

# Review of: "Technical and Financial Viability of a 1 MW CSP Power Plant with Organic Rankine Module: Case Study for a Northeastern Brazilian City"

Mostafa Esmaeili Shayan<sup>1</sup>

<sup>1</sup> Tarbiat Modares University

Potential competing interests: No potential competing interests to declare.

The article titled "Technical and Financial Viability of a 1 MW CSP Power Plant with Organic Rankine Module: Case Study for a Northeastern Brazilian City" presents a case study on the technical and financial viability of a 1 MW concentrating solar power (CSP) plant using an Organic Rankine Cycle (ORC) in Fortaleza, Brazil. The study considers different configurations of the plant, including the number of collectors and the size of thermal energy storage, to determine the most efficient and cost-effective option. While the article provides a thorough analysis of the technical and financial aspects of the CSP plant, it could benefit from more advanced analysis and tools, such as CFD, MATLAB, or artificial intelligence. These tools could provide deeper technical insights and more accurate financial projections, making the study more useful for real-world applications. However, the use of an ORC in the CSP plant is an innovative and promising approach that could lead to significant improvements in efficiency and cost-effectiveness. The study's focus on the technical and financial feasibility of the plant in a specific location also adds value to the research. Therefore, with Major revisions and improvements (Please Check my Comments ) in the technical analysis and financial projections, I recommend this manuscript.