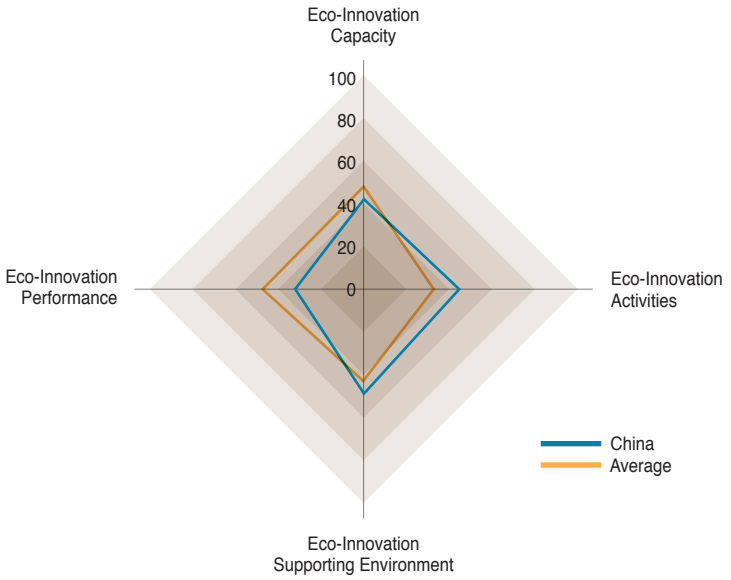
China



	China	Average
Capacity	41	49
Supporting Environment	49	42
Activities	45	35
Performance	33	46

Fig 18. ASEI Result: China

China's Eco-Innovation Quantitative Analysis

According to the ASEI 2013, China falls below the average national score (China: 42/100, Average: 43/100) when compared to other twenty four ASEM member countries evaluated by the ASEI. However, China scores above average when compared to its regional peers.

- *"Eco-Innovation Capacity" criteria score is just below average:* Country's General Innovation Capacity indicators are significantly below average and Green Technology R&D Institution Capacity and Green Technology possessed/acquired Firms indicators score fall into the average level.

- *"Eco-Innovation Supporting Environment" criteria score is above average:* Implementation of Environmental Regulations indicator represents somewhat poor figure, Maturity of Investment Setting for Green Technology Industry and Investment Scale towards Green Technology SMEs indicator score far surpass the average level.

- *"Eco-Innovation Activities" criteria score is above average:* Commercialization Level of Green Technology and Firms' Participation on Environmental Management System indicators gained considerably high marks while Economic Influence of Leading Environmentally Responsive Firms and Firms' Participation on Environmental Management System indicators demonstrate average level scores.

- *"Eco-Innovation Performance" criteria score is below average:* most indicators including Level of Environmental Impact on Society and CO_2 emission intensity indicators score far below average. However, Green Industry Market Size ranked in the top-tier compared to its peer countries.

China's Eco-Innovation Supporting Environment: Qualitative Research

	National Vision & Strategy	National Policy & Programmes	Network, Partnership & Organizations
Eco-Innovation	■ Energy Saving and New Energy Vehicle Development Plan (2011-2020)	■ Renewable Energy Law (NPC) ■ Energy Conservation Law ■ The government energy efficiency programs in 2006: (i) large substitutes for small (LSS), and (ii) energy conservation power generation scheduling ■ Major progress on transportation air emissions - China IV emission standard in 2011 - China V emission standards in 2012 ■ New and renewable energy development program (1996-2010) ■ Thousand Enterprises program (2006) [31] ■ 2009-2020 Strong and Smart Grid Plan	■ China Builds Capacity in Energy Efficiency through Linkage with Japan (2009)
Sustainable Development	■ National Plan for Science and Technology Development (2006-2020): prioritized field of research includes energy, water, environment etc. ■ The 12th five-year plan (2011-2016) [32]	■ Renewable Energy Power Pricing and Costs Sharing for Trial Implementation (NDRC) ■ Circular Economy Promotion Law ■ National High-tech R&D program: "863 program" ■ Natural Science Foundation of China-Public investment in environmental R&D (NSFC) ■ National Program on Key Basic Research Projects: "973program" [33] - Public investment in environmental R&D ■ Hundred Scholars Chinese Academy of Sciences(CAS) ■ National Key Laboratories Programmes-Public investment in environmental R&D ■ Mobilizing financing from National new products program & National key technologies R&D program ■ China Greentech Partner Program	■ The Regional Inclusive Innovation Policy Forum (2012) ■ China-Japan-US Forum on ■ Sustainable Built Environment ("CJUFSBE")
SMEs		■ Technical Innovation Fund for Small and Medium-sized S & T Firms	■ China SME Global Development Forum ■ The 30th Meeting of APEC SMEWG (Small and Medium Enterprises Working Group) (June 2010)

Table 13. China's Eco-innovation Supporting Environment Qualitative Research Table

31) *OECD, (2009), eco innovation policies in the people's republic of china*
The Program recognized industry as the largest energy user, selected 1,008 top firms that together consume one-third of all China's primary energy, and instructed them to formulate individual energy efficiency improvement plans in cooperation with local officials

32) *KPMG, (2011), China's 12th Five-Year Plan: Sustainability*
Government figures show that by the end of China's 11th Five-Year Plan in 2010, the country achieved a 19.1 percent energy consumption reduction, narrowly missing the 20 percent target. To meet further reduction targets, the 12th Five-Year Plan (5YP) is investing heavily in the low-carbon economy and sustainable development

33) *OECD, (2009), eco innovation policies in the people's republic of china*
The 973 Programme contains eight key areas: agriculture, energy, information technology, natural resources and environment, population and health, material sciences, multi-disciplinary research, and important frontiers of sciences. From 2002 to 2007, there were a total of 274 research projects funded, of which 30 were on energy and 32 were on natural resources and environment.

Major Organizations of Eco-Innovation in China

- Ministry of Science and Technology (MOST), Ministry of Commerce, Ministry of Finance
- The State Council Steering Group for Science, Technology and Education
- National Development and Reform Commission, National Leadership Committee on Climate Change, National Development and Reform Commission (NDRC), National Natural Science Foundation of China
- Local governments

Overall Comments for China

- China's eco-innovation plan is included as part of the state-run major development plan.
- China has contributed to the photovoltaic industry which is a major part of eco-innovation investment. However due to global economic recession and oversupply of photovoltaic facilities, the renewable energy market in China is slowing down its growth rate. However, the country's R&D long term national programmes such as the 863 programme and 973 programme continuously provides a firm foundation to build up eco-innovation capacity in other various areas.
- Due to fast economic growth, environmental quality of life in China has weakened and the high rate of CO_2 emission is a deepening concern for the country. In comparison to the previous national plan, the 12^{th} five-year national plan focuses on sustainable development and improvement of environmental standard rather than rapid economic growth and energy intensive industry development plans. Accordingly, there is an expectation that more eco-innovation activities will be introduced in China and eco-innovation capacity will be built over time due to such active institutional measures at the national level.