

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_99217
Title of the Manuscript:	Effect of moisture content and particle size on characteristics of fuel pellets using flat die type pelleting machine
Type of the Article	Original Research Article

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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.

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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>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> Important Suitable Missing on the energy consumption Yes no <p style="text-align: center;">Other comments:</p> <p style="text-align: center;">Review: Effect of moisture content and particle size on characteristics of fuel pellets using flat die type pelleting machine</p> <p style="text-align: center;">Ms_IJECC_99217</p> <ol style="list-style-type: none"> Abstract: It would be clearer/significant to also mention the biomass feedstock type used for pelletizing step Keyword: in the abstract summarizing the important points, does not point out about energy consumption, but there is a keyword for that, please justify this importance. In this article the section on energy consumption with Figure 6 is presented, but not mentioned in the abstract. Introduction: statement about 2.3 billion people depending on fuelwood, it would be more presentable if the author can mention instances of which countries related Introduction: same goes to the term used 'emerging countries.....', please give example for better visualization of the idea meant to be conveyed. Introduction: please write in full the abbreviation used for the first time→ LPG before using the short form term Introduction: please differentiate appropriately MT against Mt, which are used in the article. Please define clearly to avoid confusion Introduction: 'India produces 500 million tonnes (Mt) or more of crop residue annually, of which 12.2% is burned as a solid fuel for electricity production, according to the Indian Ministry of New and Renewable Energy (MNRE).' Please rephrase this sentence for better flow Introduction: define MW as megawatt for the first time use in the article for clearer understanding Introduction: 'One of the most important factors is particle size (20 % impact) affecting pellet durability. The amount of proteins, fibres, carbs, and fat influence 40 % and moisture content affects (20 % impact).', please elaborate the % meaning. What does the author mean by % impact, kindly be more specific Introduction: please define w.b., in this statement '....moisture content (20, 25, 30 % w. 	

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	<p>b.)...'</p> <p>11. Materials and Method: somehow the moisture content in % determination after spraying with water is not clear, kindly elaborate how the % is determined and set? Same goes to the determination of particle size. Kindly elaborate on the steps used. Kindly add, please refer to 2.3 or which equation or ?? (for particle size)</p> <p>12. Materials and Methods: production of pellets, kindly mention the brand and country of origin of the pelleting machine, kind also mention if the machine is self-fabricated.</p> <p>13. It is unclear the objective of the experimental strategy in this article based on the experimental planning. Please design a sub section on the experimental planning in materials and methods, to allow the reader to understand the plan of investigations. The only statement seen is in the last paragraph in the introduction section. Best is also to state clearly in the materials and methods, at least with the table showing the sets of experiments conducted for the investigations on different moisture content and particle size. From here, the experimental investigation planning will be very clear. Kindly do this for better presentation of the methods for investigations.</p> <p>14. Figure 2 is not mentioned in the text of the article, and it should be placed close to the mention, but this is not observed.</p> <p>15. Results and discussions: 3.1: out of a sudden the results are presented without knowing the experimental planning. No discussion is observed about the results obtained.</p> <p>16. Figure 3: kindly place this figure closer to the discussion starting from section 3.2.</p> <p>17. This statement ' With increasing 20 to 30% moisture content and 4 to 8 mm particle size, pellet density increased from 598.21 to 625.67 kg/m³ then decreased from 625.67 kg/m³ to 576.84 kg/m³ for the cotton stalk.' Is very confusing, please rephrase and present the results in a clearer sentence. Which is which, please make clear.</p> <p>18. Figure 3: it is not shown which of moisture content with which particle size?? Not clear! But is shown in Figure 4. Kindly make corrections for clearer presentation of results for discussion.</p> <p>19. Figure 3: if this is to be printed black and white, it is kind of hard to distinguish between the color coding, try to all add other alternative if this figure is to be printed in B&W. Same goes to Figure 4 , 5 & 6. Kindly consider this!</p>	
<p>Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Ok, kindly recheck for any other errors.</p>	
<p>Optional/General 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>	

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