# Article information:

Deep decarbonization of the Indian economy: 2050 prospects for wind, solar, and green hydrogen - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S2589004222006708>

# Article summary:

1. This paper explores options for a 2050 carbon free energy future for India, with onshore wind and solar sources projected as the dominant primary contributions.

2. Green hydrogen produced by electrolysis fueled by these carbon free energy sources can be used to accommodate for the intrinsic variability of wind and solar, as well as to supplant current industrial uses of gray hydrogen produced from natural gas.

3. An integrated renewable energy-hydrogen planning model is developed to identify the least cost option to meet this objective, with four scenarios explored for the year 2050.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

The article “Deep decarbonization of the Indian economy: 2050 prospects for wind, solar, and green hydrogen” provides an overview of potential solutions for India’s net-zero emissions target by 2050. The article is based on research conducted by The Energy and Resources Institute (TERI) and Shell (referred to subsequently as the TERI/Shell report). The article presents a novel integrated renewable energy-hydrogen planning model that is developed to identify the least cost option to meet this objective.

The trustworthiness and reliability of this article can be assessed in terms of its potential biases and their sources, one-sided reporting, unsupported claims, missing points of consideration, missing evidence for the claims made, unexplored counterarguments, promotional content, partiality, whether possible risks are noted or not presenting both sides equally.

In terms of potential biases and their sources, it is important to note that this article was written by researchers affiliated with TERI/Shell who have a vested interest in promoting their own research findings. This could lead to bias in favor of their own conclusions which may not be supported by other research or evidence. Additionally, there is no discussion about any potential conflicts of interest or alternative perspectives which could lead to one-sided reporting or partiality in favor of TERI/Shell’s conclusions.

Furthermore, there are some unsupported claims made throughout the article such as “green hydrogen allows for cheap decarbonization” without any evidence provided to support this claim. Additionally, there are some missing points of consideration such as how green hydrogen will be stored or transported which could affect its feasibility as a solution for decarbonization in India. There is also no discussion about any potential risks associated with using green hydrogen which should be considered before implementing it on a large scale.

Finally, there is no exploration of counterarguments

# Topics for further research:

* Potential risks of green hydrogen
* Alternative perspectives on decarbonization of Indian economy
* Storage and transportation of green hydrogen
* Conflicts of interest in TERI/Shell report
* Feasibility of green hydrogen for decarbonization
* Counterarguments to TERI/Shell report conclusions

# Report location:

<https://www.fullpicture.app/item/1d7f13803813a4d96085e6c8e6f76989>