

# ADDRESSING ENERGY TRANSITION GAPS IN CLIMATE AND ENERGY MODEL REGIONS OF AUSTRIA THROUGH POLICY CO-DESIGN

Commitment to an 80-95% greenhouse gas emission reduction until 2050 in Austria will require not only **significant contributions from both public and private resources** but also **widespread societal changes**. Conventional climate and energy policy approaches are seen as incremental, marginal and thus inadequate for tackling the challenges of decarbonizing. It requires the broadest **involvement of policy-makers, citizens and private and public enterprises**, and their willingness to **invest in, and to embrace, low-carbon technology and lifestyle options**.



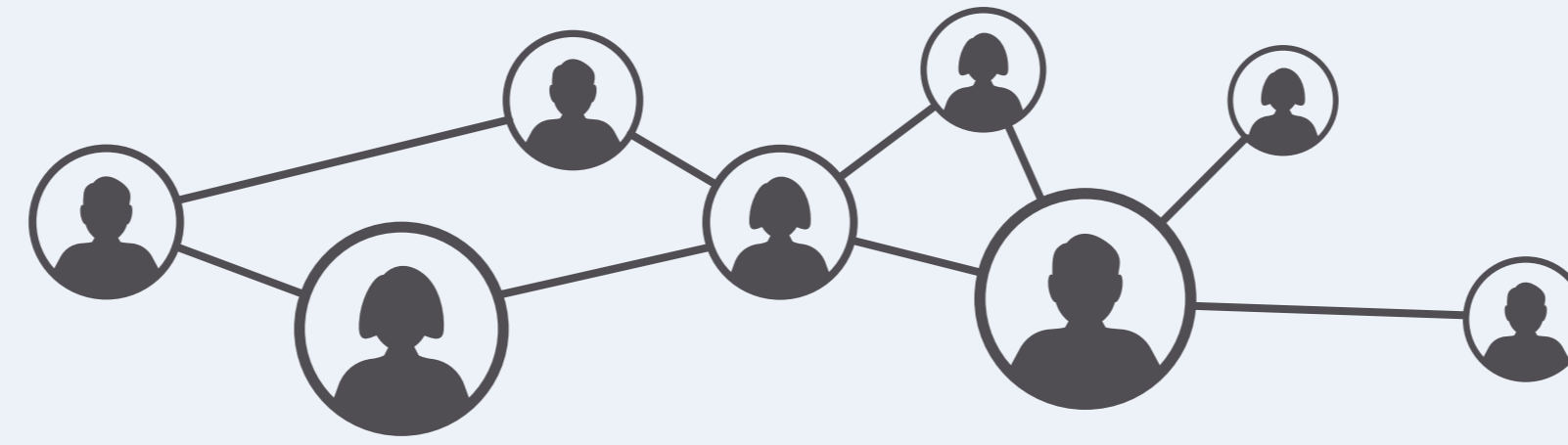
## WP1 GOVERNANCE LANDSCAPE AND HETEROGENEOUS MOTIVATION

### Research Questions

How are current institutions and policies (targets and instruments) in the CEM regions viewed - as contributing to or distracting from the energy transition?

What policies and instruments, existing and potential, are viewed as motivational?

### Methods



INSTITUTIONAL AND STAKEHOLDER MAPPING



KEY INFORMANT SEMI-STRUCTURED INTERVIEWS

## WP2 STRATEGIC CONSIDERATIONS FOR ENERGY TRANSITION AS A COLLECTIVE ACTION PROBLEM

### Research Questions

What are the perceived benefits and costs of the different actor groups (and worldviews groups)?

How do households and businesses allocate time/money and how do existing policies affect the heterogeneous payoff functions?

How can participation and collaboration be enhanced?

### Methods

#### POLICY EXERCISE

Policy exercises combine group scenario building, role-playing, and game-like mechanisms that:

- enable participants to **observe a number of cause-effect relations** on a micro-scale and to **identify corresponding processes occurring in the real world**
- help **display misconceptions, trigger dialogue and experimentation**, enhancing the process of building a **common language and collaborating** towards a common goal.

#### GAME-THEORETIC MODEL

Stylizes the interdependent decision problems of actors groups. Each actor optimizes his/her individual payoff function - which reflects **expected benefits and costs** as viewed from the **separate world views** - to determine the optimal level of own contribution to the **municipal low-carbon strategy**.

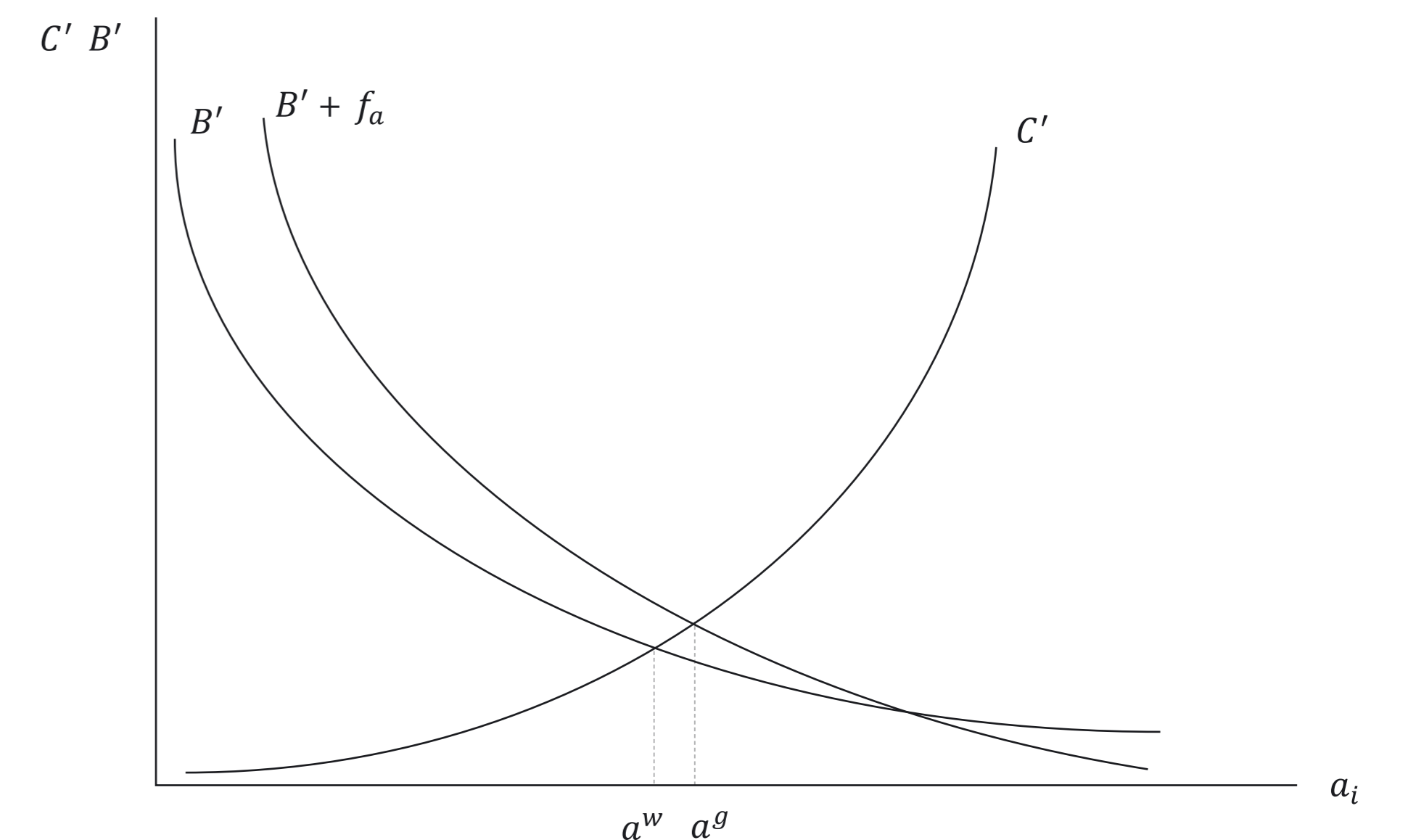


Figure Caption: The individually optimal abatement levels for the group with green preferences ( $a^g$ ) and for the group without such preferences ( $a^w$ )  
Note/Explanation: The figure shows marginal benefits ( $B'$ ) and marginal costs of abatement ( $C'$ ). The group with green preferences obtains a positive self-image ( $f_a$ ) by moving towards the morally ideal abatement level.

## WP3 USER-EXPERIENCE AND DESIGN CONSIDERATIONS

### Research Questions

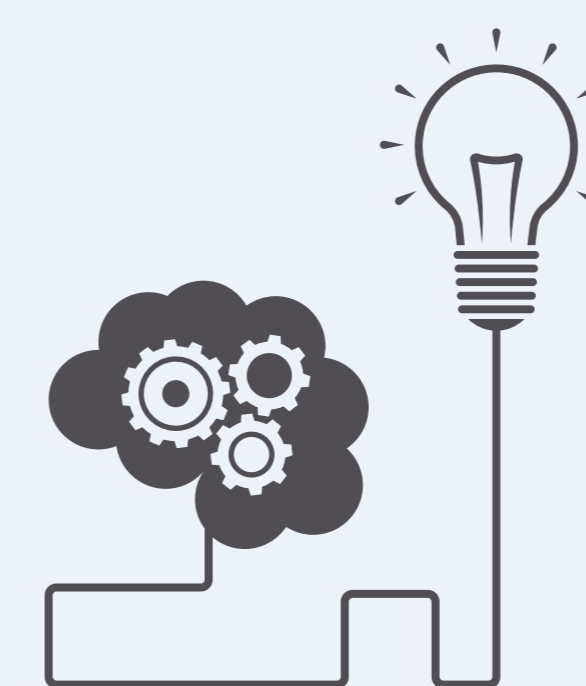
What specific design of information campaigns and implementation instruments will motivate the stakeholders?

How can a portfolio of implementation instruments be co-designed by the relevant stakeholders holding sometimes conflicting objectives and world views?

### Methods

#### DESIGN-THINKING PROCESS

Series of design-thinking workshops that will **explore locally appropriate and innovative solutions**. The workshops will involve **iterative processes of 'empathizing,' 'defining,' 'ideating,' 'prototyping' and 'testing'**.



#### FOLLOW-UP INTERVIEWS

Follow-up interviews will be carried out to **gauge progress on locally designed solutions**. We will evaluate **attitudinal and behavioral changes** that have occurred as a result of the design-thinking processes.

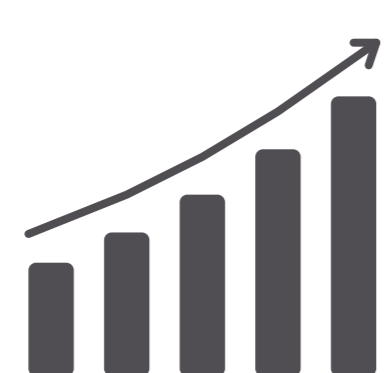


## WP1: Results

### KEM FREISTADT



Difficult for municipalities to pay membership fee to KEM



Funding for projects must be sustainable and more efficient to encourage investment



Difficulties to engage stakeholders in the region



Contradicting laws and regulations



Refurbishment of public buildings, especially historic buildings

### KEM BADEN



Challenge in terms of mobility due to the large commuter rate



Subsidies are not attractive