

Review of: "Water-Energy Nexus in Power Systems: A Review"

Danilo Ferreira de Souza¹

¹ Universidade Federal de Mato Grosso

Potential competing interests: No potential competing interests to declare.

Evaluation of the Article "Water-Energy Nexus in Power Systems: A Review"

Strengths:

1. **Comprehensive Approach:** The article provides an exhaustive and detailed analysis of the water-energy nexus, covering a wide range of pertinent topics, such as energy generation, water use, and environmental impacts.
2. **Interdisciplinary Focus:** The interdisciplinary research approach, addressing social, environmental, and technological aspects, stands out as a strength. This reflects the complexity of the subject and the need for integrated approaches.
3. **Timeliness and Relevance:** The article tackles a current and significant theme, especially considering climate change and the need for sustainable solutions.

Areas for Improvement:

1. **Clarity and Conciseness:** The article could benefit from improved clarity and conciseness in some sections. Restructuring certain paragraphs to avoid redundancies and simplifying technical terms would help make the text more accessible to a broader audience.
2. **Integration of Case Studies:** While the article addresses a wide range of topics, including specific case studies or practical examples would better illustrate the applications and implications of the discussed concepts.
3. **Deeper Discussion on Policies:** The policy section could be expanded to offer a more detailed analysis of how different countries are addressing the water-energy nexus, including the successes and limitations of current policies.
4. **Future Implications and Research Directions:** The article would benefit from a deeper discussion of the future implications of the findings and possible directions for subsequent research, providing a clear pathway for future advancements in the field.
5. **Integration of Diverse Perspectives:** Considering and integrating perspectives from different regions and communities could enrich the discussion, especially in terms of solutions tailored to diverse cultural and geographical contexts.
6. **Long-Term Impact Analysis:** A more detailed assessment of the long-term impacts of the water-energy nexus on communities and ecosystems would contribute to a more holistic understanding of the topic.
7. **Lack of Tables and Figures:** The absence of tables and figures for better comprehension of the article was noted.

These visual aids could have enhanced the reader's understanding and engagement with the content.

8. **Type of Review Clarification:** The article lacks clarification on the type of review conducted. It appears to be a broad review rather than a systematic one, which should be specified for clarity and accuracy.

Conclusion: The article "Water-Energy Nexus in Power Systems: A Review" is a valuable contribution to the study of the water-energy nexus. It comprehensively and interdisciplinarily addresses a complex and relevant topic. However, there is room for improvement in terms of clarity, inclusion of case studies, policy analysis, discussion of future implications, and integration of diverse perspectives. These enhancements could strengthen the impact and applicability of the work in a global context.