We are asked to spend no more than 5% of annual budget ($ 8 million) to make an improvement to campus. My team’s design will improve the anteroom. We want to design a self-energized heating system. The system should contain an electrical power generating system and heating control system. It should be able to convert energy to heat.

Constraints:

No more than 5% of annual budget ($ 8 million)

Transform all the anterooms of campus building

Shouldn’t change main building structure of buildings

Criteria:

Durable

Cheap

Efficiency

Safe