|  |  |
| --- | --- |
|  | |
| Book Name: | [**Geography, Earth Science and Environment: Research Highlights**](https://www.bookpi.org/bookstore/product/geography-earth-science-and-environment-research-highlights-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4650** |
| Title of the Manuscript: | **Possibility of Using Fuel Cells for Co-generation of Heat and Power in Venizelio Hospital in Crete, Greece** |
|  |  |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Environmental Management and Sustainable Development, 11(1): 51-61, 2022.**

**Available:** [**https://doi.org/10.5296/emsd.v11i1.19191**](https://doi.org/10.5296/emsd.v11i1.19191)

|  |  |  |
| --- | --- | --- |
| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** |  |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** |  |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. |  |  |
| **Is the manuscript scientifically, correct? Please write here.** |  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** |  |  |
| Is the language/English quality of the article suitable for scholarly communications? |  |  |
| Optional/General comments | 1. Abstract and Introduction  The abstract is informative but could be refined for better readability. Consider breaking down long sentences for clarity.  The introduction effectively sets up the problem but could briefly summarize key findings to engage the reader early on.  2. Methodology  The manuscript does not clearly state the assumptions behind the calculations of energy demand and system sizing. Clarifying these assumptions would enhance transparency.  The methodology should explicitly mention the data sources used for hospital energy consumption and solar-PV performance.  Details on the efficiency of the fuel cell and solar-PV system, as well as the operational lifespan, would strengthen the analysis.  3. Results and Discussion  The results are well presented, but additional visual aids (graphs or tables) could make complex numerical findings more digestible.  A sensitivity analysis on key parameters such as fuel cell efficiency, hydrogen cost, and solar irradiation would add robustness to the conclusions.  A brief discussion comparing your findings with other case studies would contextualize your work within existing research.  4. Literature Review  While comprehensive, the literature review could be more thematically structured. For example, breaking down studies based on geographical relevance, technology type, or energy application would improve readability.  Some references lack specific details (e.g., publication years, journal names). Ensure all citations are complete and formatted consistently.  5. Conclusion  The conclusion effectively summarizes the key findings but should include a stronger emphasis on policy implications and potential barriers to implementation.  Future research directions, such as operational challenges and maintenance costs, could be briefly suggested.  Minor Language and Formatting Suggestions  Grammar & Style: Some sentences are lengthy and complex. Consider revising for conciseness and readability.  Technical Terms: Clearly define key terms such as "net-zero carbon economy" for readers who may not be specialists in the field.  Figure/Table References: Ensure all figures and tables are properly numbered and referenced within the text. |  |

|  |  |  |
| --- | --- | --- |
| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer details:**

**Abir Boucetta, University Mohamed Kheider of Biskra, Algeria**