

## Review Form 1.6

Journal Name:	<a href="#">International Journal of Environment and Climate Change</a>
Manuscript Number:	<b>Ms_IJECC_99413</b>
Title of the Manuscript:	<b>The Carbon Footprint Reduction Related to Domestic Heating Using Thermal Power Plant Waste Heat</b>
Type of the Article	

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalcjast.com/index.php/CJAST/editorial-policy> )

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**PART 1: Review Comments**

	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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p><b>Reviewer Comments</b> the followings should be carefully addressed in the revision to be published in the above journal.</p> <ol style="list-style-type: none"> <li>1- The authors should be followed the instruction of the journal in all parts and sections in this manuscript.</li> <li>2- Complete mathematic calculation model with all nomenclature missing. Please check the number of each section, equation, and chart.</li> <li>3- The abstract needs more quantitative results. The abstract section is an important and powerful representation of the research. It is better that the results should be presented with the support of specified data.</li> <li>4- The authors should indicate this technique to enhance system performance. Also, the author should add more references that discuss the effect of using this technique. It is recommended that the authors carry out wide analysis and comparison with the state-of-the-art studies.</li> <li>5- Most tables and figures are needed improve the quality of all tables and figures.</li> <li>6- Add references for all equations.</li> <li>7- I would also expect to validate with two more experimental works available in the literature.</li> <li>8- The literature review must be improved. Please highlight in the literature review the differences between previous papers and your paper. Please clearly indicate the knowledge gap and prove that it is a really not analyzed area of the field. Please indicate new approach / new methods in a comparison to the existing investigations (literature review should be extended by adding the below references). The Effect of Different Twisted Tape Inserts Configurations on Fluid Flow Characteristics, Pressure Drop, Thermo-hydraulic Performance and Heat Transfer Enhancement in the 3D Circular Tube. Thermal flow and heat performance analyses in circular pipe using different twisted tape parameters based on design of experiments. Characterization of internal thermohydraulic flow and heat transfer improvement in a three-dimensional circular corrugated tube surfaces based on numerical simulation and design of experiment. Effect of different corrugation interruptions Parameters on thermohydrodynamic characteristics and heat transfer performance of 3D Three-dimensional corrugated tube. Investigation of thermal flow structure and performance heat transfer in three-dimensional circular pipe using twisted tape based on Taguchi method analysis. Investigation of the effect of various corrugated pipe configurations on thermo-hydraulic flow and enhancement of heat transfer performance with the development of different correlations. Flow Field Structure, Characteristics of Thermo-Hydraulic and Heat Transfer Performance Analysis in a Three Dimensions Circular Tube with Different Ball Turbulators Configurations. Analysis on flow structure and improvement of heat transfer in 3D circular tube with varying axial groove turbulator configurations.</li> <li>9- Description of Vortex-Fitting Algorithms analysis should be improved.</li> <li>10- You need to add error analysis of your results and add the error bars in your graphs to indicate your accuracy measurements.</li> <li>11- Improve work justification. Also, add more analysis about velocity and pressure contours.</li> <li>12- More quantitative conclusions should be presented. Please prepare additional comparisons, some percentage differences. There is a lack of quantitative conclusions which should contain main findings from the paper.</li> <li>13- Present the mathematical equation of the boundary conditions and initial condition.</li> <li>14- I would also suggest including in the conclusion section</li> <li>15- It is recommendable to add below references in order to underline the connections of the manuscript with the aims and scope of the Journal. Effect of outlet impeller diameter on performance prediction of centrifugal pump under single-phase and cavitation flow conditions. Numerical investigation on effect of various pump rotational speeds on performance of centrifugal pump based on CFD analysis technique. Experimental investigation of cavitation characteristics within a centrifugal pump based on acoustic analysis technique. Effects of different turbulence models on three-dimensional unsteady cavitating flows in the centrifugal pump and performance prediction.</li> </ol>	

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	<p>Detection of cavitation phenomenon within a centrifugal pump based on vibration analysis technique in both time and frequency domains.          Experimental investigation of the effect of suction valve opening on the performance and detection of cavitation in the centrifugal pump based on acoustic analysis technique.          An experimental study on vibration signatures for detecting incipient cavitation in centrifugal pumps based on envelope spectrum analysis.          16- The conclusion section lacks in summative conclusions. The main results, academic contributions should be emphasized in this section.          17- In the discussion development, it is very important to emphasize points of agreement or disagreement between results in this work and others cited in references part of manuscript.          18- Authors should discuss limitations of the current study and possible improvements for future directions/research works. Authors are requested to check the reference format and correct some inconsistent formats.          19- Finally, I strongly recommend the author to read through the whole text and correct it to make it more reader-friendly.</p>	
<p><b>Minor</b> REVISION comments          1. Is language/English quality of the article suitable for scholarly communications?</p>		
<p><b>Optional/General</b> comments</p>		

**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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

**Reviewer Details:**

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