

Review Form 1.6

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_94518
Title of the Manuscript:	Overriding investigation on strengthening of thermal stability of torrefied pigeon pea stalk and kinetic compensation
Type of the Article	Research 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.journalijecc.com/index.php/IJECC/editorial-policy>)

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)
Compulsory REVISION comments		
Minor REVISION comments	<ol style="list-style-type: none"> Usually, the analytical methods shown in this paper is able to find in other references, and similar trends on E_a, ΔH, ΔS was found for other biomass materials. It is advisable to show the feature of PPS, and corresponding impact on the trend of different parameters with torrefaction. It is advisable to show the logic of the article and clarify the role of different parameters before section 3.1, which makes the article easily understood. On Page 8, section 3.2, it is advisable to add a schematic to illustrate the structural change of HC, CL and LN during torrefaction, which explains the trend difference on HC,CL,LN between RPS and TPS. Please explain the effect of conversion rate (α) on different parameters more clearly, such as E_a, ΔH, ΔS. For example, E_a significantly decreases when $\alpha > 0.7$, the reason need to further analyzed. On Page 9, it is advisable to clarify the reason for the relationship between A and complex formation. On Page 10, please give details about how to estimate ΔH, ΔG and ΔS based on calculated A and E_a. 	
Optional/General comments	<ol style="list-style-type: none"> Nomenclature is missing. Calculated uncertainty values should be given in tabular form. 	

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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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