

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

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Potential competing interests: No potential competing interests to declare.

1- Comparison and the effects of the developed policies in various countries would be an impact to analyze for future implementation.

2. the article structure paragraph states, "The study reviews different methods, including modeling techniques, that can be used to examine the interdependence of economic sectors, with a particular emphasis on optimization modeling as a powerful tool to identify sustainable and efficient solutions."

However, there is no technique that can be seen in the article.

3. in the 4th paragraph, "is a basic definition of a water-energy nexus.." should be rephrased and relocated.

4. At the start of the introduction, "Please define the full form of HE".

5. This study discusses the inter-dependency between power and water systems, including energy generation and conversion, water treatment and distribution, energy storage and water consumption requirements, water reuse and recycling, and the role of ICTs.

Please justify this.

6. Section D, "energy storage and water requirement research only focused on finding the requirement of water demand for energy storage." Rephrase the line; these two can have different perspectives.

7. Page number 15- "An optimization model also can also be applied "remove the grammar mistakes ". Please check for similar errors

8. Please clarify which modeling approaches are related to water optimization, energy optimization, and battery storage management.

9. The article is related to modeling approaches of water-energy nexus systems. Then why does the study separately include the modeling approaches for water, energy, and storage? It should include the studies which have developed the nexus mechanism in a single framework.