

# EUROPEAN SCORE AT ENVIRONMENTAL PERFORMANCE INDEX AND APPLIED CASE

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Environmental Performance is a considerably recurrent topic, attracting the interest of the world policy makers. However, the aftermath of the 2008 global financial crisis is definitely creating additional barriers to achieve the ecological objectives agreed. Thus, there is a demand to discover factors of influence of this fact in order to assess vulnerabilities and path the way for their mitigation.

Released biennially by the Yale Center for Environmental Law and Policy (Y CELP) and the Center for International Earth Science Information Network (CIESIN) at Columbia University, the Environmental Performance Index (EPI) gives decision makers access to important environmental data allowing countries to compare their performance to neighbours and peers. It takes in account aspects such as Health Impacts, Air Quality, Sanitation, Water Resources, Agriculture, Forests, Fisheries, Biodiversity, Habitat, Climate and Energy.

Given the rankings and scores published at the EPI 2014, the author of this abstract aimed to compare them with an array of economic and geographic indicators, checking a possible correlation between factors.

Countries such as Bangladesh or India are recurrently referred as case examples of overloading of environmental resources due to a very high rate of human concentration among urban areas. In fact, in the European Union countries, population density does not seem to be directly influencing their environmental performance, as the correlation coefficient is -0,031. Luxembourg, even being the 6<sup>th</sup> most dense countries in Europe could attain the second place in the EPI, just below Switzerland.

Global Innovation Index published by the INSEAD gives an insight about the level of enablement of an innovation framework which has the main pillars of study on Institutions, Human Capital & Research, Infrastructure, Market Sophistication, Knowledge & Technology Outputs and Creative Outputs.

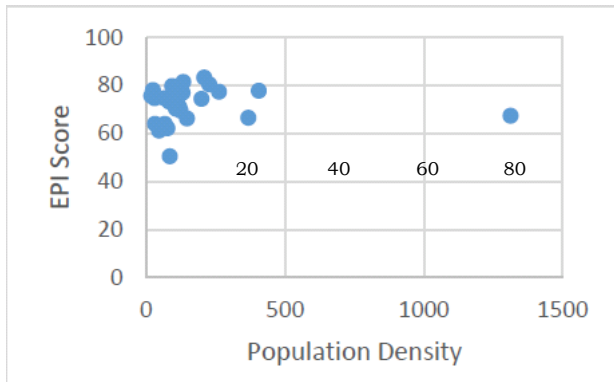


Figure 1 - EPI Score and Population Density (pop/km2); source: Eurostat and epi.yale.edu

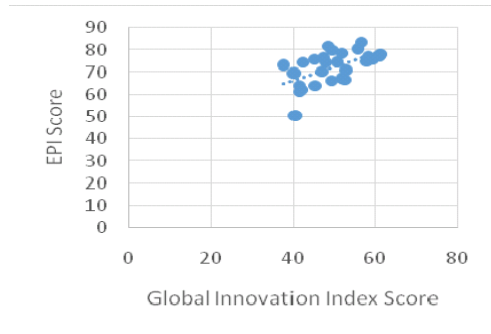


Figure 2 - EPI Score and Global Innovation Index Score performances; source: globalinnovationindex.org and epi.yale.edu

It is the belief of the author that innovation rates can be a proxy to predict environmental performances, as part of the creativity emanated by innovation process is directly used to develop cleaner and more efficient mechanisms that have a multiplying effect on environment preservation. This is somehow showed at the value of the correlation coefficient, +0,583.

The value of innovation in all of its vectors cannot be underestimated, and that is the reason for some countries and organizations to act with large investments.

Junior Achievement Portugal is a non-profit organization which aims to bring a sustainable entrepreneurship mindset to Portuguese high-schools. Groups of students are encouraged to form junior enterprises which create a real idea of business based on environmental respect principles which culminates with the production of goods or services for public sale. Crowd funding is made around school areas and the mission of these junior organizations is directly supported by the President of Portugal, which exempts them from paying income taxes. The project lasts one year and students are expected to gain business know-how and a more respectful environmental consciousness.

In 2011, the runner-up of the National Prize of Youth Entrepreneurship was a team which produced portable solar ovens for all-year round cooking. They sold more than 400 units and were invited to be present at various European fairs.

It is believed that this concept is energetically generating a truly informed and socially active generation and should be exported to third countries.

In short, we may think that environmental consciousness should not be seen as an unavoidable evil, but as an emergent need which can boost our potential and creativity.

#### References:

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