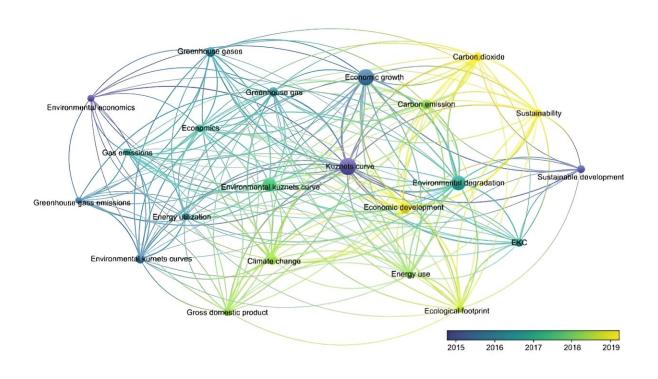


Green growth in Europe: Decoding the EU's journey to sustainability (1990-2019)

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Bibliographic analysis using Vosviewer software exhibits the relationship between climate change, environmental degradation, economic development, GDP, GHGs, energy use, and sustainability. Credit: *Environmental Science and Ecotechnology*

In a recent study <u>published</u> in the journal *Environmental Science and Ecotechnology*, researchers evaluated the Environmental Kuznets Curve (EKC) in the EU-27 from 1990 to 2019. The study focuses on analyzing



trends towards environmental sustainability in these countries.

The research spanning 29 years (1990-2019) across EU-27 countries examined the complex interplay between economic growth and <u>environmental impact</u> using the Environmental Kuznets Curve (EKC) framework. This framework suggests that environmental degradation initially increases with economic growth but decreases at higher income levels.

The study thoroughly analyzed CO_2 emissions in relation to <u>energy</u> <u>consumption</u>, GDP, and population dynamics, revealing a significant decrease in CO_2 emissions despite economic and population growth.

Advanced econometric methods showed a positive trend: as EU economies expanded, they became cleaner and more resource-efficient. This change is attributed to effective EU <u>environmental policies</u>, technological progress, and increased sustainability awareness.

Highlights:

- The total GHG emissions of the EU-27 were reduced significantly (p
- The energy consumption increased significantly by +1.18 Mtoe per year (p
- The Environmental Kuznets Curve relation has been confirmed within EU-27.
- Economic development within the EU-27 has started to improve the environment.

Lead researcher Safwan Mohammed emphasizes the significance of the study in understanding how economic development, policy interventions, and <u>environmental sustainability</u> intersect in the EU context.



The study's findings affirm the effectiveness of EU environmental policies, emphasizing the vital role of <u>economic growth</u> in enhancing environmental quality. These insights are crucial for policymakers and stakeholders in shaping sustainable development strategies and environmental protection measures.

More information: Safwan Mohammed et al, Assessment of the environmental kuznets curve within EU-27: Steps toward environmental sustainability (1990–2019), *Environmental Science and Ecotechnology* (2023). DOI: 10.1016/j.ese.2023.100312

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