# Article information:

Reliability assessment of point-absorber wave energy converters - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0029801818309089>

# Article summary:

1. Wave energy is a clean and inexhaustible resource that can provide more than 2 TW of energy supply worldwide.

2. Point-absorber wave energy converters are attractive due to their small size, wave-direction independence, and easy fabrication and installation.

3. Reliability analysis provides an effective approach for better understanding the system response to an input parameter change and hence leads to more reliable designs.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a comprehensive overview of the potential of point-absorber wave energy converters as a renewable energy source, as well as the importance of reliability analysis in ensuring their successful implementation. The article is well-researched and presents a balanced view on the topic, providing both advantages and disadvantages of this technology. However, there are some areas where the article could be improved upon. For example, it does not explore any possible risks associated with this technology or discuss any potential counterarguments that may exist against its use. Additionally, while the article does mention experiments as one method for assessing structural responses, it does not provide any details on how these experiments are conducted or what results they have yielded. Furthermore, while the article mentions finite element analysis (FEA) as another method for assessing structural responses, it does not provide any details on how FEA is used or what results it has yielded either. Finally, while the article does mention cost reduction as one benefit of using point-absorber wave energy converters, it does not provide any evidence to support this claim or discuss any strategies for achieving cost reduction in detail. In conclusion, while the article provides a comprehensive overview of point-absorber wave energy converters and their potential benefits, there are some areas where further research could be done in order to improve its trustworthiness and reliability.

# Topics for further research:

* Risk assessment of point-absorber wave energy converters
* Counterarguments against point-absorber wave energy converters
* Experimental methods for assessing structural responses
* Finite element analysis for assessing structural responses
* Strategies for cost reduction of point-absorber wave energy converters
* Research on point-absorber wave energy converters

# Report location:

<https://www.fullpicture.app/item/bf0ed26d127894020e76d743f40e5c01>