



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_15466
Title of the Manuscript:	ANALYSIS OF STEAM POWER PLANT AT KADUNA REFINING AND PETROCHEMICAL COMPANY FROM EXERGETIC PERSPECTIVE
Type of the Article	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Authors have taken into account my previous comments. For example, a literature review has been included in the paper. The literature review also includes some recently published studies which is a good thing. Line 222 Eq. (2.6) is unnecessary and should be deleted. Fig. 2, Fired boiler. I think that air and fuel should go into the boiler (see directions of arrows) and flue gas (not flue) should come out of the boiler. Respond 5 regarding units of pressure. Units can always be changed to SI units (in this case Pascal) using a correct conversion factor. This can be done although the original pressures are given in some other units. For example, some journals do not accept any other unit than Pascal (even bar is forbidden) for the pressure. I think the editor may decide whether it is acceptable to use a unit like kg/cm²g for the pressure. Lines 315-316. Authors state that the boilers should be properly lagged to avoid energy leak and the combustion air should be properly pre-heated. It is little difficult to know what this statement precisely means. If I understand correct good lagging and proper air pre-heating should decrease the exergy destruction rate over the boiler? However, authors have not shown in their results how much these improvements (for example pre-heating of combustion air) could actually reduce the exergy destruction rate over the boiler. It is a well-known fact that proper lagging and air pre-heating improve the boiler efficiency. I did not require this kind of calculation in my first review and neither do it in this revision. However, it might be interesting to see for example what the influence of proper air-heating on the exergy destruction rate is.	

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