

Fig 23. ASEI Result: Germany

Germany's Eco-Innovation Quantitative Analysis

According to the ASEI 2013, Germany scores higher (Germany: 57/100, Average: 43/100) than the national average score when compared to other twenty four ASEM member countries evaluated by the ASEI.

- "Eco-Innovation Capacity" criteria reveals higher score than average: in particular, Country's Economic Competitiveness, Country's General Innovation Capacity and Green Technology possessed/acquired Firms indicators appear considerably high.
- "Eco-Innovation Supporting Environment" criteria shows higher score than average: especially Implementation of Environmental Regulations and Maturity of Investment Setting for Green Technology Industry indicators illustrate significantly higher scores than the average.
- "Eco-Innovation Activities" criteria score is above average: Commercialization Level of Green Technology and Economic Influence of Leading Environmentally Responsive Firms indicators far outweighs the average yet Firms' Participation on Environmental Management System and Activeness of Renewable Energy Utilization indicators show lower figures than the average.
- *"Eco-Innovation Performance" criteria score is above average:* Level of Environmental Impact on Society and Jobs in Green Technology Industry indicators show figures that are far above the average.

Germany

Chapter 6 Country Level Analysis

Germany's Eco-Innovation Supporting Environment: Qualitative Research

National Vision & Strategy	National Policy & Programmes	Network, Partnership & Organizations
 High-Tech Strategy(2006) (renewed in 2010) 	 Eco-Innovation Programme (former, Environmental Technology Programme) The Master plan on environmental Technology (2008) ProgRess programme promoting the understanding of resource efficiency as a competitive advantage Research programme on Material Efficiency and Resource Conservation (MaRess) Integration of the closed-cycle and waste management into a sustainable resource- conserving substance management (2004) Identification of Relevant Substances and Materials for a Substance Flow-Oriented, Resource-Conserving Waste Management (2006) Act for Promoting Closed Substance Cycle Waste Management and Ensuring Environmentally Compatible Waste Disposal (1994, latest update 2006; now under revision) 5th Federal government energy research programme 	 NeMAT (Netzwerken zur Materialeffizienz) programme Solar Valley-grid parity for solar power in Germany Cool silicon-climate friendly communications The Centre for Resource Efficiency(VDI ZRE) (2009)
 The Framework Research Programme for Sustainable Development (FONA) National ICT Strategy "Germany Digital 2015" and Action Plan "Germany: Green IT Pioneer" National Research Strategy for BioEconomy 2030 The German Federal Sustainable Development Strategy (2002) The High-Tech Strategy 2020 for Germany (2010) National Raw Material Strategy (2010) 	 The "Saarländisches Umweltmanagement- Förderprogramm" Goal is an increase of EMAS-certified enterprises in order to tackle the sustainable resource-management issue The project WING (Materials innovation for industry and society) The Research for Sustainable Development Programme of the Federal Ministry of Education and Research (2010) The national eco-label scheme "Blue Angel" The federal government runs three subsidy programs A subsidy program for renewable energy (MAP) An energy advice program A program for remodeling federal government buildings The Integrated Energy and Climate Package (2007) The National Energy Efficiency Plan (2008) National Biomass Action Plan (2009) and Action Plan for the Industrial use of Biomass (2009) National Resource Efficiency Programme (2011) 	 International partnerships for sustainable climate protection and environmental technologies and services(CLIENT) The national "Resource Efficiency Network"
	 The KfW bank programme "Energy efficiency advice for SMEs" BMU-Umweltinnovationsprogramm supports primarily SME investing in processes for the abatement of any environmental damage DEMEA Consultative programmes on material efficiency Material Efficiency Award Scheme The Mikrokreditfonds Deutschland -a guarantee fund and sponsors mainly SME (2009) 	 PROINNO(innovation partnerships for small and medium enterprises) ZUTECH(future technologies for SMEs) Innonet(support of innovative networks) (2008)
	 National Vision & Strategy High-Tech Strategy(2006) (renewed in 2010) The Framework Research Programme for Sustainable Development (FONA) National ICT Strategy "Germany Digital 2015" and Action Plan "Germany: Green IT Pioneer" National Research Strategy for BioEconomy 2030 The German Federal Sustainable Development Strategy (2002) The High-Tech Strategy 2020 for Germany (2010) National Raw Material Strategy (2010) 	National Vision & Strategy National Policy & Programmes High-Tech Strategy(2006) Irenewed in 2010) Eco-Innovation Programme (former, Environmental Technology Programme) The Master plan on environmental Technology (2008) ProgRess programme promoting the understanding of resource efficiency as a competitive advantage ProgRess programme on Material Efficiency and Resource Conservation (MRRess) Integration of the closed-cycle and waste management into a sustainable resource- conserving Substance management (2004) Inte Framework Research Programme for Sustainable Development (FONA) The Framework Research Programme for Sustainable Development Strategy (2002) The rearesory Researd Programme of Sustainable Development Strategy (2002) The High-Tech Strategy (2002) The High-Tech Strategy (2002) The High-Tech Strategy (2002) The Indign-Tech Strategy (2002) The High-Tech Strategy (2002) The High-Tech Strategy (2002) The Indign-Tech Strategy (2002)

Table 18. Germany's Eco-innovation Supporting Environment Qualitative Research Table

Chapter 6

Major Organizations of Eco-Innovation in Germany

- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- German Material Efficiency Agency(DEMEA)
- Federal Environment Agency, German Mineral Resources Agency

Overall Comments for Germany

- Germany's eco-innovation is facilitated by policy measures focused on resource efficiency such as Sustainable Development Strategy, Waste Policy and Resource Efficiency Strategy for Innovation, and Economic Growth and Competitiveness (EEA, 2011)⁴⁹.
- Based on high standard of the national general competitiveness and innovation capacity, investment in eco-industry and environmental regulation is activating the eco-innovation of the private sector as a consequence creating green jobs and activating commercialization of green technologies.
- Germany is known to be advanced in manufacturing and technology industry and its economic structure consists of a large proportion of SMEs. As a result, the country has various policy measures to promote and support SMEs' innovation and technology advancement. This is seen as eco-innovation growth potential for Germany.

49) EEA, (2011), Survey of resource efficiency policies in EEA member and cooperating countries Country Profile: Germany

