

Japan

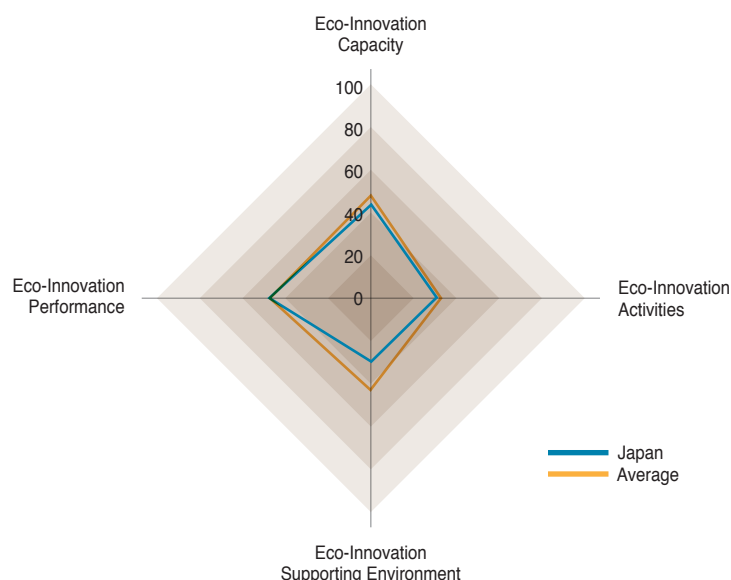





Fig 27. ASEI Result: Japan


Japan's Eco-Innovation Quantitative Analysis

According to the ASEI 2013, Japan's overall score falls below the average level (Japan: 38/100, Average: 43/100) when compared to other twenty four ASEM member countries evaluated by the ASEI.

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"Eco-Innovation Capacity" criteria score is below average: However, most of the indicators included show average scores.
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"Eco-Innovation Supporting Environment" criteria score is below average: particularly, **Government's R&D Expenditure in Green Industry** and **Maturity of Investment Setting for Green Technology Industry** indicators represent low score.
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"Eco-Innovation Activities" criteria score is aligned along the average line: **Firms' Participation on the Environmental Management System** and **Economic Influence of Leading Environmentally Responsive Firms** indicators show considerably high scores while **Commercialization Level of Green Technology** represent lower figure compared to the average.
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"Eco-Innovation Performance" criteria score is average: However **Level of Environmental Impact on Society** and **Country's Energy Sustainability level** indicators demonstrates high scores.

Japan's Eco-Innovation Supporting Environment: Qualitative Research

	National Vision & Strategy	National Policy & Programmes	Network, Partnership & Organizations
Eco-Innovation	<ul style="list-style-type: none"> ■ Green Innovation Strategy (2010) ■ Strategic Energy Plan (2010) ■ The Cool Earth ■ New Action Plan towards a Global Zero Waste Society ■ RCCJ Fuel cell roadmap ■ Innovation 25 (June, 2007) ■ 21st Century Environment Strategy (2007) 	<ul style="list-style-type: none"> ■ Top runner program⁶²⁾ ■ The Japan Environmental Technology Verification Programme (J-ETV) (2003) ■ Eco Leaf Program ■ Eco-Action 21 ■ Carbon Footprint Program ■ The Cool Earth Innovative Energy Technology Programme (2008) ■ Environment research and technology development fund ■ Green IT Project ■ Eco-Town project ■ The Eco-Point Programme (2009) ■ 3Rs(Reduce, Reuse, Recycle) Programme 	<ul style="list-style-type: none"> ■ Green purchasing network ■ Water Environment Partnership in Asia (2003) ■ Asia-Pacific Regional Inception Workshop on the Environmentally Sound Management of Electronic and Electrical Wastes (2005)
Sustainable Development	<ul style="list-style-type: none"> ■ Fukuda vision⁶³⁾ ■ The Basic Environment Plan ■ Japan's Strategy for a Sustainable Society (2007) ■ New growth strategy (2009-2010)⁶⁴⁾ 	<ul style="list-style-type: none"> ■ Third Science and Technology Basic Plan (2006-2010)⁶⁵⁾ 	<ul style="list-style-type: none"> ■ The Eco Mark Program & Global Eco-labeling Network ■ The Regional Innovation Cluster Programme ■ Keidanren voluntary action plan⁶⁶⁾
SMEs		<ul style="list-style-type: none"> ■ The New Competitive Cluster Project (2010) 	

Table 22. Japan's Eco-innovation Supporting Environment Qualitative Research Table

Major Policies of Eco-Innovation in Japan

- 21st Century Environment Strategy (2007)
- Top runner program

Overall Comments for Japan

- Japan's eco-innovation is largely implemented by firms with green technology and advanced environmental management systems. Since 1990s, eco-innovation activities of firms have focused on systemic eco-innovation this is due to limited land for industrial waste management and lack of resource. With the introduction of 3R (Reduction, Reuse, Recycling) policy which aims for 'closed loop cycle'⁶⁷⁾, Japanese firms have focused their eco-innovation effort towards waste management, eco-design and green technology.
- Japan acknowledges the importance of disclosing environmental data at the firm and industry level, thus the country has introduced national Environmental Reporting Guidelines. In 2012, 35 percent of the firms were reporting their environmental actions. Eco-action 21 provides environmental reporting guidelines for Japanese SMEs and provides incentives for best practice SMEs⁶⁸⁾.

62) OECD, (2011), *Greening Growth in Japan*

Top Runner Programme targets (Section 6.3) on lighting, electric appliances and cars agreed in the late 1990s might have contributed to spur innovation in energy efficiency in buildings and lighting and in electric and hybrid vehicles

63) As a long-term goal by 2050, aims to reduce by 60~80% of the current greenhouse gas emission

64) UN Sustainable Development Knowledge Platform. This strategy states that "green innovation" indicates innovation in the fields of environment and energy <http://sustainabledevelopment.un.org/about.html>65) OECD, (2008), *Eco-Innovation Policies in Japan*

This is the third in a series of science and technology (S&T) plans. Objective: Maximize National Potential, to create a competitive nation for achieving sustainable growth

66) On December 17, 1996, Keidanren presented the Industry-Wise Voluntary Action Plans for 29 industries (represented by 131 organizations), which were drafted in response to Keidanren's Appeal on the Environment. http://www.asiaec-col.ecoj.or.jp/eng/e3104keidanren_outline.html

67) In 2007, as one of strategies for the sustainable society, 'sound Material-Cycle Society' was announced

68) Environmental Reporting Guidelines: with the enact of 'Law Concerning Promotion of Environmental Consideration in Business Activities', companies are mandatory to write and announce the environment report. Eco-Action21: certification and registration system of environment reporting certification for SMEs