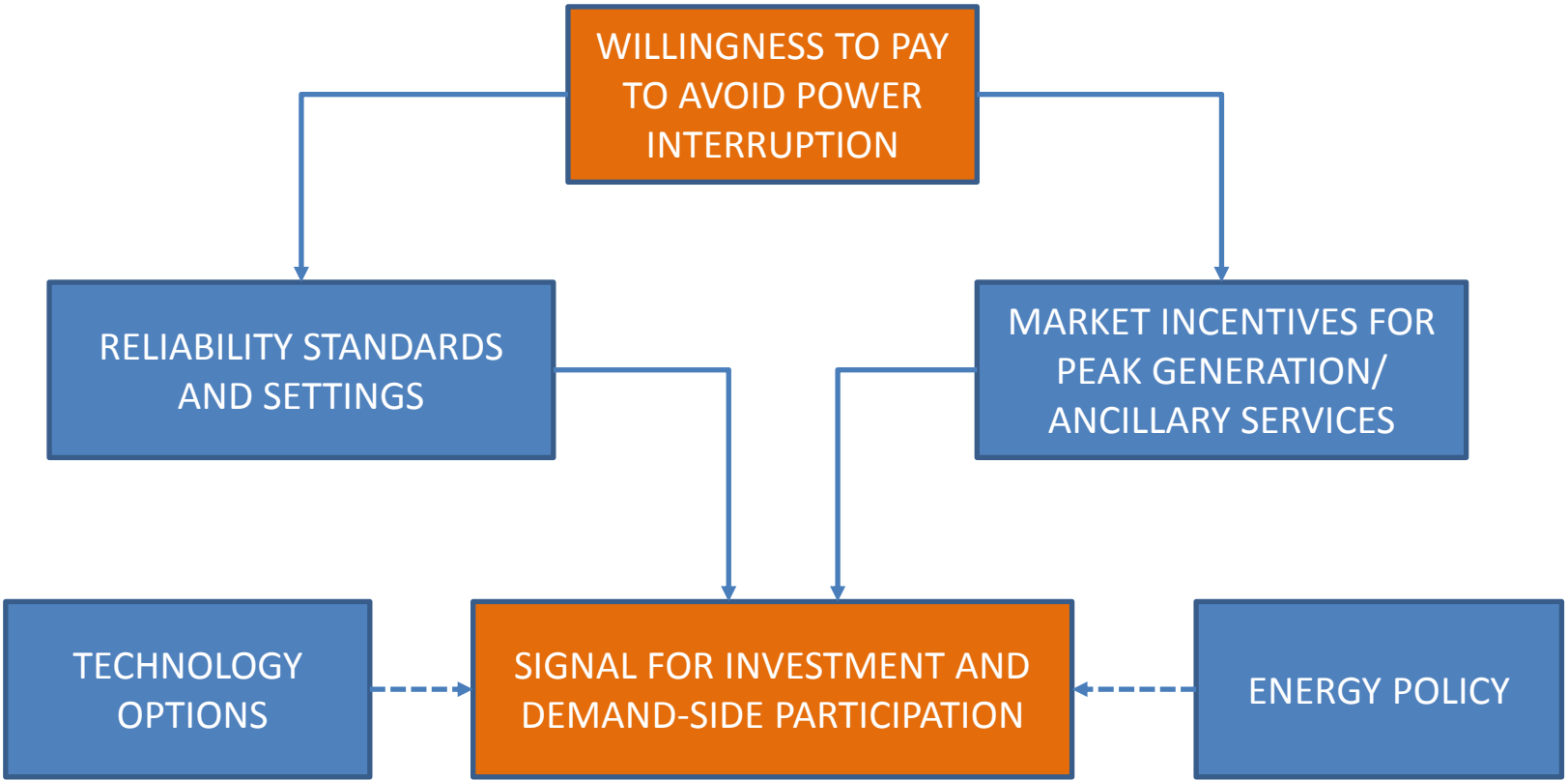
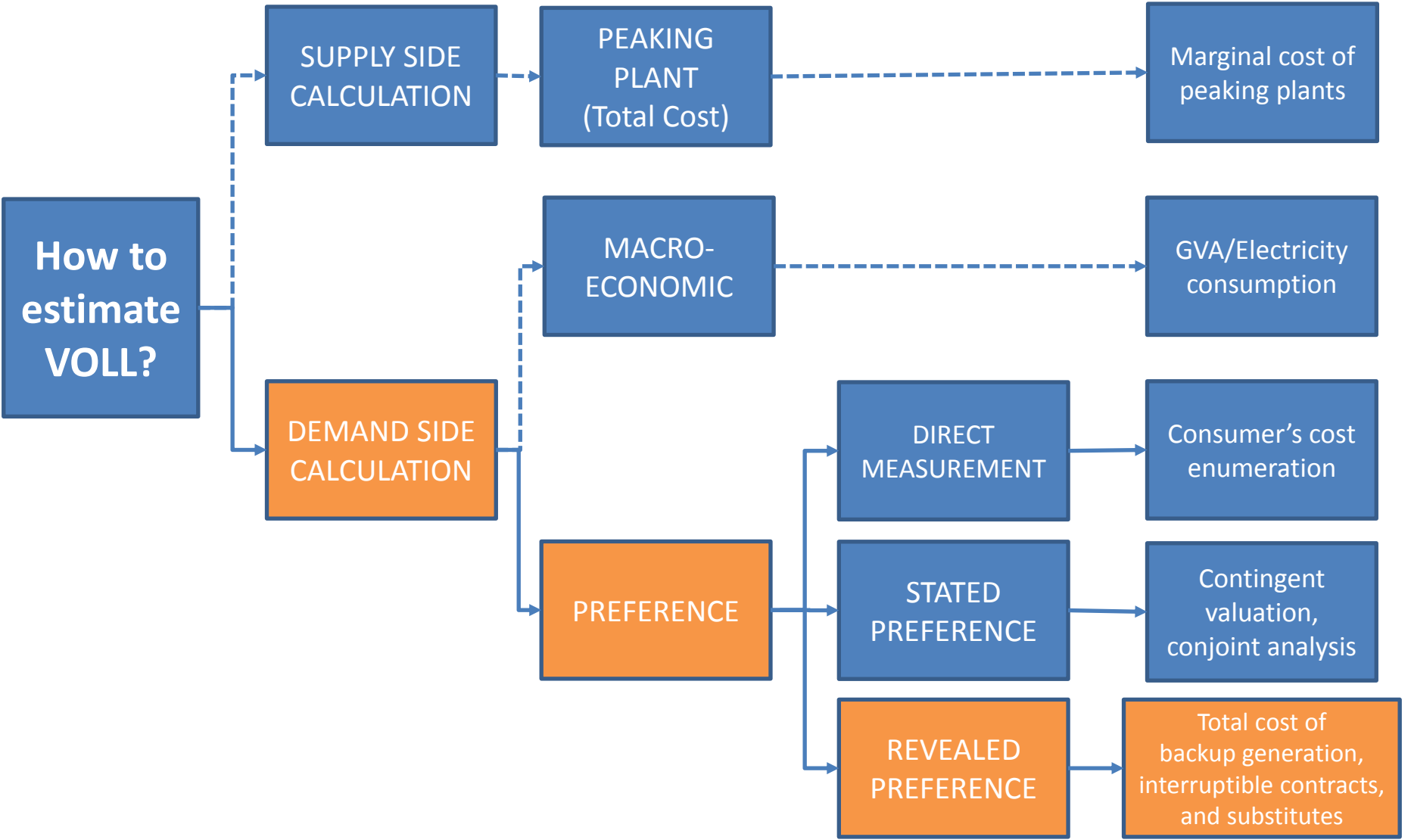
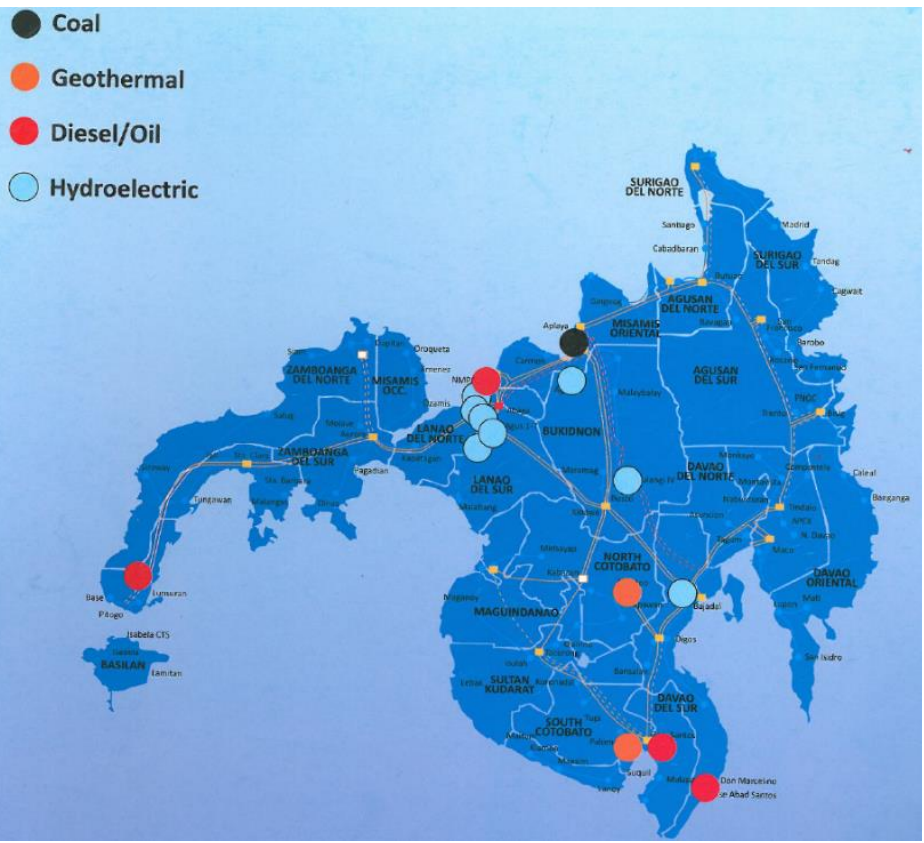


# Integrating the social cost of power interruption with reliability planning



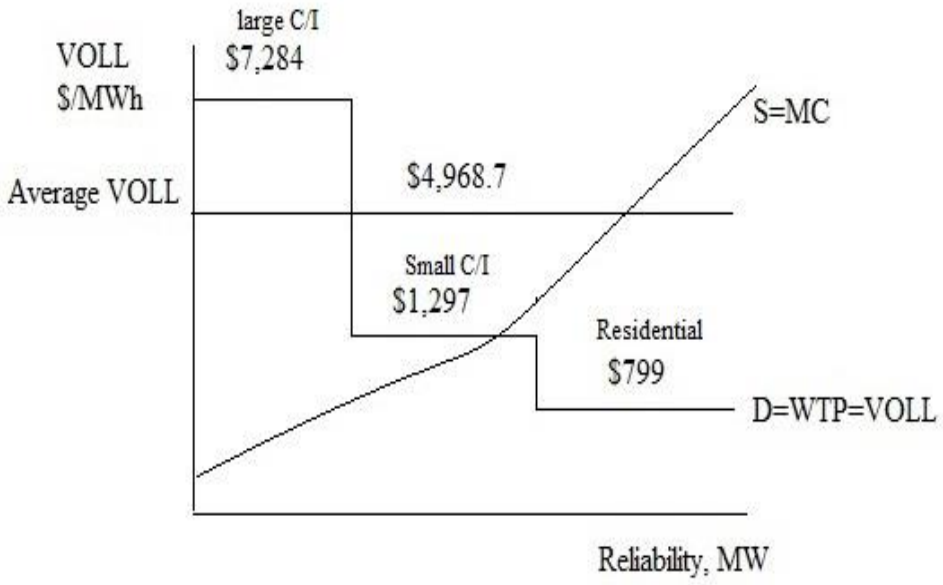


# Case study: The island of Mindanao in the Philippines

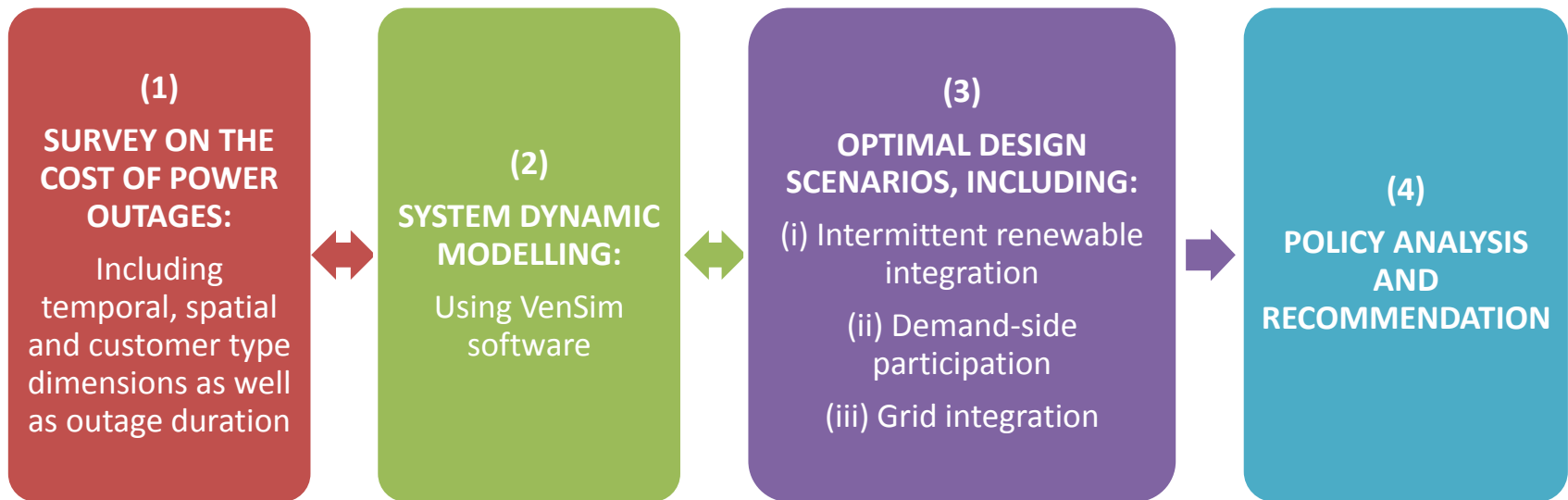


## Revealed preference approach

$$VOLL = \frac{\text{Total cost for backup facility}}{\text{Operational Duration}}$$



# Next Steps



## KEY CHALLENGES

1. What is the right level of **VOLL aggregation** in order to capture factors such as temporal and spatial variability?
2. How to **incorporate VOLL** into system modelling?
3. Case study is a **developing and insular economy** with a **regulated electricity market**. How (much) should these characteristics be part of the system modelling?