

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

Abdo Abdullah Ahmed Gassar¹

¹ Hanyang University

Potential competing interests: No potential competing interests to declare.

The paper presented analyzes the potential for increasing renewable sources in coal-based district heating systems using EnergyPLAN-based modeling. In general, the research topic is interesting, and the paper is well-written and organized.

However, the novelty and original contributions of this work have not been sufficiently justified throughout the manuscript.

Detailed comments are as follows:

- Title: The authors mentioned in the title of this study "Increasing Renewables and Building Retrofit in a Coal-Based Cogeneration District Heating System"; however, I did not observe any scenario related to building retrofit measures. This study was only focused on the increase of integrating wind and solar sources into coal-based cogeneration district heating systems. Therefore, the authors should justify this aspect in the study or reconsider the title of this paper.
- Methodology: Although this section is the core of the paper, the following items are raised: How was each scenario implemented? What are the characteristics of each scenario? Please also clearly state which scenarios are included in the paper and the specific characteristics of each scenario. Also, how were the results in figures 3-5 obtained? In the current state of the methodology, it is nothing more than a general explanation of general steps. The originality of this paper lies in how each scenario is clearly implemented and evaluated.
- Methodology flowchart: Explain the general process of solving the problem for the typical problems raised. In other words, the flowchart should include an explanation of the general steps to achieve these findings. Because figure 1 is not enough.
- Limitations of this study should be included in the conclusions section.