

Australia improves in the global Environmental Sustainability Index

According to the 2005 Environmental Sustainability Index (ESI) produced by a team of environmental experts at Yale and Columbia universities, Australia is rated 13th in the world in environmental sustainability out of 146 countries, just ahead of Gabon, but behind New Zealand and Latvia.

The Index, released earlier this year at the World Economic Forum in Davos, Switzerland, ranks Finland, Norway, Uruguay, Sweden and Iceland as the top five sustainable nations, respectively. Their high ESI scores are attributed to substantial natural resource endowments, low population, and successful management of environment and development issues.

The EIS ranks countries on 21 elements of environmental sustainability covering natural resource endowments, past and present pollution levels, environmental management efforts, contributions to protection of the global commons, and a society's capacity to improve its environmental performance over time.

Improving from 2002's 16th place, Australia scored well in the Social and Institutional Capacity, Environmental Systems, and Reducing Human Vulnerability sectors, with Science and Technology rated highly. We ranked very poorly, however, in the Global Stewardship and Reducing Stresses sectors, with scores for Reducing Air Pollution and Reducing Transboundary Environmental Pressures being twice as low as the average score for countries in our socio-economic grouping. This suggests that Australia has some of the best knowledge capacity for how to solve major problems, but could still be doing much more to alleviate them.

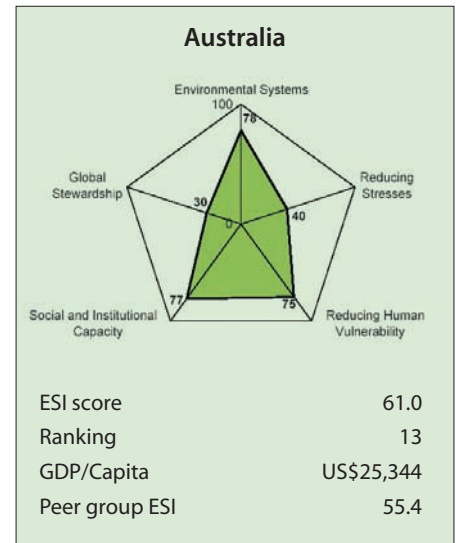
While the 2005 ESI generates a number of policy conclusions, income emerges as a critical driver of environmental results. It's also clear that the variables that gauge a country's commitment to good governance – including robust political debate, a free press, lack of corruption, and rule of law are highly correlated with overall environmental success.

The ESI demonstrates, however, that environmental protection need not come at the cost of competitiveness. Finland is the equal of the United States in competitiveness but scores much higher on environmental sustainability and outperforms the US across a spectrum of issues, from air pollution to contributions to global-scale environmental effects.

The United States placed 45th in the rankings, behind the Netherlands (44) and ahead of the United Kingdom (66). Bottom-rung results on other issues, such as waste generation and greenhouse gas emissions, bring down the overall US standing.

'The ESI provides a valuable policy tool, allowing benchmarking of environmental performance country-by-country and issue-by-issue,' said Daniel C Esty, Professor at Yale University, and the creator of the ESI. 'By highlighting the leaders and laggards, which governments are wary of doing, the ESI creates pressure for improved results.'

'While the ESI makes comparative policy analysis possible, it is shocking how many critical environmental issues are still not measured in any usable way,' noted Marc Levy, Associate Director of the Center for International Earth Science Information Network in the Earth Institute at Columbia University, and one of the lead contributors



Australia improved its performance in the latest ESI rankings, but still has work to do in some key areas.

From the 2005 Environmental Sustainability Index report, by Yale University and Columbia University.

to the ESI. 'The international community must make a renewed commitment to developing metrics to track policy progress, particularly in the context of the environmental elements of the Millennium Development Goals – the worldwide effort to lift developing countries above the burdens of poverty by 2015.

'No country is on a sustainable trajectory – and the ESI demonstrates this,' said Gus Speth, Dean of the Yale School of Forestry and Environmental Studies. 'We've all got something to learn from those at the leading edge. And the ESI offers a mechanism for identifying best practices across the spectrum of environmental issues.'

More information:
More about the ESI: www.yale.edu/esi

Climate network underway

A huge climate-observing network across the Indian Ocean aims to monitor ocean currents and temperature and understand the conditions that bring rain – and drought – to nearly two thirds of the world's population.

Nine deep-ocean moorings are already in place through

investment by the United States, Japan and India, and a further mooring is being considered in a joint arrangement between Australia and China. CSIRO and the Bureau of Meteorology are leading Australia's input.

Dr Gary Meyers, from CSIRO's Wealth from Oceans

Flagship said the recent discovery of El Niño-like phenomena in the Indian Ocean – strong two-way interactions between ocean and atmosphere – has highlighted the importance of regional data collection to understand and predict seasonal and longer-term climate variability over all the surrounding continents.



Marine scientists deploy a monitoring buoy. CSIRO Marine Research