

# Belief-updating experiment of perceived renewable energy trade-offs

## Step 1: Eliciting beliefs before treatment (prior beliefs)

- i. Respondents' **own trade-off evaluations**: First-order prior beliefs
- ii. Respondents' **expectation of others' trade-off evaluations**: Second-order prior beliefs
- iii. Respondents' **confidence** in stated prior first- and second-order beliefs

**Trade-offs evaluated:**

- **biodiversity** preservation vs. **emission** reduction
- **landscape** protection vs. **emissions** reduction

Random assignment with 50% probability

## Step 2: Experimental treatment and control groups

### Treatment group

- i. Experimental **treatment**: True **population-wide trade-off evaluations** from the SURE survey; actual second-order beliefs
- ii. Respondents' **own trade-off evaluations after the treatment**: First-order posterior beliefs

**Trade-offs evaluated:**

- **biodiversity** preservation vs. **emission** reduction
- **landscape** protection vs. **emissions** reduction

### Control group

- c) **No additional information**; repeated their own second-order beliefs to keep the information equally salient as in the treatment group

## Step 3: Eliciting support for energy technologies

- a) **Support or opposition** to renewable energy technologies
  - Alpine PV
  - Wind
  - New nuclear energy
  - Prolonged nuclear energy