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ASSESSING THE IMPACT OF RENEWABLE ENERGY INVESTMENT ON ENERGY POVERTY: INSIGHTS FOR A JUST TRANSITION

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Extended Abstract

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Abstract Summary

The global energy transition has placed renewable energies at the center of decarbonization and sustainable development strategies. However, despite technological advances, significant inequalities persist in access to affordable energy. In many regions families continue to face energy poverty. This phenomenon is not only a technical problem, but also a social and territorial one, revealing structural vulnerabilities that the energy transition can both mitigate and exacerbate. The main objective of this study is to assess whether investment in renewable energy contributes to reducing the financial dimension of energy poverty across the European Union countries. Studying the impact of investment in renewable energy on reducing energy poverty is essential to understanding how energy transition policies can reconcile environmental and social objectives.

Considering data from 27 European Union countries between 2015 and 2023, a dynamic panel data model was employed to assess the impact of renewable energy on arrears in utility bill payments. This approach aims to determine whether renewable energy affects energy poverty (particularly its financial dimension) either directly or indirectly through electricity prices. Regarding expected results, renewable energy expansion may reduce electricity prices and, consequently, lower the number of households with arrears in utility bill payments across the countries in the sample.

This study contributes to the existing literature by providing a cross-country, EU-wide dynamic assessment of the relationship between renewable energy deployment and the financial dimension of energy poverty. The expected results have implications for inclusive energy policies, oriented towards efficiency and carbon neutrality and towards distributive equity. In this way, investment in renewables may be a dual vector of ecological transition and social justice, contributing to reducing energy inequalities at the local level.

Presenting Author Biography

She as a PhD in Economics from the University of Warwick, UK and a MSc in Economics from the University of Coimbra from the University of Coimbra. Associate Professor at the DEGEIT. She lectures under graduated and graduated courses of Energy Economics and Energy Policy and regulation. She is an integrated member of the GOVCOPP. She is a member of research teams in several European projects. She is the director of the master in sustainable energy systems. She is co-author of scientific articles in reference journals, books and book chapters in the areas of energy economics, energy policy and Sustainability.