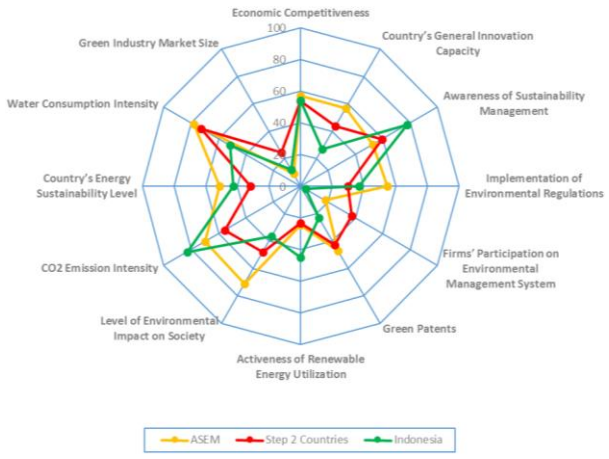
Indonesia

	3,416	256 million	14:43:43	0.684 Medium	4.31	4.26	
Flag	GDP per capita	Population	Industry structure (1st:2nd:3rd)	HDI	Sustainable social index	Sustainable env. index	Geographic location

	Score
ASEI 2015	**39.72**
Eco-Innovation Capacity	52.83
Economic Competitiveness	54.07
Country's General Innovation Capacity	26.96
Awareness of Sustainability Management	77.46
Eco-Innovation Supporting Environment	36.90
Implementation of Environmental Regulations	36.90
Eco-Innovation Activities	23.95
Firms' Participation on Environmental Management System	3.76
Green Patents	23.32
Activeness of Renewable Energy Utilization	44.79
Eco-Innovation Performance	45.21
Level of Environmental Impact on Society	36.66
CO_2 Emission Intensity	83.08
Country's Energy Sustainability Level	42.51
Water Consumption Intensity	51.72
Green Industry Market Size	12.10



- Indonesia's eco-innovation capacity and performance are high. However, eco-innovation supporting environment and activity are low.
- Awareness of Sustainability Management (indicator no. 1.5) and CO_2 Emission Intensity (indicator no. 4.2) of Indonesia are higher than the average score of the same development state countries.
- Country's General Innovation Capacity (indicator no. 1.2) and Firm's Participation on Environmental Management System (indicator no. 3.2) of Indonesia are lower than the average score of the same development state countries.

Table 14 Eco-innovation Policy instruments of Indonesia

National plan and strategy	Sustainability	■ Vision 25/25
	Eco-innovation	■ The 2005-2025 National Energy Policy Blueprint
Programmes and actions	National	■ Public Disclosure Pollution Control Program(PROPER) ■ Eco-industry program ■ Green Investment Program ■ Low Cost Green Car (LCGC) program
	International	■ The APEC Policy Partnership on Science, Technology and Innovation (PPSTI) ■ Indonesia-Singapore Environmental Partnership (ISEP) (2002)
Legislation		■ Law No. 32/2009 on Environmental Protection and Management
Finance		■ Green Investment Program ■ Environmental Soft Loans(for SMEs) ■ The Indonesia Climate Change Trust Fund
Information		■ BAPEDAL Regional Network Project (1996~2005) ■ 7th Regional Environmentally Sustainable Transport(EST) Forum

With its abundant resources, Indonesia is strongly founded in agriculture, but recent industrial development brought expansion in the manufacturing and service businesses. Indonesia is also one of the biggest exporters of palm oil, cocoa, tin, steel, copper, rubber, and fish. De-spite its rapid economic growth, Indonesia is in need of innovation for sustainable development since Indonesia is currently relying on agriculture and other industry forms that are sustained by gathering and collecting natural resources. The infrastructure of Indonesia especially plays as an important role in improving the country's competitiveness as a distribution center of the East Asia. Indonesia is already aware of the need for technical advancement in order to improve their data communication technology. In order to do so, country calls for high-quality manpower, however 50% of their population still remains at an elementary level of education and only 8% of the whole population has received a higher education.

Under these conditions, the Eco-Innovation policy has been promoted along with the Nation-al Action Plan on climate change and the focus of its operation has been mainly on the renewable energies. Wind and water power energy development businesses are being developed intensively as a part of the policy to diversify electricity energy source and raise effectiveness of electric power supply. The related programs and initiatives are implemented cooperatively with international organizations such as the GEF, the UNDP, and the World Bank. They provide economic incentives such as tax reduction for the developing renewable energy related businesses. The Indonesian government selects and promotes measures that

provide economic incentives rather than restrictions for environmental improvement. The Indonesian Environmental Agency operates a clean technology investment support policy in alliance with financial institutions for small and medium sized enterprises. This is mainly done by the Development Planning Institute of Indonesia. The Development Planning Institute, in cooperation with the UNDP, established and operates the Indonesia Climate Change Trust Fund.

The BAPEDAL[18] categorizes factories into five different levels, ac-cording to its pollution level, based on the Public Disclosure Pollution Control Program (PROPER), in which incentives are given if a factory advances a level. Many different East Asian countries have started to benchmark this approach after it has proven to produce positive outcomes. These kinds of environmental programs are based on the previous project experiences of the ADB and the World Bank that were designed to strengthen their capacities. The ADB has been supporting the network project of the local environmental offices to strengthen capacity of Indonesian environmental agencies for the past 10 years (1996~2005), while the World Bank has been supporting the Development Technical Assistance project of the Environmental Office to enhance the technological capacity of the Environmental Office (1992-1999). In addition, they also supported a network of construction businesses to create innovative green technology of the Southeast Asian countries, including Indonesia. Along with many other international cooperative programs, the Global Green Growth Institute (GGGI) supports the green growth program of Indonesia. Multiple international cooperation programs contribute to improve Indonesia's eco-innovation capacity. INAGREENTHEC contributes to the expansion of eco-Innovation awareness through networks in the green building related fields, eco-friendly products and technology, green energy, green transportation, green ICT, green policies, and water resources and waste management. Indonesia's eco-Innovation appears to be necessary effort undertaken in order to enhance Indonesia's technical competitiveness to lead a self-sufficient economy. They will need a long-term plan to improve manpower quality by providing supports to train high-quality human resources for Eco-Innovation. In addition, they will need to support a short-term techno-logical development in order to develop eco-Innovation technologies for a self-sufficient economy, which is the direction the country is headed toward.

[18] Badan Pengendalian Dampak Lingkungan (Environmental Impact Management Agency)