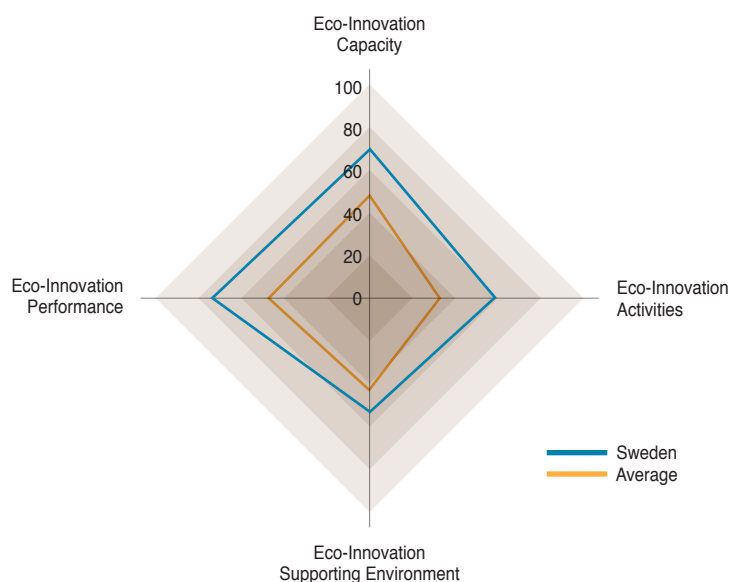


Sweden



	Sweden	Average
Capacity	71	49
Supporting Environment	56	42
Activities	60	35
Performance	74	46

Fig 34. ASEI Result: Sweden

Sweden's Eco-Innovation Quantitative Analysis

According to the ASEI 2013, Sweden score is higher than the average national score (Sweden: 65/100, Average: 43/100) when compared to twenty four ASEM member countries evaluated by the ASEI.

- *"Eco-Innovation Capacity" criteria score is higher than average:* most of the indicators in this criterion shows comparatively high scores than average figures, yet **Green Technology R&D Institution Capacity** indicator score is similar to the average.
- *"Eco-Innovation Supporting Environment" criteria score is above average:* most of the indicators such as **Implementation of Environmental Regulations**, **Maturity of Investment Setting for Green Technology Industry**, **Government's R&D Expenditure in Green Industry** and **Investment Scale towards Green Technology SMEs** indicator scores are above the average.
- *"Eco-Innovation Activities" criteria score is exceeds the average level:* **Commercialization Level of Green Technology**, **Firms' Participation on Environmental Management System** and **Activeness of Renewable Energy Utilization** show higher scores relative to other included indicator scores.
- *"Eco-Innovation Performance" criteria is far above the average level:* most of the indicators show comparatively high scores yet **Green Industry Market Size** indicator score demonstrates a relatively lower figure.

Sweden's Eco-Innovation Supporting Environment: Qualitative Research

	National Vision & Strategy	National Policy & Programmes	Network, Partnership & Organizations
Eco-Innovation	<ul style="list-style-type: none"> ■ The Environmental Technology Strategy (2011) 	<ul style="list-style-type: none"> ■ Environmental technology Action Plan ■ The research and innovation bill (Bill 2008/9:50) - the government's support for eco-innovation research programmes ■ five-year energy efficiency programme for 2010-2014 	<ul style="list-style-type: none"> ■ The International Cooperation for Eco-Innovations Programme (2012) ■ VINNOVA⁸⁴⁾
Sustainable Development	<ul style="list-style-type: none"> ■ Integrated climate and energy policy (2009) ■ The Strategy for Development and Export of Environmental Technology (2011-2014) ■ National Innovation Strategy for 2020⁸⁵⁾ 	<ul style="list-style-type: none"> ■ Sustainable Technologies Fund ■ Delegation for Sustainable Cities (2008) ■ Innovationsbron AB - providing business incubation support for Swedish enterprises focusing on environmental technology ■ Nordic Cleantech ■ Action Plan for Swedish Cleantech (2009) ■ National system for Green certificates in electricity production ■ Swedish Environmental Code (1998) ■ 16 Swedish Environmental Quality Objectives (1999) ■ National Waste Plan (2005) ■ A National Program for Waste Prevention (2013) 	<ul style="list-style-type: none"> ■ Swedish American Green Alliance (SAGA) ■ SEMCo - the Swedish government's expert body on environmental and other sustainable procurement ■ The Swedish Environmental Technology Council (SWENETEC) ■ Swedish energy agency
SMEs		<ul style="list-style-type: none"> ■ The Environment-Driven Business Development program (2003) ■ MISTRA (The foundation for strategic environmental research) Innovation - to give small and medium-sized enterprises (SMEs) a chance to develop innovative ideas ■ Almi (Almi Företagspartner AB) is owned by the state with the task to promote the development of competitive small and medium-sized businesses as well as to stimulate new enterprises with the aim of creating growth and innovation in Swedish business life 	<ul style="list-style-type: none"> ■ Cleantech Inn Sweden - A nation-wide business support organization that coaches new and established companies in the promotion and adoption of cleantech innovations

Table 29. Sweden's Eco-innovation Supporting Environment Qualitative Research Table

84) VINNOVA <http://www.vinnova.se/en/About-VINNOVA/>

VINNOVA - Swedish Governmental Agency for Innovation Systems - is Sweden's innovation agency. Mission is to promote sustainable growth by improving the conditions for innovations, as well as funding needs-driven research. VINNOVA's vision is for Sweden to be a world-leading country in research and innovation, an attractive place in which to invest and conduct business. VINNOVA is a Swedish government agency working under the Ministry of Enterprise, Energy and Communications and acts as the national contact agency for the EU Framework Programme for R&D

85) *The Swedish Innovation Strategy, National Innovation Strategy for 2020 Government Offices of Sweden*

A good innovation climate lays the foundations for more jobs, a more sustainable society with better quality of life for all inhabitants and growth throughout the country

Major Policies of Eco-Innovation in Sweden

- VINNOVA
- The Swedish Energy Agency(SEA)
- Swedish Environmental Protection Agency
- the Swedish Agency for Economic and Regional Growth
- The Swedish Environmental Technology Council (SWENTEC)

Overall Country Analysis: Key Features of Eco-Innovation in Sweden

- Based on the abundant natural resources and the high level of competency in manufacturing industries such as engineering, pharmacy and wood processing, Sweden has a high standard of national eco-innovation competency in Europe. In all four criteria of ASEI evaluation Sweden ranks in the top tier of the list.
- Sweden, already producing the lowest CO₂ emissions per person in Europe, has an ambitious environmental policy objective 'to hand over to the next generation a society in which the major environmental problems in Sweden have been solved'.⁸⁶⁾ The Integrated Climate and Energy Policy allows Sweden to implement mid-long term practical strategy to challenge climate change and enhance energy efficiency, to create provision of energy with zero CO₂ emissions. Such policy measure has allowed creation of eco-innovation activities to in insulation and automobile sectors.
- Sweden has relatively high overall R&D expenditure (3.4% of GDP)⁸⁷⁾ and policies that support SMEs which takes over 64% in the total employment⁸⁸⁾ which is mainly delivered via VINNOVA will further expand its potential towards eco-innovation. VINNOVA supports advancement of technology and more recently actively supports companies with eco-innovative technological solutions, so that they can transfer such solution to the emerging market.
- Sweden's four focused areas of eco-innovation: ICT, Space technology, Biotechnology, Nanotechnology (EIO, 2011)

86) *European Environmental Agency, (2011), Sweden resource efficiency policies*

In Environmental Objectives Bill in March 2010, the Swedish Government stated that the overall goal of environmental policy was to hand over to the next generation a society in which the major environmental problems in Sweden have been solved, and that this should be done without increasing environmental and health problems outside Sweden's borders. The Bill was approved by the Riksdag in June of the same year.

87) *2010 research and development expenditure (% of GDP), World Bank*

88) *SBA Fact Sheet 2012 Sweden, European Commission*