



## **EconoMag**

**The Show that demystifies Economics**

**Environmental Economics - Part 5**

**Harnessing the environment for a green economy ©**

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Welcome back to another edition of Economag on EnglishWaves. We're currently focusing on the links between our natural environment and the global economy. We've looked at how we price our environment, the resources we most rely on, and the costs of pollution on both a local and global scale. Given the global push to deal with pollution, and most particularly greenhouse gas emissions, which countries are paving the way forward towards a greener economic future?

Costa Rica might be a small country, but it's taking big strides in becoming the first developing country to have 100% renewable electricity. Hydro, wind and geothermal resources will primarily be used. That's an enormous achievement for a small, relatively poor nation. The country's citizens and entrepreneurs should rightfully be excited about this achievement as it presents several industrial opportunities with regards to solar panels, wind turbines, batteries and bioenergy. This stands to create thousands of jobs in the local economy, and reduce the dependence of the country on global markets for energy. For example, Costa Rica has traditionally been an oil and fossil fuel importer.

Ironically, some of Afghanistan's most challenging characteristics support the growth of renewable energy. The fragmented nature of the country – geographically and politically speaking – means that it will always be a significant challenge to build and maintain the type of large-scale electricity grids and projects that traditionally rely on oil or gas. It takes a lot of financial muscle to build an oil refinery or gas power plant, for instance. These types of facilities require good governance and a strong national government – things the country are short on at the moment. A decentralized power generation model, owned and controlled by local people, is much more favourable: this means people can harness local sources of energy, such as solar or wind energy. In fact, the country has an abundance of renewable energy sources. The country has high levels of sunshine, and rivers suitable for hydro plants. Smaller-scale renewable energy sources are already spurring economic activity in the country by powering schools and small businesses.

The benefits of greener economies aren't however confined to smaller, developing nations. In the last decade China has become a world leader in a number of areas, and renewable energy counts amongst them. The country is the world's largest producer and user of renewable energy technologies, and is committed to a significant increase of the electricity generating capacity based on these – doubling wind and quadrupling solar sources by 2020. China also

leads the world in some key areas of green infrastructure such as high-speed railways and smart grid technologies that facilitate new models of energy consumption and supply. Not only does this signify a breakaway from a fossil fuel based economy, but also that in reducing pollution thousands of jobs are transferred to the green economy. Instead of simply burning coal, someone has to build the solar panels and dams that will be used, meaning long-term, sustainable economic growth.

That concludes our look at the ways in which our global economy is adapting to the needs of our environment. Economic activity doesn't need to be curtailed whilst adopting greener models of growth. Stay tuned to Economag on EnglishWaves.