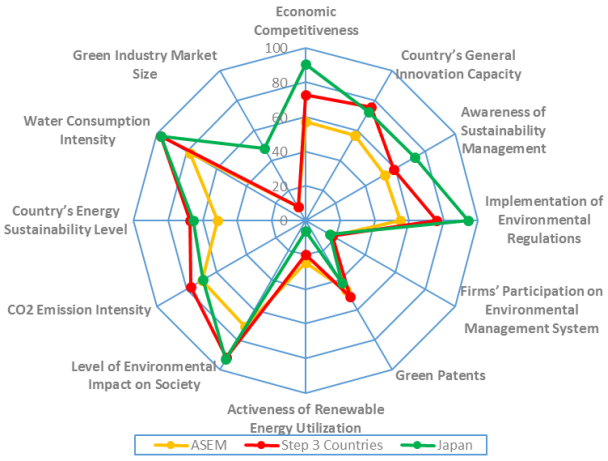
Japan

	32,480	126.9 million	1:27:72	0.891 Very High	6.29	5.83	
Flag	GDP per capita	Population	Industry structure (1st:2nd:3rd)	HDI	Sustainable social index	Sustainable env. index	Geographic location

	Score
ASEI 2015	**67.23**
Eco-Innovation Capacity	78.68
Economic Competitiveness	90.65
Country's General Innovation Capacity	72.60
Awareness of Sustainability Management	72.79
Eco-Innovation Supporting Environment	94.12
Implementation of Environmental Regulations	94.12
Eco-Innovation Activities	21.49
Firms' Participation on Environmental Management System	16.30
Green Patents	42.15
Activeness of Renewable Energy Utilization	6.03
Eco-Innovation Performance	74.61
Level of Environmental Impact on Society	93.07
CO_2 Emission Intensity	69.23
Country's Energy Sustainability Level	65.62
Water Consumption Intensity	97.15
Green Industry Market Size	47.97



- Japan's eco-innovation capacity, supporting environment and performance are higher than the average score of the same development state countries. However, eco-innovation activity is low.
- Ecomomic Competitiveness (indicator no. 1.1) and Green Industry Market Size (4.6) of Japan are higher than the average score of the same development state countries.
- Activeness of Renewable Energy Utilization (indicator no. 3.5) is lower than the average score of the same development state countries.

Table 9 Eco-innovation Policy instruments of Japan

National plan and strategy	Sustainability	■ Japan's Strategy for a Sustainable Society (2007)
	Eco-innovation	■ New growth strategy (2009-2010) ■ Green Innovation Strategy (2010) ■ Strategic Energy Plan (2010) ■ Third Science and Technology Basic Plan (2006-2010)
Programmes and actions	National	■ Top runner program ■ The Japan Environmental Technology Verification Programme (J-ETV) (2003) ■ Eco Leaf Program ■ Eco-Action 21 ■ Eco-Town project ■ Carbon Footprint Program ■ The Cool Earth Innovative Energy Technology Programme (2008) ■ 3Rs (Reduce, Reuse, Recycle) Programme
	International	-
Legislation		■ Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services (Green Purchasing Law) ■ Act on Special Measures Concerning Procurement of Renewable Electric Energy Operators of Electric Utilities (2012)
Finance		■ Environment research and technology development fund
Information		■ Water Environment Partnership in Asia (2003) ■ Asia-Pacific Regional Inception Workshop on Environmentally Sound Management of Electronic and Electrical Wastes (2005) ■ Eco Mark Program & Global Eco-labeling Network ■ Green purchasing network ■ Regional Innovation Cluster Programme ■ Keidanren voluntary action plan

Japan has early attempted eco-innovation in energy sector with basis of superior technologies. The government of Japan has established and developed eco-innovation policies to support its implement in energy sector; solar, wind, geothermal, hydroelectric energy so on. At the same time, technological innovation to reduce environmental burden have been implemented in the existing energy sectors, such

as, nuclear, fuel and LP gas.

Specific plans and programs to promote eco-innovation have been developed for sustainable development by establishing the "New growth strategy", "Green Innovation Strategy" and "Strategic Energy Plan". In order to foster high technology in the medium-long term, "Third Science and Technology Basic Plan" and Top runner program" have been operated for capacity building of eco-innovation of the companies. Policies to support eco-innovation of Japan are established even in the technology sector, environmental management and market side. The technology sector has typically "Top Runner Approach". This program sets performance of the companies which achieved the highest level of energy efficiency as a target baseline, and expand the regulatory or incentive policies so that other industry competitors are able to achieve it. The government sets the target for improvement rate of energy efficiency by 22.8% and if the Japanese car companies have achieved the goals for early 2005 in an effort to receive and respond to regulation and incentive policies. These policies have contributed the Japanese company to acquire comparative advantage as first mover in the global market place through environmentally friendly vehicles, as well as, "Eco-town project" and "3Rs"[4] for environmental management and "Carbon Footprint Program" and "The Eco-Point Program" for environment-friendly society and green market activation.

METI[5] is the major organization which is main axis establishing the eco-innovation policies especially through economic incentive instrument. In late 1998, Japan has provided incentives to improve energy efficiency, promoting the national energy plan. Ministry of Environment has also established the "Eco-Action 21", "The Japan Environmental Technology Verification Programme (J-ETV)", "New Action Plan towards a Global Zero Waste Society" and "Environment research and technology development fund (ERTDF)".

[4] 3Rs (Reduce, Reuse, Recycle) Programme

[5] Ministry of Economy, Technology, and Industry(METI)