

## Paper Assignment Sustainable Energy 2024

### **Instructions:**

1. Make a group of 2 persons (only 1 group allowed for 3 persons)
2. Select one topic from the list below for your paper.
3. Write paper in English.
4. The paper must consist of the following sections: 1) Title, 2) Abstract, 3) Introduction, 4) Methodology, 5) Results and Analysis, 6) Conclusion and 7) References.
5. Turnitin Similarity Index **MUST** be under 25%
6. Please fill out this form before **4 September 2024, 23.59 WIB**: <https://bit.ly/LIST-PAPER-SEB-2024>
7. Draft submission: **16 October 2024, 23.59 WIB**. Draft version of the paper **MUST** contain all 7 sections mentioned in point 4. Students will receive feedback from reviewers to improve the quality of the paper. Students are required to revise and resubmit their papers for final grading.
8. Submission of revised paper: **18 December 2024, 23.59 WIB**

### **TOPICS:**

#### **Energy Supply System**

1. Role energy storages for future energy system
2. Review on hybrid renewable energy systems in rural area
3. Integrated off grid/microgrid with productive zone
4. Review on CO<sub>2</sub> energy storage technologies
5. Review on CO<sub>2</sub> capture technologies
6. Review on geothermal reservoir and power generation technologies
7. Implementation Potential of 2nd and 3rd Generation Biofuel

#### **New Energy**

8. Review of green hydrogen production
9. Review of fuel cell technology and application

#### **Energy Demand System**

10. Review on the role of energy efficiency for energy transition
11. Review on the role of changing behavior on energy demand reduction
12. Review on the role of electrifying of demand sectors emission reduction

#### **Policy**

13. Market, Economy, and Regulation
14. Review on carbon trading mechanisms

### **Grading system**

Content: 80 %

Format: 20 %

**Assessment rubric:**

CONTENT (80%)		Assessment Criteria	Scoring			
no.	Section		1	2	3	4
1	Title	precise, concise and clear description of the paper	title does not meet the criteria	title does not adequately describe the topic	Title is suitable enough	Title fits the criteria perfectly
2	Abstract	the abstract content explains 4 points; i.) brief introduction , ii.) objectives, iii.) methodology, iv.) analysis results v.) conclusion.	abstract content contains only 1 point of the criteria	abstract content only contains 2 points of the criteria	abstract content only contains 3 points of the criteria	complete abstract content according to criteria
3		keywords (3-5 keywords that match	abstract keywords are not mentioned and irrelevant	The abstract keywords are mentioned, but there are fewer than 3 or more than 5, which are not relevant to the title or abstract	The keywords are mentioned according to the criteria, but some are not relevant to the title or abstract	The keywords are mentioned according to the criteria and are relevant to the title or abstract
4	Introduction	Clarity in presenting the problem and scope.	The introduction does not explain the problem and scope	The introduction does not sufficiently explain the problem and scope	The introduction explains the problem and scope in sufficient detail	The introduction explains the problem and scope in great detail

5		The uniqueness of the paper / novelty compared to similar research.	The unique aspects of the paper are not explained and are not compared with similar research	The unique aspects of the paper are mentioned but compared with only 1-2 similar studies	The unique aspects of the paper are mentioned but compared with only 3-5 similar studies	The unique aspects of the paper are mentioned and compared with more than 5 similar studies
6		Research Objective	Objectives are not mentioned	Objectives are mentioned but irrelevant to the paper topic	Objectives of the paper is present and fairly relevant to the topic of the paper.	Objectives are mentioned and perfectly fit with the topic of the paper
7	Methodology	Appropriateness of the method in answering the research objectives	does not meet the criteria	less than the criteria	sufficient according to the criteria	Perfectly suitable the criteria
8	Result and Discussion	There is a connection between the results & discussion and the paper's concept (e.g. purpose, scope, etc.)	results/discussion have nothing to do with the original concept paper	results/discussion 10 - 49 % related to the initial concept paper	results/discussion 50 - 79 % related to the initial concept paper	results/discussion > 80 % related to the initial concept paper
9		Depth and accuracy of analysis	analysis of the data presentation is absent or very poor	analysis of the data presentation lacks depth and precision	analysis of the data presentation is deep enough but less precise	analysis of the data presentation is very good and precise
10	Conclusion	Conclusion answers research objectives	Does not meet the criteria	less than the criteria	sufficient according to the criteria	Very suitable to the criteria

11	Referen ce	Credibility of references; contains credible sources such as scientific articles, textbooks, reports that can be accounted for.	references contain more than 3 non- credible sources	references contain 1-2 non-credible sources	references contain 3-10 credible sources but are less up- to-date	references contain more than >10 credible and up-to-date sources
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Format (20%)		Assessment Criteria	Scoring			
no	Section		1	2	3	4
1	Entire Paper	Grammar	very Poor grammar (10-40% follow writing rules)	poor grammar (50-70% follow writing rules)	grammar is good enough (70%-80% follow writing rules)	grammar is excellent
2	Entire Paper	Suitability and consistency of citations	30%-50% of data sources are not cited according to the guideline / rules of citation writing	more than 51-70% of data sources are cited according to citation rules but not consistently	71-85% of data sources are cited according to citation rules but inconsistentl y	data sources are cited according to writing rules and are consistent