

Review of: "Refrigerant Selection in Air Conditioning Systems Considering Thermodynamic, Environmental, and Economic Performance Using the BHARAT-II Multi-Attribute Decision-Making Method"

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Potential competing interests: No potential competing interests to declare.

The article is well-written, and the proposed concept is very well explained through two application examples.

In AHP, to obtain the weights of the attributes, the decision maker has to specify the relative importance of every attribute over every other attribute. However, in the proposed approach, unlike AHP, all the attributes are simply ranked (1 to n) based on priority, and these ranks are then used to prepare a relative importance matrix to further determine the weights.

Although the idea looks simple, the merit is that it always ensures consistency while assigning the importance of one attribute over the other. I tried a few examples and observed that every time the consistency ratio is 0 (i.e., perfectly consistent), irrespective of the size of the problem. This is not possible in AHP, especially for large-sized problems.

2. The rest of the procedure is like SAW.