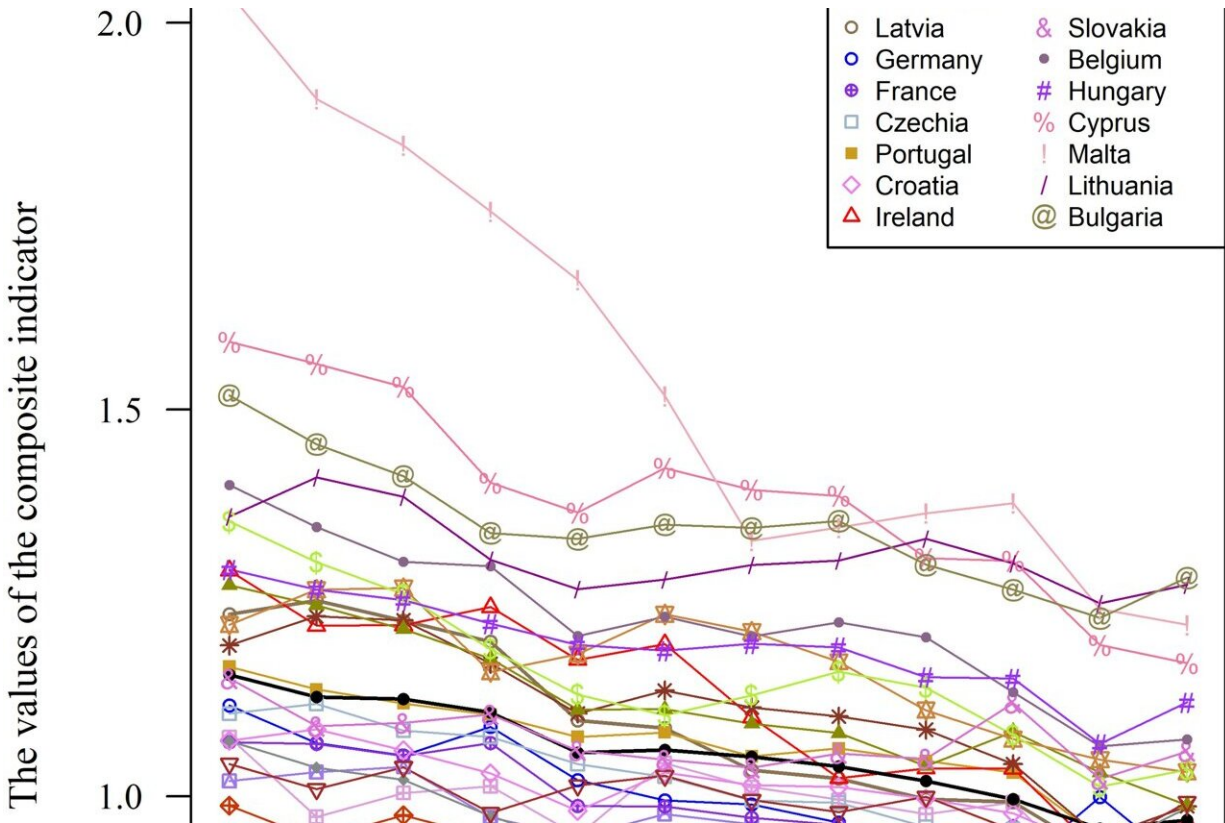


EU countries have seen a decade of progress towards their 2030 sustainable energy goal

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Changes in progress on SDG 7 achieved by the EU countries between 2010 and 2021 in relation to the EU-level target for 2030. Credit: Walesiak, Dehnel, 2024, PLOS ONE, CC-BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

Countries in the European Union (EU) have made progress over the past decade toward Sustainable Development Goal 7 (SDG 7), which calls for

"access to affordable, reliable, sustainable and modern energy for all" by 2030, according to a study [published](#) in the journal *PLOS ONE* by Marek Walesiak from Wroclaw University of Economics and Business, Poland, and Grażyna Dehnel from Poznań University of Economics and Business, Poland.

In 2015, the United Nations developed 17 global Sustainable Development Goals to be achieved by 2030. Tenets of SDG 7 include [universal access](#) to affordable energy; increased [renewable energy](#) in developing countries; and international clean energy research. Seven key metrics, called indicators, are used to quantify countries' progress toward the broad aim.

Walesiak and Dehnel measured 27 EU countries' progress toward SDG 7 between 2010 and 2021, using data provided by Eurostat. EU countries assessed included Croatia and excluded the United Kingdom.

The researchers captured each country's position relative to the 2030 targets, including progress made and distance still to go. To adjust for differences among countries, the researchers adopted a new-to-the-field method called dynamic relative taxonomy.

Data demonstrated that EU countries made progress toward the SDG 7 targets from 2010-2021, both individually and collectively. The researchers found that Sweden came closest to achieving SDG 7 goals in 2021, followed by Denmark and Estonia; Bulgaria was furthest from the goal. Malta, which in 2010 was furthest from the 2030 targets, made the greatest progress toward SDG 7. Latvia displayed the largest leap in rankings, jumping from 19th to 8th place.

In 2021, several countries had already achieved 2030 targets for one or more of SDG 7's key indicators. For example: Sweden, Finland, and Latvia surpassed the 40% target for the [indicator](#): "Share of renewable

energy in gross final energy consumption." The researchers credit this to hydropower and biofuels.

The researchers state that all indicators must be closely and continuously monitored to ensure the EU achieves its SDG 7 goals by 2030. Noting the potential impact of the COVID-19 pandemic, they acknowledge that sixteen countries experienced deterioration in their progress from 2020–2021.

The authors add, "The aim of the study is to assess progress towards meeting SDG 7 ('Ensure access to affordable, reliable, sustainable and modern energy for all') by individual EU countries in 2010–2021, and to determine their distance in relation to the target set for 2030. In order to limit the impact of the compensation effect on the ranking of EU countries, we applied dynamic relative taxonomy with the geometric mean to create an aggregate measure that takes into account target values for the indicators with adjusted data."

More information: Progress on SDG 7 achieved by EU countries in relation to the target year 2030: A multidimensional indicator analysis using dynamic relative taxonomy, *PLoS ONE* (2024). [DOI: 10.1371/journal.pone.0297856](https://doi.org/10.1371/journal.pone.0297856). href="https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0297856"

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