

## Prioritizations and Trade-offs between Energy and Occupant Needs in Buildings

### Introduction:

This activity is designed to be an engaging and thought-provoking session on the intricate balance between energy efficiency and occupant comfort in building design and operation. The goal is to foster insightful and lively discussions, encourage critical thinking, and promote collaborative problem-solving through thoughtful exchanges. We'll be dividing the class into six groups, each responsible for exploring different aspects of the trade-offs between energy and human needs. Enjoy the session!

### Rules and Structure Explanation (5-10 minutes):

- **Group Formation:** Divide yourselves into six groups. Each group will consist of a balanced mix of students with diverse backgrounds and expertise.
- **Advocacy Roles:** Within each group, assigning roles as needed – there should be at least one spokesperson who will represent the group's views in front of the class.
- **Question Allocation:** There are three key questions to be addressed, with two groups assigned to each question. One group will advocate for one of the proposed directions, while the other will advocate for the other. Each group should try to anticipate the arguments of the other side and prepare rebuttals in advance.
- **Presentation and debate process:** The debate should start with each group briefly summarizing their key arguments. Afterwards, cross-group discussions and challenging each other's opinions is encouraged for a more comprehensive understanding.

### Discussion Rounds (10 mins preparation + 20 mins debate):

- **Round 1:** Groups 1 and 2 discuss and present arguments for and against the first question - "Mechanical cooling in a global context: Can we get rid of it or is it an absolute necessity?"
- **Round 2:** Groups 3 and 4 focus on the second question - "Building design for likeability or environmental performance?"
- **Round 3:** Groups 5 and 6 delve into the third question - "The role of technological innovations versus education & occupant behavior in optimizing energy use and ensuring occupant comfort?"

### Conclusion and Group Reflection (10 minutes):

- Each group prepares a brief summary of their discussion and lesson learnt. Reflect on the challenges and nuances of their assigned topic.