

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.

Thanks to the authors for their valuable work. The following are my main concerns:

- In the Abstract section, it is required to state the problem definition, purpose of the paper, and outputs of the methods.
- Is the simple ranking on which the BHARAT-II method is based subjective or objective? It can be clearly indicated in the Introduction section.
- In Table 2, are ODP values for R290 and R1270 correct? They need to be checked.
- In Table 7, are ODP and GWP values actual or scaled? If actual, it is required to check the values (i.e., GWP of R134a is 1530 according to IPCC AR6, but it was stated as 4 in the table). If scaled, it is needed to be indicated as a footnote.
- In Table 7, does R744+R290 refer to a mixture? If so, the composition needs to be specified.
- In the first paragraph of Section 3.2, the sentence "*The attributes **except** ODP, GWP, and TF were described already on a scale by Poongavanam et al. (2022).*" conflicts with the sentence "*The attributes ODP, GWP, and TF are already assigned on a scale by Poongavanam et al. (2022)...*" in Step 3. It is needed to be checked.
- Performance values of the refrigerants (e.g., power consumption, COP, TEWI, lifetime cost) can be compared. The performance data from the literature cited in the paper can be used for comparison.
- Question sentences, exclamation marks, and offensive expressions (i.e., "*pointless*") should be avoided throughout the text. Using a polite and formal language is crucial for a high-quality paper.
- Grammar and typographic mistakes (i.e., "...for **n** automobile air conditioning system..." in the first paragraph of Section 3.2, "...selection of **a** best refrigerant..." in the last paragraph of Section 3,) are needed to be corrected throughout the text.