03/25/51/29e722a9.pdf>

117 The programme brochure (in Swedish) <http://publikationer.tillvaxtverket.se/Download.aspx?ID=1302>

118 <http://www.energimyndigheten.se/en/Energy-efficiency/Companies-and-businesses/Programme-for-improving-energy-efficiency-in-energy-intensive-industries-PFE/>

119 <http://www.hallbarastader.gov.se>

An individual economic instrument in use is energy and carbon dioxide taxes, which promote greater energy efficiency within production processes<sup>120</sup>.

According to a Pro INNO Europe country report, 6 % of innovation policy measures in Sweden are targeted especially to the environmental sphere. Average share in EU countries is 5 %. Furthermore, 22 % of innovation support measures target SME directly, the average figure for all EU countries being also 22 %<sup>121</sup>.

### Better products

There isn't a specific strategy in the field of better products in Sweden. An individual initiative that could be mentioned is "On the Road to EPD project"<sup>122</sup>. The overall goal of an Environmental Product Declaration, EPD, is to provide relevant, verified and comparable information to meet various customer and market needs. The project by the Swedish Environmental Council and the Swedish Industrial Research Initiative is designed to help companies in the process of developing an EPD by a step-by-step procedure, enabling SMEs to enter the system gradually.

Eco-labels are also used in Sweden. In addition to the EU eco label, the Nordic Swan –scheme is in place.

### Smarter Consumption

There isn't a specific strategy aimed at sustainable consumption in Sweden, but the topic is addressed in the national SCP report (see page 28). Sweden is also active in the international arena of smarter consumption. Sweden is leading the Marrakech Task Force for Sustainable lifestyles within the Marrakech process and has run nine projects related to smarter consumption around the world.

In the field of GPP, The Swedish Government has endorsed a three-year National Action Plan for GPP 2007–2009. The action plan sets out current status, targets for 2007–2009 and proposed measures to achieve the goals<sup>123</sup>.

## 3.9 Summary of the country findings

The findings of the country analysis are summarised in table 3. From the summary it can be concluded that the countries mostly address the same themes most actively. For example, in all the countries, some activities that address leaner and cleaner production are in place, but in the field of retailers, the situation is the opposite. Furthermore, it seems that in the countries where an SCP strategy is in place, the individual themes are also addressed more thoroughly than in the other countries. Germany is an exception in this respect, as it has initiated measures in most of the fields, even though it doesn't have an SCP strategy in place.

In the field of **raw material use** policies two of the BSR countries, Finland and Germany, have elaborated strategies, with other countries regulating raw material use through individual policy instruments. Taking a more strategic approach to raw material use would be beneficial, because resource efficiency is an essential strategy to tackle climate change and reducing material flows also decreases the likelihood of environmental impacts from sources that haven't yet been identified. More stringent raw material use policies encourage SMEs to create and apply eco-innovations in the field of resource efficient production, products and services. However, as stated before, stricter policies should be accompanied with support activities aimed at SMEs.

In the field of **leaner and cleaner production**, many government strategies in the BSR countries are in place. This is most likely due to the fact that sustainable production and eco-innovation are, in addition to the obvious environmental benefits, seen as big business opportunities where direct economic benefits can be achieved. However, despite the large amount of strategies, four gaps in them could be identified:

- 1 Missing integrated approach to all the three aspects: industrial development, supporting SME and eco-innovation.

120 Swedish National Reporting to the UN Commission on Sustainable Development CSD18 19. URL: [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni\\_ni\\_pdfs/NationalReports/sweden/Full\\_text.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni_ni_pdfs/NationalReports/sweden/Full_text.pdf)

121 EC (2009). INNO-Policy TrendChart – Innovation Policy Progress Report Sweden. URL: [http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country\\_Report\\_Sweden\\_2009.pdf](http://www.proinno-europe.eu/node/extranet/upload/countryreports/Country_Report_Sweden_2009.pdf)

122 [http://ec.europa.eu/environment/sme/pdf/epd\\_en.pdf](http://ec.europa.eu/environment/sme/pdf/epd_en.pdf)

123 Official government letter 2006/07:54 Environmental public procurement. URL: [http://www.msr.se/Documents/rapporter/handlingsplanen\\_eng.pdf](http://www.msr.se/Documents/rapporter/handlingsplanen_eng.pdf)

2 Narrow definition of eco-innovation

3 Need for stronger implementation

The first gap refers to the situation that only in few cases a really integrated approach to SME and eco-innovation can be found in the strategies. This means that all the three aspects (industrial development, SCP and SMEs special needs) are not addressed at the same time; either there is a gap in linking environmental aspects and industrial development, or a gap in linking SME support and eco-innovation.

The second gap refers to the definition of eco-innovation. The most benefit of eco-innovation can be achieved when it is understood not only as technological innovation at the production phase but targeting also other life-cycle stages, e.g. producing products with a smaller impact on the use-phase and that require less raw materials and providing consumers with products and services that encourage sustainable lifestyles. Integrating this wider definition of eco-innovation (see chapter 1.1) in innovation policies would secure greatest benefits to both competitiveness and the environment.

The third gap refers to the implementation phase. Even though in some of the strategies the need for measures supporting eco-innovation for SCP in SME is acknowledged, the take up of eco-innovation in SME is still considered to be low, which implies that the strategies are not implemented effectively. More concrete and targeted measures need to be implemented, to offer SMEs with tools and training to take up eco-innovation, instead of merely stating that SMEs need support in this issue. A further beneficial measure to encourage eco-innovation in SME would be to target the entrepreneurs-to-be already in the education phase. So far no initiatives that address the education phase could be found.

In the field of **better products**, eco-labelling is well covered in the countries as in all of them eco-labelling schemes are in place. From the point of view of other national efforts, this field is however less covered than the previous 'leaner and cleaner production' -topic. The retailer sector is also very scarcely addressed in the countries' policies. Retail sector would be important from the point of encouraging product innovation, because it has a significant role as gatekeepers between producers and consumers. Being in direct contact with consumers, retailers have significant influence on what products consumers want to buy, and how they use and dispose them, thus giving retailers an opportunity to boost the demand of sustainable products. On the other hand, retailers

| Country | Overall SCP Strategy | The use and management of raw materials |                   |  |
|---------|----------------------|---|-------------------|--|
|         |                      | Strategies/ action plans                | Other instruments |  |
| DK      | -                    | -                                       | +                 |  |
| EE      | -                    | -                                       | +                 |  |
| FI      | +                    | +                                       | +                 |  |
| DE      | -                    | +                                       | +                 |  |
| LT      | -                    | -                                       | +                 |  |
| PL      | +                    | -                                       | +                 |  |
| RU      | -                    | -                                       | +                 |  |
| SE      | +                    | -                                       | +                 |  |

are in contact with suppliers worldwide, including also many SMEs. Projects aimed at the retail sector are needed to raise the awareness of the retail sector about their role in encouraging eco-innovation for SCP.

In the field of **smarter consumption**, no specific strategies were found. However, in all countries individual instruments such as information dissemination campaigns, economic tools, product standards and offering sustainable alternatives, such as public transport are used to encourage sustainable consumption.

The sustainable consumption measures taken in the countries tend to focus on providing information on environmental aspects to consumers. One of the reasons for this might be that sustainable consumption is traditionally viewed as a part of consumer policy, where consumer protection and securing transparency of information are central principles. So far information dissemination measures have been successful in for example expanding the markets for organic food and fair trade products. Now there is a great opportunity to broaden this demand to other consumption fields as well by using new creative means in addition to information dissemination and thus increasing demand for sustainable products and services and spurring eco-innovation also in the SME level (see recommendations chapter 4).

|  | Leaner and Cleaner production |                      | Better products and services and the market place |                      |            |                      | Smarter consumption |                      |                     |                      |
|--|-------------------------------|----------------------|---|----------------------|------------|----------------------|---------------------|----------------------|---------------------|----------------------|
|  | Strategies/<br>action plans   | Other<br>instruments | Suppliers   |                      | Retailers  |                      | Public consumption  |                      | Private consumption |                      |
|  |                               |                      | Strategies  | Other<br>instruments | Strategies | Other<br>instruments | Strategies          | Other<br>instruments | Strategies          | Other<br>instruments |
|  | +                             | +                    | -   | +                    | -          | +                    | +                   | +                    | -                   | +                    |
|  | -                             | +                    | -   | +                    | -          | -                    | +                   | +                    | -                   | +                    |
|  | +                             | +                    | -   | +                    | -          | -                    | +                   | +                    | -                   | +                    |
|  | +                             | +                    | -   | +                    | -          | +                    | -                   | +                    | -                   | +                    |
|  | +                             | +                    | -   | +                    | -          | -                    | +                   | +                    | -                   | +                    |
|  | +                             | +                    | +   | +                    | -          | -                    | +                   | +                    | -                   | +                    |
|  | -                             | +                    | -   | +                    | -          | -                    | -                   | +                    | -                   | +                    |
|  | +                             | +                    | -   | +                    | -          | -                    | +                   | +                    | -                   | +                    |

### 3.10 The relationship between national strategies and regional activities

The international SCP agenda and priorities are formed through the Marrakech process. These priorities are then reflected in regional SCP initiatives such as the EU SCP action plan. As members of the European Union the countries assessed – except Russia – follow in general outline the same framework, even though the intensity of activities varies between countries and between the different themes inside SCP. For example, retailers have a central role in the EU SCP action plan, but in the national level their important role hasn't been recognised to the same extent.

The EU BSR Strategy is not focused on SCP issues, as presented in chapter 2, but eco-innovation aimed at the production process is handled as a part of factors affecting the region's prosperity. In this regard there is a similarity between the EU BSR Strategy and national activities, as cleaner production is also the most actively covered field of SCP in the countries assessed.

Between the EU BSR strategy and national activities there are some synergies and possibilities to work together towards eco-innovation for SCP in SME. From the actions aimed at innovation in general, listed in the EU Baltic Sea Strategy, one strategic action and two flagship projects could be mentioned: 'Establishing a common Baltic Sea Region innovation strategy', 'Developing a BSR programme for innovation, clusters and SME networks' and 'Creating a

Baltic sea fund for innovation and research'. If these initiatives would adopt an integrated approach to eco-innovation which is at the moment mostly lacking in the national initiatives (see chapter 3.9), they would have great potential in facilitating eco-innovation in SME in BSR.

A further interesting point is that the importance of entrepreneurship training is highlighted in the EU BSR strategy. It is said that entrepreneurship should be present at all levels of education, teachers should be provided with appropriate knowledge and innovative teaching methods and an entrepreneurial culture should be established, with involvement of local business. Integrating sustainable entrepreneurship -training to this priority would give the opportunity for young entrepreneurs to elaborate business ideas that promote sustainable lifestyles right from the early stages of a business development. In the national initiatives, education for sustainable entrepreneurship is not covered so far.

The action programmes of Baltic 21 address many SCP topics even though they are not called SCP. Baltic 21 mission is to contribute actively towards advancing sustainable development in the Baltic Sea Region by coordinating goals and activities, and by serving as a forum for cooperation across borders and between stakeholder groups. By acting as a bridge between stakeholders, the Baltic 21 can serve as catalyst that helps to advance eco-innovation for SCP in the countries' SME and to strengthen the implementation of national strategies in the field. In the following chapter 4, recommendations are given on how Baltic 21 and national governments could advance eco-innovation for SCP in the BSR region.

## » 4 Recommendations

This chapter presents recommendations on how eco-innovation for SCP could be encouraged in the Baltic Sea Region, with a focus on how the role of SMEs can be supported. The recommendations are based on the previous chapters and divided into two categories: recommended actions for the Baltic 21 Strategy 2010–2015 and recommendations for national governments in BSR. The distinction between these two sets is not clear-cut and some of the recommendations directed at Baltic 21 may apply also for national governments and vice versa. Inside both of these sets, recommendations concerning the production phase the consumption phase and overall recommendations are given.

### 4.1 Recommended actions for the Baltic 21 Strategy 2010–2015

#### Sustainable production

##### 1. Training and tools for SMEs

Even though SME in the BSR region are probably more aware of their role in developing and/or implementing eco-innovation for SCP compared to the global average, they still need training and support. The importance of SME support is recognised in the cleaner production strategies in the region (see chapter 3), but more effective implementation of these strategies is needed. The need for training can be grouped into three components:

- The impact SMEs production has on the environment and how to reduce these impacts
- Sustainable business model innovation and the potential to encourage sustainable consumption
- The benefits of eco-innovation for SMEs business

The last point is important as many SMEs view SCP related issues as restrictions, liability and additional costs. Therefore, there is a need to present eco-innovation as a business opportunity to make it attractive for SMEs where "survival" is the key issue. Suggestions for mobilising eco-innovation for SCP potential for SMEs must be framed in terms of competitiveness or new business models rather than compliance, as has been done in the 'Competitive edge for SME through responsibility' -strategy of the Finnish Ministry for Employment and Economy (see chapter 3.3). Training projects with a small group of SME could be implemented first and later replicated with a bigger group. The experience gathered in the project should be widely disseminated among other SMEs in the region.

##### 2. Supporting CSR in SME

Corporate social responsibility (CSR) and SCP are concepts that are closely linked. However, in CSR social aspects (such as fair treatment of employees and community contribution) are emphasised and reporting activities have a central role. Many SMEs are already doing a lot in the social field, but their capacity to report on these activities is low. A project on CSR and reporting would help SMEs to communicate their achievements to the wider public.

##### 3. Using existing networks to disseminate information on eco-innovation for SCP to SMEs in the region

The results gathered in the projects aimed at SMEs should be widely disseminated in the BSR region using existing networks. A database could be set up, which contains best practices in the field of SCP and eco-innovation from all BSR countries.

#### Sustainable consumption

##### 4. Creating demand for sustainable innovations through creative instruments

Creating consumer demand is essential for establishing markets for sustainable products and for encouraging enterprises to make and apply eco-innovations. The tools aimed at promoting sustainable consumption in BSR so far have been quite traditional, such as awareness raising campaigns and eco-labelling initiatives (see chapter 3). Cooperating with film and marketing schools to produce short films or 'advertisement' for sustainable consumption would help to make SC attractive, fun and joyful.

##### 5. Demonstrating the role of retailers in creating demand for eco-innovation

Current SCP initiatives and policies in the Baltic Sea Region have mostly neglected the important role of the retail sector in SCP, even though some sporadic initiatives such as the German 'Sustainable Retail Initiative' can be identified (see chapter 3.4). Retailers have a significant role as gatekeepers between producers and consumers. Being in direct contact with consumers, they have significant influence on what products consumers want to buy, and how they use and dispose them. On the other hand, they reach out to suppliers worldwide. Projects aimed at the retail sector are needed to raise the awareness of the retail sector about their role in creating demand for eco-innovations.

## **6. Demonstrating the potential of eco-innovation for sustainable housing**

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Many of the enterprises working in the field of renovation and interior design are small- and medium sized, and can thus have an important role in creating demand for eco-innovation in the field of sustainable housing. For example, an SME installing the heating system of a house can have a great influence on the sustainability of the alternative chosen. A project could be set up where the possibilities and potential for eco-innovation in the field of housing are demonstrated, accompanied with information on what is the role of SME. The project could be implemented for example in the form of a travelling exhibition.

### **Overall**

#### **7. Giving input to the revision of the EU SCP action plan**

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The review of the EU SCP action plan starts in 2011, and the revision is anticipated to be ready in 2013. Giving input to the review would be a good opportunity to contribute the knowledge and experience gathered from Baltic 21 projects to the SCP action plan and to further the priorities of the region in the field of SCP.

#### **8. Becoming a regional platform for implementation of Marrakech process**

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The Marrakech process is at the moment particularly topical as the proposal of the 10-year framework of programmes will be reviewed by the Commission on Sustainable Development (CSD) during the 2010/11 two-year cycle (see page chapter 2.4). The Baltic Sea Region could support the Marrakech process by becoming a regional implementation platform for it, focusing on projects targeted at SMEs.

#### **9. Making BSR a global leader in eco-design**

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Eco-design means designing products in such manner that environmental impacts are reduced. Eco-design also includes designing sustainable products in a way that their appearance is appealing to the consumer. The BSR has a great potential in the field of eco-design and many companies are already applying these principles in their production. Implementing a project on eco-design would help to identify BSR's leadership potential in the field.

## **4.2 Recommendations for National Governments**

### **Sustainable production**

#### **1. Creating a helpdesk on eco-innovation for start-up companies**

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Creating a helpdesk that concentrates on providing support for start-up companies in the field of eco-innovation would be a concrete tool for strengthening the implementation of cleaner production strategies in BSR. The help-desk would provide coaching and information services and arrange practical trainings on how to benefit from eco-innovation.

#### **2. Financing eco-innovation in SME**

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Access to finance is one of the most critical constraints for the application of eco-innovation in SMEs. In the Baltic Sea Region, the problem is not so much the absence of funding but the lack of awareness from the SMEs side about the funding possibilities and the difficulties to follow the funding application procedures and to select the right funding scheme. Furthermore, the financial institutions quite often have a high perception of risk when lending to SMEs. This is due to the fact that there is a lack of financial information that makes difficult for financial institutions to make investment or lending decisions.

In order to close this gap, SMEs in the Baltic Sea Region should be supported in fulfilling financial institution's requirements to access to finance products and services. Capacity building can be offered to SMEs so that they can present adequate financial information and carry out the funding applications procedures properly. Furthermore, information should be provided to SMEs of existing products and services offered by financial institutions and explain them what the best options for their needs might be.

#### **3. Taking sustainable business model innovation seriously**

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In the country analysis it was identified that there is lack of an integrated approach to SMEs and eco-innovation in the governmental strategies assessed (see chapter 3.9). This means that the industrial development/innovation policy, eco-innovation and support to SMEs are not usually addressed at the same time. Furthermore, eco-innovation is

often understood as only technological innovation in the strategies and sustainable business model innovation is not included. To fully exploit the potential of eco-innovation, this integrated approach should be strengthened in national strategies.

#### **4. Integrating SCP knowledge in the work of institutions working with SMEs**

There are many institutions working with SMEs in BSR that give business advice and services. Raising the awareness of these institutions on eco-innovation for SCP would be an important step.

### **Sustainable consumption**

#### **5. Strengthening GPP activities**

Green public procurement is a concrete tool that public authorities can use to create markets for sustainable products and environmental technology, facilitate eco-innovation and help domestic developers to achieve economies of scale and compete globally. GPP strategies have already been made in most BSR countries, but also in the countries where this hasn't yet been done, GPP should be brought to the political agenda. Also in the countries where GPP strategies exist, there is still a need for more effective implementation and more ambitious targets.

### **Overall**

#### **6. Encouraging eco-innovation through local policy frameworks**

Many cities in the BSR region are already active in sustainability, for example Hamburg and Stockholm have been nominated the 'Green Capitals of Europe', Stockholm for 2010 and Hamburg for 2011<sup>124</sup> and Union of Baltic Cities has been active in the framework of the 'Roadmap for Sustainable Baltic cities'<sup>125</sup>. The existing activities in the city-level could be strengthened by action plans that bring all SCP initiatives under a common framework. Public authorities in the national level could encourage city-level authorities to elaborate their own SCP action plans that present the potential of eco-innovation for sustainable lifestyles in a city, e.g. in the fields of infrastructure, housing, mobility and leisure time activities, and how SME can provide sustainable solutions in these fields.

#### **7. Education for sustainable entrepreneurship**

Many national initiatives are already in place to encourage sustainable production methods in SMEs in BSR, but there is a gap in the education phase. Sustainability aspects should be integrated as a part of university curricula to encourage entrepreneurs-to-be to elaborate innovative business ideas based on SCP. Education for sustainable entrepreneurship would also present an opportunity to link sustainable consumption and production together by demonstrating the role SMEs can have in encouraging sustainable consumption (see picture 2).

<sup>124</sup> [http://ec.europa.eu/environment/europeangreencapital/index\\_en.htm](http://ec.europa.eu/environment/europeangreencapital/index_en.htm)

<sup>125</sup> <http://www.ubc.net/plik,429.html>



