

Systems Thinking in Climate & Sustainability Systems - Application6: Improve the design of a renewable energy system

This is a team assignment. Every team member should contribute to this assignment, and only the team members should work on this assignment. Once you submit this form, you will receive a copy of your responses to your email address.

For this assignment, you will improve on the design based on your system description from Application5.

You may use the following resources for this assignment:

- Preparation2: Systems thinking article
- NEET Climate & Sustainability Systems presentation
- 22.03 Final review
- Your responses to Application5

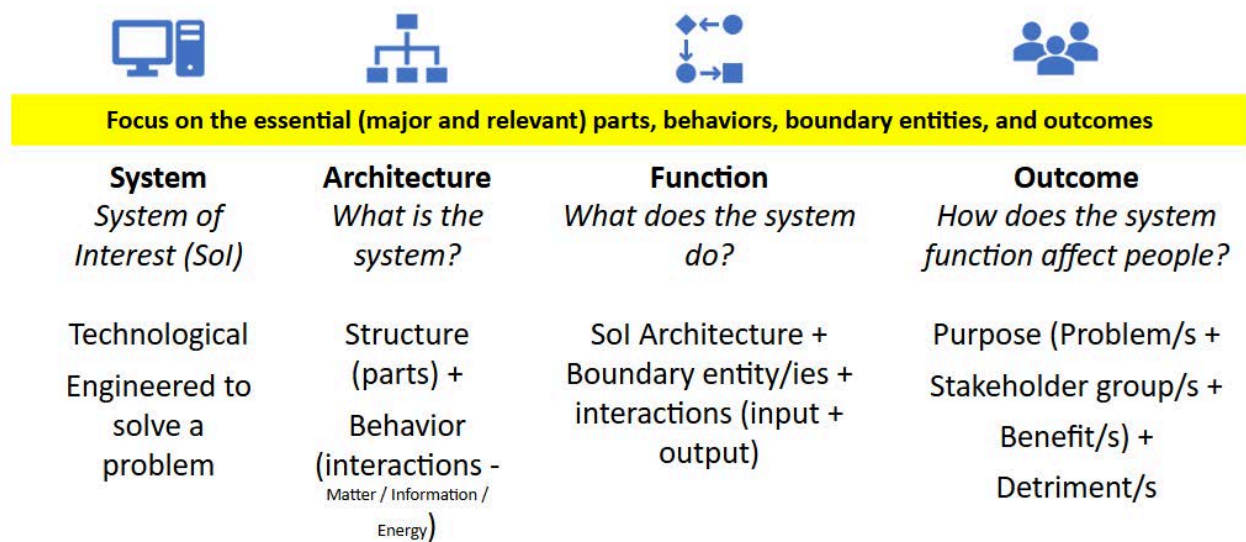
You are allowed to use additional resources, as long as you report on your use below.
You are allowed to use generative AI, as long as you report on your use below.

* Indicates required question

1. Email *

2. First name and last name of every team member *

System Architecture-Function-Outcome construct



3. From your responses to Application5, select an outcome (benefit or detriment) caused by the system function that you would like to focus on for this assignment. Describe that outcome here (you may copy and paste your response to Application5). *

4. To improve this outcome (increase benefit or reduce detriment), what would you change about the output (system function)? How would that improve the outcome? Describe not just what you would change, but also how it would change the way the system functions. *

5. To make this change in output, would you need to change the input in any way? If so, then please describe this change.

6. To change the output as you described in your answer to the last question, what would you change about the structure of the system of interest (architecture)? How would that change the output? *

Describe not just what you would change, but also how it would change the way the system functions.

7. How would the change in structure of the Sol change its behavior (interactions between parts)? *

8. Draw a diagram for the system function (input + System of Interest architecture + output) and upload it [HERE](#). The file name should contain the first name of every team member. *

See examples in the presentation for reference. You can create a digital drawing or a pen-and-paper drawing, as you prefer.

Mark only one oval.

☐ Done

9. System outcome: Will your change to the system function change the stakeholders, problem, benefit/s, or detriment/s in any way (including changing or adding new ones)? If so, then please describe those changes here.

10. If you used any additional resources for this assignment, please provide their URLs/references here and describe what item/s you used them for.

11. If you made use of generative AI (like chatGPT) while working on this assignment, please provide details here about what tool/s you used, how you used them, how you found it useful, and what potential shortcomings you found. Add any other information you deem relevant.

12. If there was anything that was not clear in this assignment, please add your comments here.

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