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| 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\_4632** |
| Title of the Manuscript: | **Forecasting Installation Capacity for the Top 10 Countries Utilizing Geothermal Energy by 2030** |
| 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.**

**Thermo, 2(4): 334–351, 2022.**

**Available:** [**https://doi.org/10.3390/thermo2040023**](https://doi.org/10.3390/thermo2040023)

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| 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.** | This work is essential for the scientific community, as it provides decision-makers with a solid analytical basis for guiding energy policies and optimizing the development of geothermal energy worldwide. It is also a valuable reference for researchers wishing to delve deeper into methods for forecasting installation capacities and their impact on the energy transition. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The study's title can be rephrased as follows:  Forecasting geothermal installation capacity worldwide to 2030: Application of an improved grey prediction model to the top 10 user countries. |  |
| 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. | The authors are encouraged to include meaningful quantitative results, such as the mean error between the IGM(1,1) and GM(1,1) models compared with actual data from 2022 and 2023, rather than a simple qualitative analysis. In addition, they should present predictions for the year 2030, as mentioned in the conclusion. |  |
| **Is the manuscript scientifically, correct? Please write here.** | Is correct |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | [**https://doi.org/10.1016/j.geothermics.2015.11.003**](https://doi.org/10.1016/j.geothermics.2015.11.003)  [**https://doi.org/10.1016/j.geothermics.2019.06.008**](https://doi.org/10.1016/j.geothermics.2019.06.008)  [**https://doi.org/10.1016/j.jclepro.2020.121874**](https://doi.org/10.1016/j.jclepro.2020.121874)  [**https://doi.org/10.1016/j.geothermics.2011.10.001**](https://doi.org/10.1016/j.geothermics.2011.10.001)  [**https://doi.org/10.1016/j.geothermics.2024.102924**](https://doi.org/10.1016/j.geothermics.2024.102924)  [**https://doi.org/10.3390/su16124964**](https://doi.org/10.3390/su16124964) |  |
| Is the language/English quality of the article suitable for scholarly communications? | Good |  |
| Optional/General comments | 1. Abstract. It is suggested to add important quantitative data.  2. Introduction. Some references in the text (such as [1-5]; [6-10]; [17,18]; and [19-23]) are too brief. Please introduce the main contributions of these references, rather than simply citing them in such a straightforward manner.  3. In the state of the art (section 3 of the introduction), specify the prediction methods used by the authors of the latter.  4. Results and discussions. Commented on figures 3(a)-(j); what explains the peaks observed on the IGM(1,1) model between 2000 and 2002 in figures 3(a), (b), (d)-(g), (i), and (j); the authors should include the results of the GM(1,1) model on the same graphs as those of the IGM(1,1) model in order to facilitate a better comparison; the authors should validate the prediction results of the IGM(1,1) model for the years 2022 and 2023 by comparing them with the actual data available in reference [10], in order to reinforce the reliability of their model.  5. It is recommended that the authors extend the predictions to 2040, or even 2050, in order to broaden the scope of the study..  6. The authors should discuss the shortcomings and limitations of this paper. |  |

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| **PART 2:** | | |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with 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 details)* |  |

**Reviewer details:**

**Nelson NGUEFACK LEKANE, Uniserty of Douala, Cameroon**