

Resource Efficiency: Economics and Outlook for China



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China's dramatic economic growth over the past few decades has increased demands for natural resources within and beyond the country itself in ways that are unprecedented in human history.

While that growth has lifted millions out of poverty it has also come with rising environmental challenges linked to the extracting, processing and use of those natural resources in areas from construction to power generation.

But as this report shows, there are other ways of looking at this development trajectory including the fact that when compared with the global and regional picture, China's track record in improving resource efficiency has been in some cases among the best on the globe.

China's energy efficiency for example, improved over the 1970 to 2009 period at an annual compound growth rate of just over 3.9%, exceeding the global performance of just under 0.7% and that for the Asia Pacific region as a whole which was 0.13%.

These are among the findings of the Resource Efficiency: Economics and Outlook for China which is a joint report of UNEP and its regional partners, the Commonwealth Scientific and Industrial Research Organisation (CSIRO)/

Australia and the Institute of Policy and Management (IPM), Chinese Academy of Sciences (CAS).

It underlines that China has in the past few years introduced a considerable number of policies in areas from renewable energies to vehicle emissions standards that are contributing to boosting resource efficiency and assisting towards a transition to green economy and an ecological civilization. The effects of many of these policies will however only become apparent in the years ahead.

The report also underlines that China, in common with other emerging economies needs to make significant investments not only in more resource-efficient infrastructure such as energy saving buildings, but also in human capital and governance capacity if far greater resource efficiency and a transition to a sustainable economic model is to be truly realized.

China's development path is also in part the world's development path given the country's influence on markets and sustainability across the globe.

This report can contribute to greater understanding of what China has already achieved and the challenges and opportunities for improving resource efficiency and 'decoupling' of economic growth from natural resources use in the years and decades to come.

A handwritten signature in black ink that reads "Achim Steiner". The signature is fluid and cursive.

Achim Steiner

United Nations Under-Secretary-General and
Executive Director
United Nations Environment Programme