

# Public Deliberation on Climate Transitions & Well-Being

## Climate Action & Social Resilience

Riya Anand,<sup>†</sup> Steven Kimbrough

Department of Operations, Information, & Decisions;  
Wharton School of Business, University of Pennsylvania

<sup>†</sup>corresponding author: College of Arts & Sciences, COL 26, riyaana@sas.upenn.edu



### Problem Statement

- Humanity is in the process of making major transitions as a result of the climate emergency
- Some of these “green transitions” include<sup>1</sup>:
  - Climate change mitigation (reduction of GHG emissions)
  - Climate change adaption (protection and resilience against physical effects of climate change)
  - Sustainable use and protection of water and marine resources
  - Transition to a circular economy
  - Pollution prevention and control
  - Protection and restoration of biodiversity and ecosystems
- These transitions must be considered as a bundle in order to account for their positive and negative consequences on each other
- Extensive public discussion of these transition policies are needed in order to facilitate public and administrative decisions especially at the state and local level of government
- This research serves to create a portfolio of 50 types of municipal policy, specifically in terms of their funding, implementation, and management at a given time and place, for a given planning cycle

### Solution Approach

#### Solution Approach

- We envision and propose a program of **climate action deliberation** sessions with members of the public.
- Sessions are to be focused on climate transition policies and their effects on well-being

#### Principal Reference Methodologies

- **Focus:** democratic deliberation, participatory democracy, and collective problem solving<sup>2,3,4</sup>
- Work creates a space allowing for productive public **deliberation** to require structured opportunities to learn about, reflect on, and deliberate over policy alternatives in a **collective** manner
- Instead of directly inquiring about preferences among policies, this research serves to probe participants as to their views on how various policies affect the well-being of themselves and others



SOURCE: Author, based on information from Organisation for Economic Co-operation and Development (OECD), *Catching the Deliberative Wave: Innovative Citizen Participation and New Democratic Institutions* (Paris: OECD Publishing, 2020).

#### Deliberation Session Structure

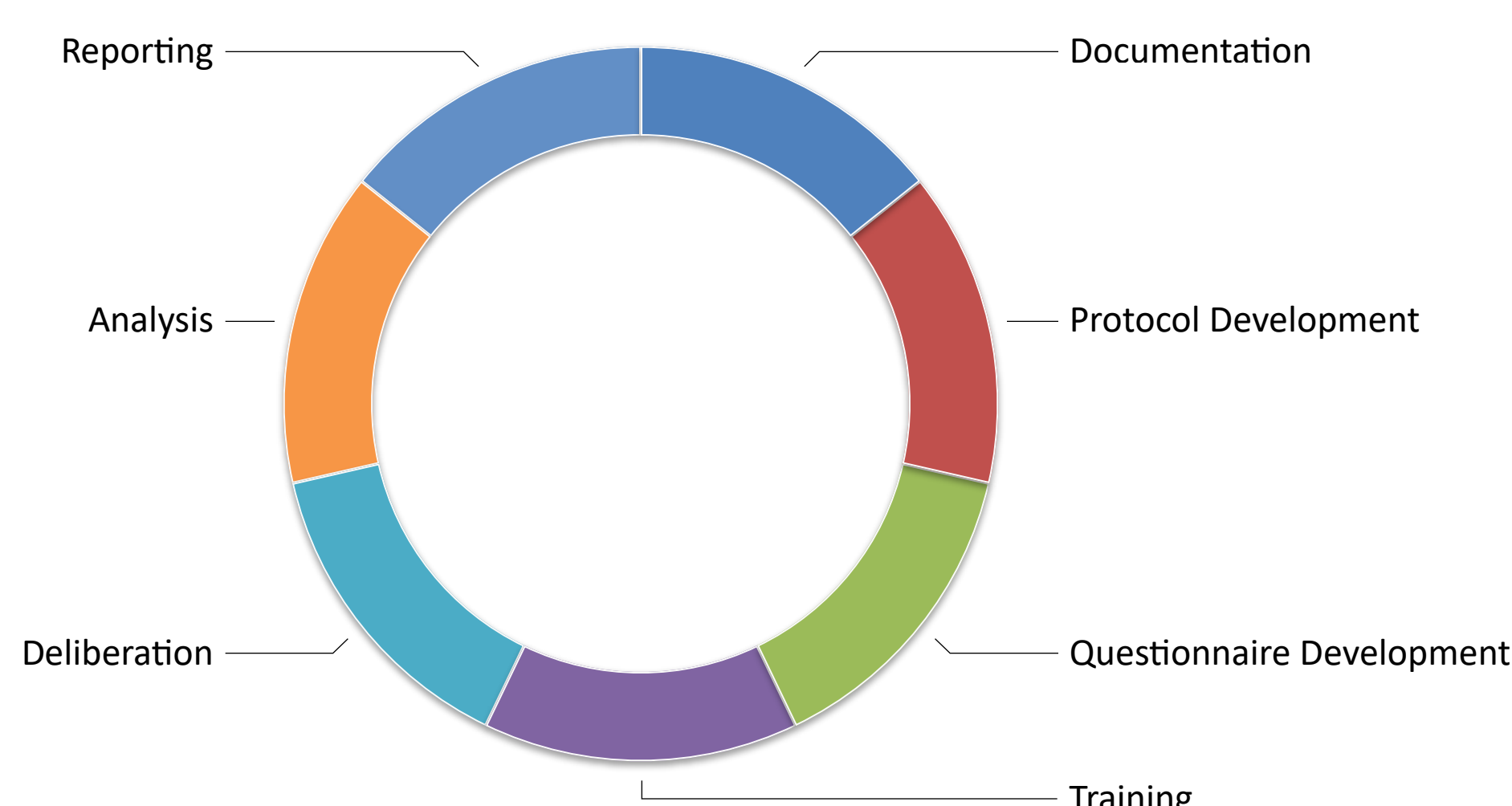
- The structure of deliberation sessions will draw from focus group methods<sup>5</sup>:

**I Education**  
In order to engage in a meaningful and nuanced discussion about climate transitions, moderators will explain concepts and issues that may be unfamiliar to participants.

**II Deliberation**  
Moderators will then facilitate a discussion to elicit participants' views on climate policy alternatives and their effects on well-being

**III Polling**  
Each participant will complete a questionnaire that asks them to make a series of choices among policy alternatives. And will also be asked to explain their choices in relation to their views

#### Core Workflow



### Key Deliverables

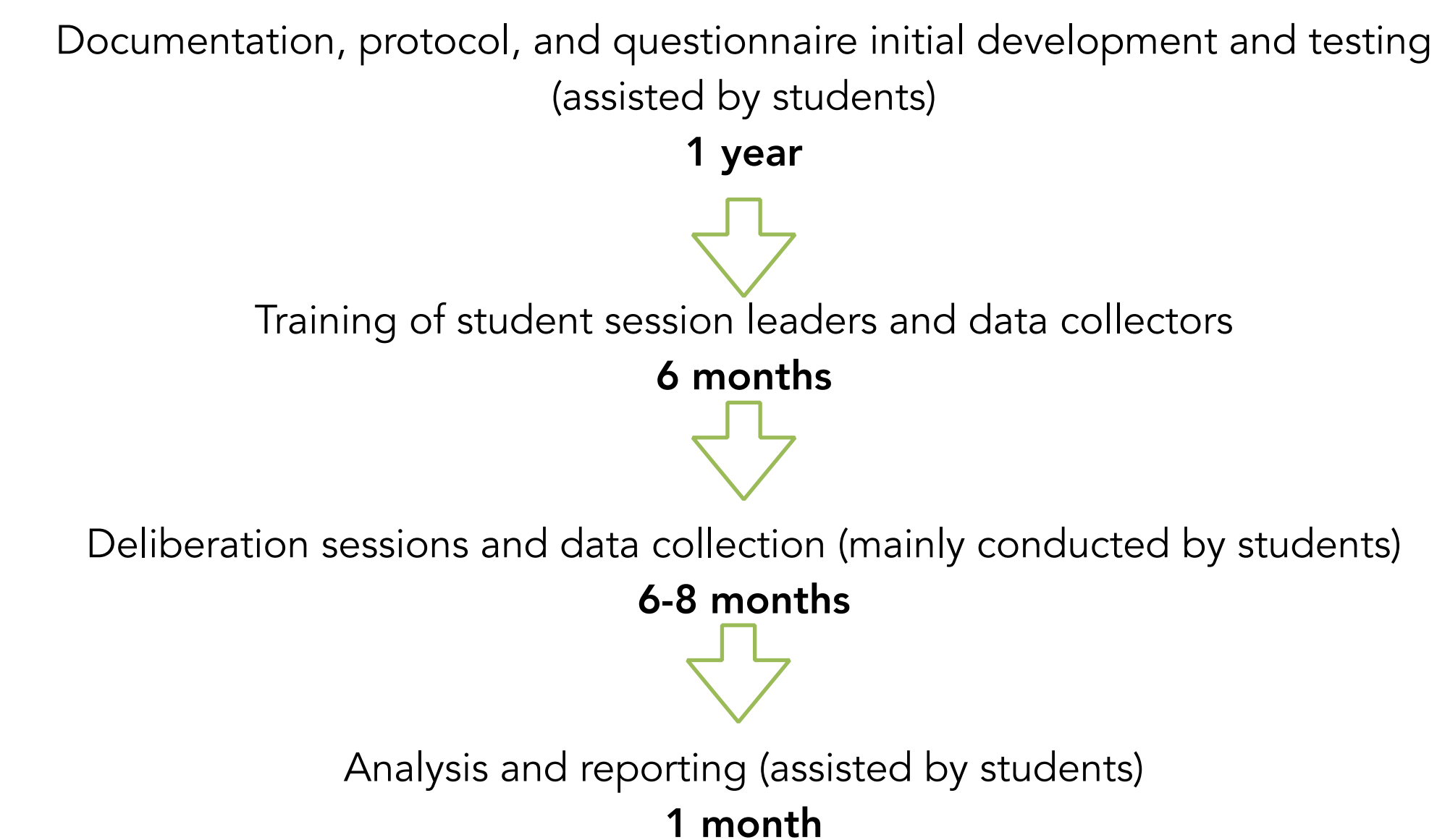
#### GOAL #1: Democratic Deliberation

- To foster and to learn better how to foster democratic deliberation regarding the green transitions

#### GOAL #2: Well-Being

- To map, across many people, judged associations between green transition policies and indicators of well-being
- To create a starting point for the indicators are the capabilities identified in the capabilities approach (to assessing well-being) literature including:
  - (1) Final report with full supporting documentation and materials
  - (2) Presentation of results to interested parties, including civic organizations and governmental decision makers on climate policy

#### Timeline



#### Metrics for Success

- Number of deliberation/discussion sessions held with members of the public.
- Number of public participants
- Quality of the data collected
- Engagement by participants in the discussions.

### Capabilities & Well-Being

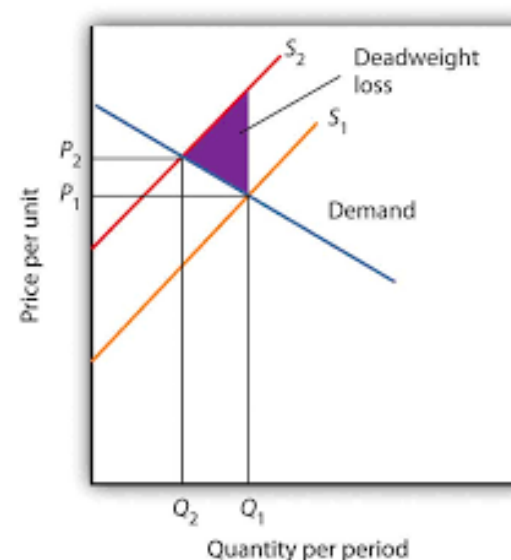
- This study is about assessing policies (or equivalent) **motivated by climate change**
- Effects on **well-being** and **quality of life** are being assessed with an emphasis on capturing the thought process, especially creative thought process of those who are reflecting

#### Important Terminology

- **Adaptation:** “the process of adjustment to actual or expected climate and its effects”
- **Mitigation:** “a human intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs)”
- **Targets of Adaptation:** measures to deal with extreme heat, storms (wind, flooding, rain), sea level rise
- **Levers of Mitigation:** (a) Reducing energy use by efficiency and other ways of avoiding demand (e.g., walking, public transportation). (b) Switching away from end use burning of fossil fuel, mainly by electrification.

#### Co-Benefits

- Numerous climate-change related policies come hand in hand with **free-rider “market failure”**
  - An individual bears the cost, but the entirety of the public enjoys the benefits



#### Study Goals

This study looks to determine...

- I. The **co-benefits** of these policies
- II. **How** these co-benefits of these policies can **counter market failure**
- III. How the combination of these policies or use of co-benefits can be used to “create” some form of benefit to the individual that will overcome its cost

Through...

SCHOLARSHIP

INTERVIEWS

### Scholarship

#### Scholarship Overview

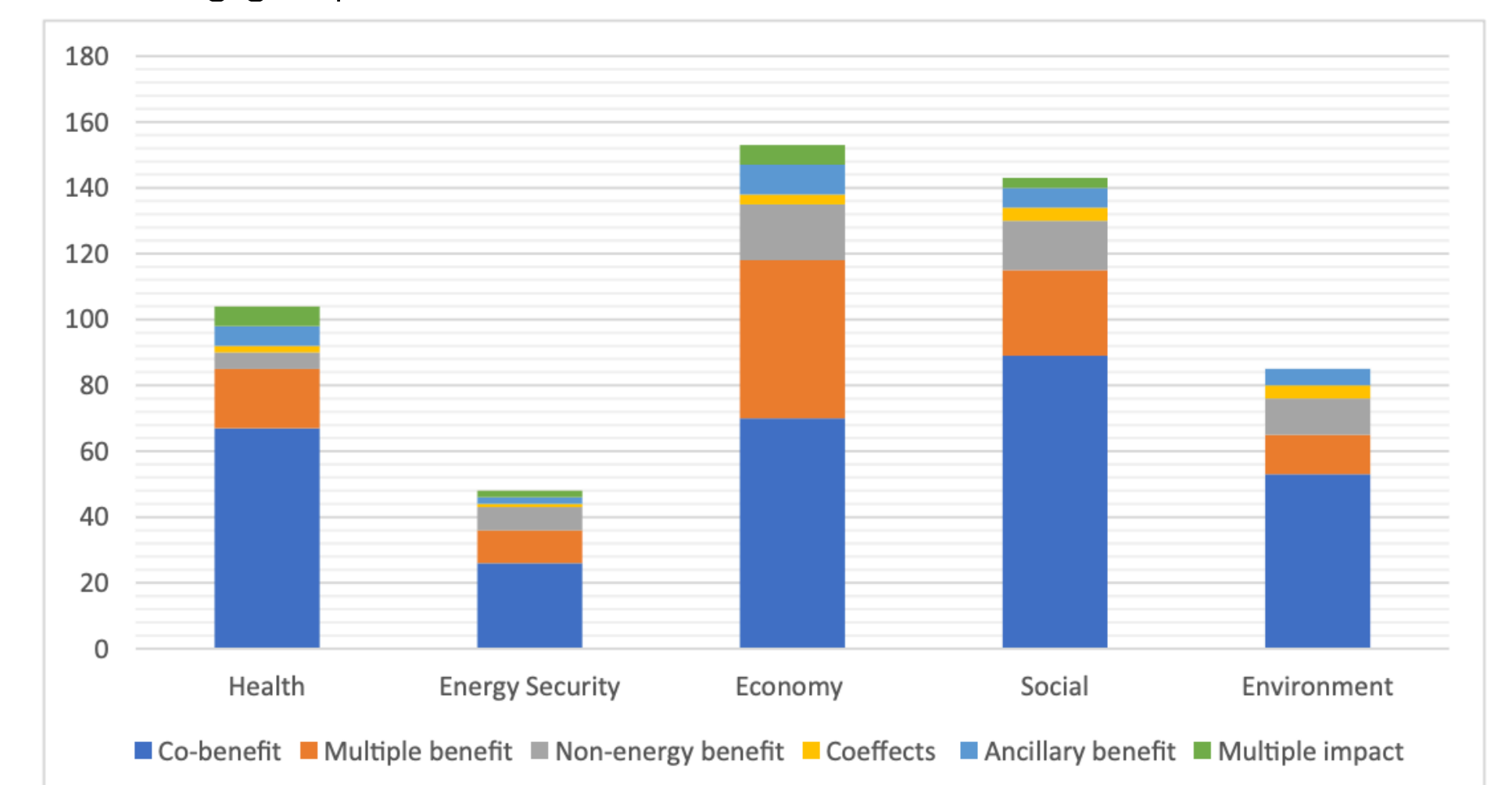
- Scholarship involves review of scholarly literature and academic articles who's information contributes to the goal of the study
- Various sources have already been reviewed to date and review will continue over the course of the study

#### Significant Scholarship Findings

*Co-Benefits of Energy Demand Reduction in Europe*<sup>6</sup>

“Co-benefits - the secondary benefits of climate change mitigation action - offer an opportunity to reframe energy reduction as financially advantageous and also address a wide range of other policy goals.”

- 86 co-benefits found across 53 papers could be categorized into the following groups:



Representation of the six co-benefit terms within the five co-benefit categories: Health, energy security, economy, social, and environment

- The authors found a **gap** in the levels of accurate, comparable quantitative analysis that was presently available amongst the categories
- Seeing a lack of standard, a **four step-plan** was proposed for improving the use of co-benefits, to improve climate change related policy:
  - I. Work on **standardization** of co-benefit terms to allow for a common knowledge base among researchers
  - II. Emphasis focus on **cross-disciplinary** co-benefit research to avoid information or research siloes
  - III. Increase levels of research on **primary quantification** of EDR co-benefits to establish functional methodologies and raise awareness
  - IV. Make a greater effort to **inform** policy-makers of these co-benefits

### Interviews

- Preliminary interviews are being conducted with the purpose of seeking to discover the pros and cons of the transition policies with respect to the well-being

#### Primary Findings

- Policy co-benefits have been derived from the interviews conducted to-date & these include:
  - Time
  - Material affordances
  - Risk reduction
  - Good living

#### Time

- Time is one of the biggest cost concerns when it comes to many transition policies
- Through discussion, it was identified that time has the potential to become a co-benefit rather than a cost
- Time was found to be a significant concern regarding the transition to electric vehicles
- Interviewees were drawn away from the idea of moving to an EV due to the time concerns related to charging the vehicle, especially in contexts where there is no a residential charger available

Interviewees would be more comfortable making the transition to an EV “if there was a nice coffee shop with wifi where one could work, there was a dry cleaner, there were other retail shops, perhaps a Wawa sort of place”

- In this context, the discussion allowed for the brainstorming of collaborative policies that could be implemented to counter the identified cost of time
- These collaborative policies increased appeal for the policies in the eyes of the interviewees

#### Material Affordances

- Policies such as composting can benefit from being implemented at a municipal level
- In areas where municipal composting is implemented, it brings the community an incentive to compost and to utilize a garden due to the fact that it makes this accessible

#### Risk Reduction

- Various policies including home electrification are often risky when implemented by themselves (e.g. full home electrification runs a large risk in the winter when heating is required)
- The identification of co-benefits or supplemental policies can allow for risk reduction and greater comfort in implementation

#### Good living

- Most policies promote good health from less exposure to air pollution to promotion of physical health through increase in walkability, etc.

#### Conclusion

- The green transition to sustainability is **necessary** primarily due to clear, extreme changes in weather patterns
- **Numerous** policies (80-100) will be needed to create the impact needed (e.g. composition, incentives of insulation, etc.)
  - **Which** policies are put into place and **how** they are implemented?
- As part of the discussion, we are trying to find and understand the **pros and cons** of policy **alternatives** especially in the context of people's lives

**Acknowledgements:** The first author would like to thank Professor Steven Kimbrough for giving me the knowledge and guidance needed to construct an academic research paper, poster, and presentation and for his time, help, and guidance through the entire research project. I would like to thank Ann Vernon-Grey for providing me the opportunity to participate in the Penn Undergraduate Research Mentorship (PURM) program and providing guidance throughout the summer. I would like to thank Rand Quinn and the rest of the Climate Decision Lab for helping me expand my ideas, answering my questions, providing a huge level of background information and expertise for this project.

#### References:

- [1] [https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities\\_en](https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en)
- [2] Briggs, X. d. S. (2008). *Democracy as Problem Solving: Civic Capacity in Communities Across the Globe*. MIT Press.
- [3] Fishkin, J. S. (2018). *Democracy When the People Are Thinking: Revitalizing Our Politics Through Public Deliberation*. Oxford University Press
- [4] Fung, A. (2001). Accountable autonomy: Toward empowered deliberation in Chicago schools and policing. *Politics & Society*, 29(1), 73-103
- [5] Morgan, D. (1998). *The Focus Group Guidebook*. Thousand Oaks, CA: SAGE Publications, Inc.
- [6] Finn, O., & Brockway, P. E. (2023). Much broader than health: Surveying the diverse co-benefits of energy demand reduction in Europe. *Energy Research & Social Science*, 95, 102890. <https://doi.org/10.1016/j.erss.2022.102890>