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| Book Name: | [**New Horizons of Science, Technology and Culture**](https://bookstore.bookpi.org/product/new-horizons-of-science-technology-and-culture-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_5783** |
| Title of the Manuscript:  | **Present Energy Scenario and Solar Energy as an Alternative Option** |
| Type of the Article | **Book Chapter** |

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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 paper presents significant value to the field of renewable energy and the reliance of thermal collectors in order to meet the energy needs of the population. The literature lacks sufficient studies on comparing the two types of the thermal collectors and this manuscript can fill this gap; however, the manuscript needs substantial revision before it is ready for publication.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | The title focuses on using solar energy as an alternative option; however, the subject of the manuscript is about the comparison between the evacuated tub solar collector and the flat plate solar collector. I kindly suggest changing the title. Here’s some suggestions:* **“Recent study of the comparison between the evacuated tube solar collector and the flat plate solar collector”**
* **“Thermal solar collectors as an alternative energy option”**
* **“Stationary Solar Collectors: Comparative Study on the Evacuated Tube and Flat Plat Solar Collectors”**
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| 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. | Yes, the abstract is comprehensible. However, the authors should improve it by highlighting the superior performance of the ETCs over the FPCs. |  |
| **Is the manuscript scientifically, correct? Please write here.**  | Yes, the manuscript is scientifically correct, but the authors should strengthen it by:-Adding more recent references. - Adding a validation study to strengthen the credibility of their findings. The authors have detailed two types of stationary thermal solar collectors (ETCs and FPCs). However, in the literature, thermal solar collectors are classified into two categories: trackers and non-trackers (stationary solar collectors) solar collectors. The authors should mention this in the manuscript.- There are two types of FPCs: glazing and unglazing, the authors should mention these two types and clarify which type was used in the study.- The authors should mention also the type of the ETCs used in the study (heat pipe or direct flow ETC). |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | The references in the manuscript are relevant to the topic, however most of them are not recent and outdated. I suggest changing them by including references more recent (within the last 6 years). Kindly consider the following references for improving the manuscript:**«**[**Optimizing Thermal Performance of Evacuated Tube Solar Collectors with Cascaded Phase Change Materials**](https://www.researchgate.net/publication/390879106_Optimizing_Thermal_Performance_of_Evacuated_Tube_Solar_Collectors_with_Cascaded_Phase_Change_Materials?_sg%5b0%5d=xoub7r45_Fr0lG6URiSD7QRBz-mJJ01Y9_2YNVYu1-wcZwH39dENHXNriITDKovYpA1mmwLBvHejCgb_XTp2Xhu0YCx21GG9t238IQrf.3b4NCr7fUcrfF9D_F5ucg-irEgVUhPLFLhg5asqCCR-B3U0ZhQzKgRgzEEeNawhElkRmMxcJ9kXh7Mr0s_xteQ&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19)**»****«**[**New Evacuated Tube Solar Collector with Parabolic Trough Collector and Helical Coil Heat Exchanger for Usage in Domestic Water Heating**](https://www.researchgate.net/publication/372668553_New_Evacuated_Tube_Solar_Collector_with_Parabolic_Trough_Collector_and_Helical_Coil_Heat_Exchanger_for_Usage_in_Domestic_Water_Heating?_sg%5b0%5d=xoub7r45_Fr0lG6URiSD7QRBz-mJJ01Y9_2YNVYu1-wcZwH39dENHXNriITDKovYpA1mmwLBvHejCgb_XTp2Xhu0YCx21GG9t238IQrf.3b4NCr7fUcrfF9D_F5ucg-irEgVUhPLFLhg5asqCCR-B3U0ZhQzKgRgzEEeNawhElkRmMxcJ9kXh7Mr0s_xteQ&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19)**»****«**[**Performance enhancement of evacuated U-tube solar collector integrated with phase change material**](https://www.researchgate.net/publication/383064073_Performance_enhancement_of_evacuated_U-tube_solar_collector_integrated_with_phase_change_material?_sg%5b0%5d=xoub7r45_Fr0lG6URiSD7QRBz-mJJ01Y9_2YNVYu1-wcZwH39dENHXNriITDKovYpA1mmwLBvHejCgb_XTp2Xhu0YCx21GG9t238IQrf.3b4NCr7fUcrfF9D_F5ucg-irEgVUhPLFLhg5asqCCR-B3U0ZhQzKgRgzEEeNawhElkRmMxcJ9kXh7Mr0s_xteQ&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19)**»****«**[**An Experimental Comparison of the Performance of Various Evacuated Tube Solar Collector Designs**](https://www.researchgate.net/publication/369459613_An_Experimental_Comparison_of_the_Performance_of_Various_Evacuated_Tube_Solar_Collector_Designs?_sg%5b0%5d=xoub7r45_Fr0lG6URiSD7QRBz-mJJ01Y9_2YNVYu1-wcZwH39dENHXNriITDKovYpA1mmwLBvHejCgb_XTp2Xhu0YCx21GG9t238IQrf.3b4NCr7fUcrfF9D_F5ucg-irEgVUhPLFLhg5asqCCR-B3U0ZhQzKgRgzEEeNawhElkRmMxcJ9kXh7Mr0s_xteQ&_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJlY3QiLCJwYWdlIjoicHJvZmlsZSIsInByZXZpb3VzUGFnZSI6InByb2ZpbGUiLCJwb3NpdGlvbiI6InBhZ2VDb250ZW50In19)**»****«Thermal augmentation in evacuated tube solar collectors using reflectors, nano fluids, phase change materials and tilt angle: A review»** |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes, the language is suitable for scholarly communications |  |
| Optional/General comments | -All the symbols should be defined - All tables, figures and equations should include proper references. -Sections 3.1 and 3.2 should be improved by including a detailed explanation on the working principle of each solar collector.-The authors are advised to include a section on enhancing the thermal solar collector through several strategies such integration phase change materials or connecting the collector to a solar tracker collector or by enhancing the working fluid… |  |

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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s Feedback** (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:**

**Sana Said, Tunisia**