Country: Sweden, Ministry of Enterprise

Title:

Strategy and Action Plan for New-industrialization

Focus area 2, 4, 5, 6, 7, 8: Promote the internalization of negative externalities and the sustainable use of natural capital; Shift consumer behaviours towards sustainable consumption patterns; Develop clean physical capital for sustainable production patterns; Promote green and fair trade; Increase green and decent jobs, while developing the necessary human capital and Improve access to services, healthy living and well-being

Description of the action: The Swedish Government has presented a Strategy on New-industrialization with the purpose to react to the global challenges and at the same time create opportunities for business development and new jobs.

Vision: Sweden will be a world leader in the innovative and sustainable industrial production of goods and services.

Objective: The industrial sector throughout Sweden is to increase its competitiveness and participation, primarily in the high-quality segments of global value chains.

The Strategy, SMART INDUSTRIES, includes 4 focus areas:

Industry 4.0 – Exploit the potential of digitalization

Sustainable production – Improve the industrial sector's capacity for sustainable and resource-efficient production

Industrial skills boost – Ensure the supply of skills to the industrial sector

Test bed Sweden – Create attractive innovation environments.

<u>Industry 4.0</u>: Smart industrial companies in Swedish industry are to be leaders in digital development. The implementation will therefore focus on the following:

- Stimulate the development, deployment and use of digital technologies that have the highest potential to lead the industry's transformation.
- Take advantage of the digitalization wide opportunities regardless of company size, and geographic location.
- Encourage new business- and organizational models to utilize the potential of the new technology.
- Meeting the needs for new knowledge that the digital revolution brings.
- Adapt framework and infrastructure for the digital age.

<u>Sustainable Production</u>: Increased resource efficiency, environmental protection and more sustainable production should contribute to the industry's value creation, job creation and competitiveness across the country. The implementation will therefore focus on the following:

- Develop new or improved existing technologies, goods and services with respect to significantly reduced emissions, phasing out of particularly hazardous substances, higher energy and resource efficiency, higher reusability and recyclability, as well as higher environmental performance.
- Unlocking the potential of new digital and other technologies for the transition to a fossil free and the circular economy.
- Encourage business models that create values based on circular economy.
- Ensure that regulations and other instruments will make it easier to produce resource-efficient and environment-friendly and provide a sustainable supply of raw materials.

<u>Competence</u>: Competence system at local, regional and national level to meet the industry's needs and promote long-term development. The implementation will therefore focus on the following:

- Increasing interest in science and technology and to increase industry relevant programs of education attractiveness.
- Improve matching of the industry's need of labor and education at all educational levels
- Ensuring that the education system provides students not only with the right skills but also with the right competence, in terms of the abilities required in the society and for conversion to a digitized and circular economy.
- Improve conditions for lifelong learning.
- Promoting change of career and mobility between universities and business.

<u>Test beds:</u> Sweden should be a leader in research in areas that contribute to strengthening the industrial production in Sweden. The implementation will therefore focus on the following:

- Align research and innovation efforts on areas that have particular potential to contribute to new-industrialization and long-term competitiveness.
- Open up the public sector to be the industry test bed to solve societal challenges in close collaboration with stakeholders at local and regional level.
- Increase the use of innovation-friendly procurement.
- Promote cooperation between universities and industrial research and develop the institutions sector.
- Making it more attractive for researchers to work in Sweden.
- Making it more attractive for companies to invest in and conduct R & D activities in Sweden.

Action's time frame/milestones, as appropriate: The Strategy was presented in end of 2015. An Action Plan is now being developed. The Strategy and Action Plan will continuously be revised.

Type of action: The implementation will involve a number of actions and tools including regulation, education and research initiatives, public procurement, opening up the public sector for example to provide test beds and open data. It will require the active participation of

industry and industry-related service sector. The regional level has a crucial role to play in the implementation. More concrete measures will be developed in an Action Plan.

In support for the work, the Government has commissioned a specific council consisting of four members with broad experience and a good understanding of the industry preconditions and needs. The Council will monitor implementation of the strategy and Action Plan and regularly provide recommendations on the way forward.

The Enterprise and Innovations Minister will continue the industrial dialogues with representatives of industry and the services sectors as a forum to discuss development and evaluation of the Government's work.

Economic sectors: All industrial sectors

Reference instruments and sources, as appropriate: —

Expected co-benefits and impact of the outcome: The purpose with the strategy is to strengthen Swedish business on a global market, create new jobs and at the same time reduce the negative impact on the environment and the climate. This will be achieved through cooperation, integration, development of tools, new business models etc. more efficient use of nature resources, a circular economy where material and products are reused, material flows are toxic free and waste is used as a resource. This will allow Swedish business to compete with sustainable products and services on a global market and at the same time reduce its internal costs.

SDGs target(s) that the action may contribute to implement: (in particular) 1, 7, 8, 9, 12, 13, 14, 15

Implementation of Environmental Performance Review (EPR) recommendations, as appropriate: —

Objectively verifiable indicators, as appropriate: —

Partners: Other Ministries and relevant agencies, business, universities and research institutes, business.

Contact point:
Mr Per Stagnell
Swedish Ministry of Enterprise
E-mail: per.stagnell@gov.se

Country: Sweden, Ministry of the Environment and Energy

Title:

PAGE, Partnership on Action for a Green Economy

Focus area 1, 2, 5, 7: Improve the measurement and valuation of natural capital; Promote the internalization of negative externalities and the sustainable use of natural capital; Develop clean physical capital for sustainable production patterns and Increase green and decent jobs, while developing the necessary human capital

Description of the action: Sweden contributes to the UNEP initiative PAGE through financing and engagement in Steering Committee. The Partnership for Action on Green Economy (PAGE) seeks to put sustainability at the heart of economic policymaking. The Partnership supports nations and regions in reframing economic policies and practices around sustainability to foster economic growth, create income and jobs, reduce poverty and inequality, and strengthen the ecological foundations of their economies.

PAGE is a direct response to the Rio+20 Declaration, *The Future We Want*, which called upon the United Nations System and the international community to provide assistance to interested countries in developing, adopting and implementing green economy policies and strategies. Bringing together the expertise and broad convening power of five UN agencies — United Nations Environment Programme, International Labour Organization, United Nations Industrial Development Organization, United Nations Development Programme and United Nations Institute for Training and Research — and working closely with national governments, private sector and civil society, PAGE offers a comprehensive, coordinated and cost effective package of analytical support, technical assistance and capacity building services to countries and regions to transform their economies into drivers of sustainability and social equity.

In its first two years, PAGE has set up a governance structure (with a Secretariat, Management Board and Donor Steering Committee) and centered the five agency partnership in a jointly developed results framework, with the overall objective to support countries' efforts to transform their economies to be greener and more inclusive. The expertise and delivery models of each agency are brought together under a joint commitment to deliver on agreed outcomes and outputs at the national and global level. Building on this joint agreement on results, PAGE partners have developed a business model that provides an integrated offer to interested countries, taking into account each agency's strengths and the specific country demand.

Action's time frame/milestones, as appropriate: As the demand by countries for support on inclusive green economy (IGE) continues to grow, PAGE has developed a medium term strategy. It lays out plans for supporting 20 countries by 2020 and includes a blueprint for mobilizing resource and augmenting partnerships to achieve this initial target. It also sketches

out a growth trajectory to 2030 that aligns PAGE with the Sustainable Development Goals (SDGs).

Type of action: PAGE services take into account different starting points, needs and circumstances of each partner country and, inter alia, include:

- 1. Assessments for evidence-based policy proposals, e.g. green economy modelling and policy assessments to enable policymakers to visualize the impact of their policy and investment decisions, green jobs assessments, green industry assessments, and public expenditure reviews;
- 2. Multistakeholder policy consultations and support for adoption of policies and plans;
- 3. Sector-specific and thematic policy reform;
- 4. Policy implementation and mobilization of finance; and
- 5. Capacity development.

Economic sectors: All economic sectors

Reference instruments and sources, as appropriate: —

Expected co-benefits and impact of the outcome: The collective convening power of five partners UNEP, UNIDO, UNDP, ILO, UNITAR, and distinct expertise of each of them enables PAGE activities to cover macro, mezzo, micro levels of economy and issues that cut across economic sectors. Through relevant partners, PAGE reaches out to the ministries of planning, labour, environment, transport, agriculture, industry, and education, among others. Similarly, PAGE reaches a broad segment of the private sector and civil society through the networks and constituencies of the multiple governmental partners involved.

PAGE produces a coherent and comprehensive action: As a result of its broad reach within the economic policy-making circles, and close coordination among its partners, PAGE activities are synergistic and comprehensive. National plans and strategies, including IGE priorities, are validated and endorsed across Government and with civil society, ensuring that stakeholders are informed and enabled for a coordinated action to implement them.

PAGE reduces transaction costs: Agreement on joint efforts and results framework to achieve a common objective, high level of trust and transparency between partners, shared governance mechanism for organizational and operational decision making, management of the PAGE trust fund under rules of one agency, and appropriateness of working with common national green economy champions and leaders have been some of the key factors to reduce transaction costs for PAGE partners and for the countries they are supporting. In most partner countries, general preference by the national ministries is to engage through PAGE compared to working bilaterally with multiple UN agencies, each with its own administrative procedures and requirements. The Partnership also reduces the costs of delivering development assistance for PAGE funding partners as efforts are streamlined and duplication is avoided.

SDGs target(s) that the action may contribute to implement: 1, 7, 8, 9, 12, 13, 14, 15

Implementation of Environmental Performance Review (EPR) recommendations, as appropriate: —

Objectively verifiable indicators, as appropriate: —

Partners: Lead UN organisation: UNEP in partnership with UNIDO, UNITAR, UNDP and ILO. Support from Steering Committee/Donors; Germany, South Korea, Switzerland, Norway, Finland, Sweden, and EU Commission. Partner countries (receiving support): Burkina Faso, Senegal, Ghana, South Africa, province in China, Peru, Mongolia, Mauritius.

Contact point:

Gunilla Blomquist

Swedish Ministry of the Environment and Energy

E-mail: gunilla.blomquist@gov.se

Country: Sweden, Ministry of the Environment and Energy

Title:

Making the values of ecosystem services visible

Focus area 1, 2, 3: Improve the measurement and valuation of natural capital; Promote the internalization of negative externalities and the sustainable use of natural capital and Enhance ecosystems and ecosystem services as part of ecological infrastructure

Description of the action: The Swedish government in 2014 adopted a national milestone target on the importance of biodiversity and the value of ecosystem services. The target stipulates that, by 2018, the importance of biodiversity and the value of ecosystem services are to be generally known and integrated into economic positions, political considerations and other decisions in society where it is relevant and reasonable to do so. This target is part of the updated national strategy and action plan on biological diversity, which is embedded in the system of Environmental Quality Objectives adopted by Parliament. The target contributes to the global Strategic Plan for Biological Diversity 2011-2020 and its Aichi targets that were adopted by the Convention on biological diversity in 2010, in particular Aichi target 1, 2, 3, 14, 15, 18, 19 and 20.

This initiative contains a number of assignments for national authorities as well as a political declaration on the importance of applying knowledge on the values of ecosystem services in political decision making, as it becomes available and improves through the assignments in question.

The government has commissioned the Swedish Environmental Protection Agency to cooperate with central authorities in strategic communication of ecosystem services. Through this project, running from 2014-2018, a network is being established representing key sectors. A guide for valuation of ecosystem services, and other requested tools, are being produced. Sectoral agencies are identifying processes where integrating ecosystem services is most relevant. Regional planning of so called green infrastructure is being developed, employing stakeholder participatory approaches at the local level, and involving improved consideration of ecosystem services.

Research programmes are carried out as well as cooperation through the EU Mapping and Assessment of Ecosystems and their Services. Key research needs and ways of improving interaction between research and society are being identified.

Statistics Sweden has been commissioned to develop methods for including the value of ecosystem services in environmental accounting, through linking data on land use in economic sectors with knowledge of habitat types.

Economic and legal instruments will be improved, to reflect values of ecosystem services that become known through the pursuit of the milestone target. For example, a public inquiry has been initiated to develop ecological compensation measures in order to contribute to mitigating net loss of biodiversity and ecosystem services caused by exploitation activities.

The need for enhanced consideration of ecosystem services in policy for corporate social responsibility, innovation and public procurement is being highlighted by the government.

Action's time frame/milestones, as appropriate: The time frame for the milestone target is 2018.

Type of action: The initiative employs policy instruments primarily, but aims to improve regulatory, economic as well as information instruments through building capacity and understanding of the importance of biological diversity and secured delivery of ecosystem services that contribute to well-being.

Economic sectors: Economy-wide.

Reference instruments and sources, as appropriate: See for example guides and assessments produced by The Economics of Ecosystems and Biodiversity (www.teebweb.org).

Expected co-benefits and impact of the outcome: The expected long term effect of the mile stone target is the creation of mechanisms that secure the capacity of ecosystems and provides incentives for a sustainable management of biological diversity. It is clear however, that work in this area needs to progress in a step-wise manner in order to make efficient use of knowledge that emerges along the way.

SDGs target(s) that the action may contribute to implement: Biodiversity and ecosystem services contribute to most of the SDGs. In the national Swedish context, the initiative may contribute in particular to SGD 2, 3, 6, 7, 8, 9, 11, 12, 13, 14 and 15.

Implementation of Environmental Performance Review (EPR) recommendations, as appropriate:

Objectively verifiable indicators, as appropriate: The development of robust data on ecosystem services is part of the initiative.

Partners: International collaboration is prominent with EU Member States, the European Commission, and the Nordic Council of Ministers. Cooperation also takes place within the Intergovernmental science-policy Platform on Biological Diversity.

Contact point:

Mr Lars Berg Natural Environment Section Ministry of the Environment and Energy E-mail: lars.berg@gov.se

Country: Sweden, Ministry of Finance Title: **Strategy on Sustainable Consumption** Focus area: Description of the action: Time frame/milestones, as appropriate: Type of action Economic sectors: Reference instruments and sources, as appropriate: Expected co-benefits and impact of the outcome: SDGs target(s) that the action may contribute to implement: Implementation of Environmental Performance Review (EPR) recommendations, as appropriate: Objectively verifiable indicators, as appropriate: Partners: Contact point: Lars Berg Swedish Ministry of the Environment and Energy

E-mail: lars.berg@gov.se