

Review of: "Increasing Renewables and Building Retrofit in a Coal-Based Cogeneration District Heating System"

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Potential competing interests: No potential competing interests to declare.

Thanks, authors for this topic, can be so interesting.

The current manuscript: "It examines the role of energy efficiency in buildings and the integration of renewable energy into district heating systems. It explores various scenarios using the EnergyPLAN model to assess the impact on primary energy savings, renewable electricity production, and CO2 emission reductions. The study demonstrates significant benefits of integrating renewable energy and implementing energy efficiency measures in buildings, both in terms of environmental impact and energy savings. This approach also enhances the flexibility of district heating systems, allowing for greater integration of variable renewable energy sources."

The abstract does not follow recommended structure by the journal. It should be checked and rewritten. The writing style of the manuscript should be better and improved.

The literature review might be enriched by incorporating a more diverse set of case studies. It's recommended to consider the inclusion of the following articles, as they could add depth and dimension to the manuscript.

<https://doi.org/10.3390/en14051244>

<https://doi.org/10.3390/buildings12020238>

<https://doi.org/10.3390/buildings13071617>

and etc. HOWEVER, much more work must be also reviewed and added to this work.

Could you elucidate the unique aspects of this work? It's essential to clearly highlight the novelties and distinguish this work from others. Please ensure the gap and subsequent innovations are comprehensively detailed.

The methods and analysis used do not align with what's defined or may need further clarification.

What main conclusions can be presented?