



SDI Review Form 1.6

Journal Name:	Asian Journal of Advanced Research and Reports
Manuscript Number:	Ms_AJARR_51663
Title of the Manuscript:	Waste-to-Energy: A Circular Economy tool towards Climate Change Mitigation in Imo State, South-Eastern, Nigeria
Type of the Article	Review 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: (<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
Compulsory REVISION comments	<ul style="list-style-type: none"> - "Circular economy is one such technology that offers precisely this opportunity..." Circular economy is not a technology; it is a system or an approach. - "Estimated finance accruable with the two WTE technologies under study are presented in figure 10. Estimation is for household consumers, hence the rate as earlier stated. While anaerobic digestion would have yielded a total of about N 74 billion in ten years beginning with N 6.5 billion in 2021 to N 8.2 billion in 2030, incineration would in same period of consideration accrued about N 137 billion from N12.2 billion to N 15.2 billion. The research has not considered a full feasibility of the project including economic parameters that includes capital expenditure (CAPEX) and operational expenditure (OPEX). "In order to avoid bias and prejudice, it is important to highlight that anaerobic digestion also produces composts and soil conditioners and fertilizers which would increase the overall yield of anaerobic digestion. Rough estimates of the NPV for both approaches are needed to give a full picture of both projects and make the claim based on solid grounds. 	
Minor REVISION comments	<ul style="list-style-type: none"> - "Integration of results with detailed clarifications of circular economy and climate mitigation indicates WtE as an index of sustainable development" - "The bottom ash from combustion operations serves as feedstock to the construction industry, hence closing a potential pollution loop" Needs more clarification, combustion of what materials. Also needs better introduction to ensure cohesion as it suddenly mentions a process in the middle of talking of the importance of WtE. - "Waste is an indispensable by-product of most human daily activity. According to Attah et. al., (2016), the term "waste" connotes different meanings to different people. Michael-Agwuoke (2012) defined waste as residual materials which are a result of human activities and cannot be reused or recovered as a resource..." - "There are different sources of waste such as municipal (households, schools, offices etc), medical, agricultural, industrial or from automobile." - "In Nigeria waste streams generally consist of putrescibles, plastics, paper, textile, metal and glass (Ayuba et al. 2013)." - "..., overall impact of poor waste management practices and renewable nature of WTE conversion." Not so clear what is needed to be stated. - "Combustion process such as incineration is preferred mostly on an industrialized scale where the calorific heat value of MSW is high." - "Suitable and currently applied in industrialized and emerging countries, it treats both high moisture content and low moisture..." Suitable in what way. Economically, technologically...? - "Carbon capture and storage (CCS) is another method of climate change mitigation". - "Waste to energy is an integral process of consolidating the three Rs (Reduce, Reuse and Recycle). "2 paragraphs later another 3Rs are mentioned, keeping only one is better; either the "redistribution" or "recycle" 	
Optional/General comments	<ul style="list-style-type: none"> - Standardize the acronym "WtE" to be either written as "WtE" or "WTE" - Comment on what is in the figures, explain them and highlight the key points that a reader should get from them. - Overall grammatical and structural mistakes some are highlighted in the attached document 	



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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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i> No	
Are there competing interest issues in this manuscript?	No	

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