

# How do renewable energy and innovation impact environmental quality in different countries?

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Renewable energy production leads to reduced carbon dioxide emissions in countries that are members of the Organization for Economic Co-

operation and Development (OECD) but increased emissions in emerging economies, according to the results of a study [published](#) in the *Natural Resources Forum*.

A similar disparity was seen when considering the environmental impacts of innovation. (The OECD is an international organization that works to build better policies for better lives. Thirty-eight countries around the world are currently members.)

Regarding institutional quality—the measure of the effectiveness and efficiency of a country's institutions—higher quality was linked to fewer emissions in OECD countries but more carbon dioxide emissions in emerging economies. Furthermore, economic globalization improved environmental quality in OECD countries but worsened environmental quality in emerging economies.

Economic growth appeared to enhance environmental quality in both sets of countries.

"These findings provide valuable insights for shaping renewable energy policies, fostering innovation, promoting [economic growth](#), enhancing institutional quality, and harnessing globalization efforts to reduce [carbon dioxide emissions](#) and enhance environmental quality," the authors wrote.

**More information:** A Comparative Study on The Moderating Impact of Renewable Energy and Innovation on Environmental Quality, *Natural Resources Forum* (2024). [DOI: 10.1111/1477-8947.12420](https://doi.org/10.1111/1477-8947.12420)  
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