

CEV406 Environmental Economics: Course Project Instruction

This is a group project (max # students = 4). You are expected to design/conduct a survey AND/OR an experiment and submit a report summarizing your findings based on your data analysis.

Objectives: Conduct a mini environmental economics research project to analyze the interaction between human behavior and environment. Design a “policy” to change people’s behavior to promote pro-environmental behavior.

Procedure:

Step 1. Set up your own research question involving **changing human behavior** and **solutions for one of environmental problems**, such as climate change, air pollution, water pollution, plastic pollution, waste problems, recycling, energy efficiency, ...

Step 2. Select your methodology.

Option 1: Survey Only

If you select this option, you will design an extensive survey to analyze people’s decision mechanisms (knowledge, social norms, habit, obstacles, intentions, actions etc, together with individual characteristics) to change their behavior to resolve environmental problem.

Option 2: Experiment + mini Survey

If you select this option, you will conduct an experiment and collect data by observing people’s behavioral change. Conduct a mini-survey to reveal the reasons behind your observations.

Step 3 (Option 1). Design and conduct a survey to reveal people’s existing knowledge/beliefs/behavior, influence of social norms, role of habit/change in habit, existing/potential obstacles, intentions for changes, actual actions and individual characteristics. (Collect at least 100 observations. Face-to-face or online. Pay attention to the sampling bias if you conduct the survey online.)

Step 3 (Option 2). Carefully design an experiment to observe people’s actual behavioral change. Design and conduct a follow-up survey.

NOTE: Before conducting a survey and/or an experiment, send questions/experimental design to the instructor for approval.

Step 4. Data Analysis

Conduct necessary data analysis. For Option 1, estimate at least one regression model to determine the factors affecting individual decisions and actions, in addition to basic data summary. For Option 2, use ANOVA and/or necessary method to analyze the impact of your experiment.

Step 5. Write a project report as a group and submit by e-mail. (Due: January 10th Friday at 23:59).

Example Topics:

- (a) Promoting individual energy saving behavior (on campus, household, companies...)
- (b) Promoting individuals' recycling behavior (on campus, household, companies, organizations)
- (c) Promoting individual actions to reduce CO₂.
- (d) Promoting individual zero waste actions. (organic waste, plastic waste, E-waste... reduce, reuse, reduce actions...)
- (e) Promoting electric vehicle. (Identification of obstacles (infrastructure, regulations...), demand and supply)