



Clean Energy Competition Individual Judging Rubric

Contestant's Name:	Last Name, First Name
Project Title:	
Judge's Name:	
Final Score:	/ 85 (130)
Any section highlighted in this yellow color is for Phase II of the competition only.	

	Superior	Above Average	Average	Below Average	Poor
Innovative Ability (20 points)					
1. The topic idea is original and/or innovative.	5	4	3	2	1
2. The approach to solving the problem is unique.	5	4	3	2	1
3. The contestant's research helped answer a question in a creative way.	5	4	3	2	1
4. The topic idea is related to the contest prompt.	5	4	3	2	1
5. The topic addresses clean energy.	5	4	3	2	1
6. The topic addresses sustainable energy.	5	4	3	2	1
7. The topic addresses accessible energy.	5	4	3	2	1

	Superior	Above Average	Average	Below Average	Poor
<b>Experimental Design Process (35 (50) points)</b>					
1. Defined the engineering problem to be solved, identifying the need, the target user, and the justification. [Who] needs [what] because [why].	5	4	3	2	1
2. Accessed a minimum of three, sources for background research, addressing all important facets of the project & studied and learned from existing solutions.	5	4	3	2	1
3. Specified design requirements that state the important characteristics the solution must meet to succeed. Kept the target user in mind when identifying the requirements.	5	4	3	2	1
4. Created alternative solutions to the problem.	5	4	3	2	1
5. Chose the best solution from the alternatives, justifying how the solution meets the design requirements (outstanding contestants might use the "engineering decision matrix").	5	4	3	2	1
6. Included a clear visual representation of data collected/observations made (e.g., graphs, charts, pictures, diagrams).	5	4	3	2	1
7. Concluded on a final solution for the topic.	5	4	3	2	1
8. Developed the solution, refining and improving it during the construction of a conceptual prototype.	5	4	3	2	1
9. Used information collected during the testing of the prototype to improve the product. Redesigned and retested the product until the design goal and design requirements were met (e.g., through debugging, optimizing).	5	4	3	2	1
10. Clear analysis of qualitative and quantitative data utilizing methods such as the calculation of mean or T-test, and/or the examination of possible patterns, themes, or relationships.	5	4	3	2	1
	Superior	Above Average	Average	Below Average	Poor
<b>Product (15 points)</b>					
1. The contestant's solution represents significant improvements over existing products/solutions. The product is a creative solution to the problem.	5	4	3	2	1
2. The final product meets universal design criteria, such as elegance, robustness, aesthetics, and cost effectiveness. The product is safe to build, use, store, and dispose of.	5	4	3	2	1
3. The final product is useful to the project-specific defined target user. The project fills a meaningful need.	5	4	3	2	1

	Superior	Above Average	Average	Below Average	Poor
Skill (15 points)					
1. The project appears to represent the contestant's own work.	5	4	3	2	1
2. Necessary scientific skill is demonstrated by the use of appropriate equipment and other materials. This includes appropriate safety precautions.	5	4	3	2	1
3. The overall display of the submission significantly contributes to the project (i.e. content, grammar/spelling, formatting, etc.).	5	4	3	2	1
	Superior	Above Average	Average	Below Average	Poor
Presentation (15 points)					
1. The contestant's presentation communicates both the merits of the final product and the process that the contestant went through to reach the final product.	5	4	3	2	1
2. The contestant can communicate effectively about the project (the contestant responds logically to questions or defends the design choices and conclusions).	5	4	3	2	1
3. The contestant's final submittal / report provides ample evidence of how the contestant used the engineering process throughout the project.	5	4	3	2	1
Round 2 Recommendation					
Do you recommend this project for second round of the competition?	Yes			No	
Final Comments/Recommendations for Improvement/Positive Feedback:					
Total Score					
		/	80 (130)		