

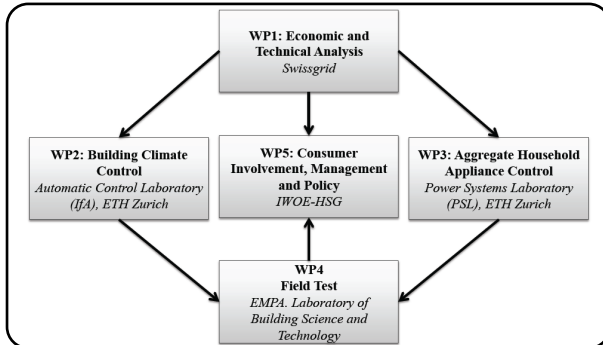
# HeatReserves

## Business Models for HeatReserves

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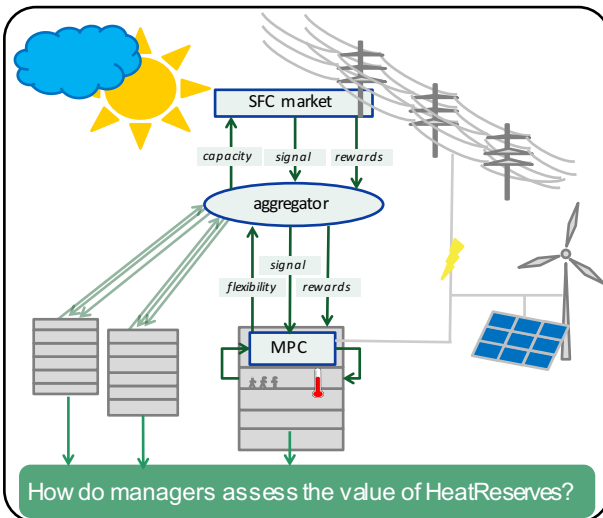
### HeatReserves – Project Structure and Research Objectives



In WP5 we explore consumer preferences and attitudes towards participation in the demand response scheme developed in WP 2 and 3. We broadly review and test different psychological theories that propose a wide range of insights into how to influence consumer decision making regarding participation in demand response programs. Based on our findings, we develop implications for demand response contract design, incentive schemes, business model design, and energy policy. Our WP is divided into three tasks:

- Task 1 - completed: Behavioral experiments – focus end consumer
- **Task 2 – current task: Design phase – focus large business consumer**
- Task 3 – following task: Field experiments – focus implementation

### Exploring Building Managers' Preferences



While there is agreement that demand response can supply the increasing need for flexibility in national power grids, we know little of how thermal loads of large buildings as one of the most interesting flexibility resource can be exploited. Based on a series of semi-structured interviews in Switzerland and Germany, we track decision making processes regarding energy management in large commercial buildings. Qualitative content analysis reveals three main stakeholder groups whose claims are influencing decision making and organizational behavior: the owners' claim for cost effectiveness, the occupants' claim for comfort and optimal using conditions, and society's claim for environmentally and socially sound operations. Knowledge of how conflicts between those claims are balanced is comprised in heuristics - simple, rule-based strategies rooted in past experiences and dependent on the specific decision environment. The implementation of demand response touches all three conflicts. In order to overcome these conflicts, business models need to match existing heuristics' portfolios. We derive three heuristic-based business models that will prove effective in guiding large buildings to take over an active demand response behavior.

### Three generic business models for HeatReserves

	→ The profit-oriented business model...	The responsibility-driven business model...	The user-centric business model...
<b>SELECTING</b>	<b>Customer identification</b> ...shall address building management service companies in charge of large office buildings.	...shall address companies with high publicity and strong voluntary ecological efforts.	...shall address public organizations and private companies in own buildings or with long-term rental agreements.
	<b>Customer engagement</b> ...shall offer an competitive advantage over other service companies.	...shall improve reputation.	...shall provide optimal using conditions at lower costs.
	<b>Value chain linkages</b> ...has to conform to existing building infrastructure. ...must not demand active participation of occupants and owners. ...shall exploit the flexibility of standardized comfort ranges for DR.	...shall lower the energy consumption's negative environmental impact. ...may slightly constrain usage and comfort while carefully informing occupants and users. ...shall conduce to sustainability marketing strategies.	...shall customize solutions for long-term business relationships. ...shall identify and exploit slack resources for DR. ...shall be integrated in energy efficiency strategies.
	<b>Monetization</b> ...shall enable companies to offer similar service for lower prices.	...shall guarantee long-term payback of investments in necessary building infrastructure.	...shall reduce net energy costs.