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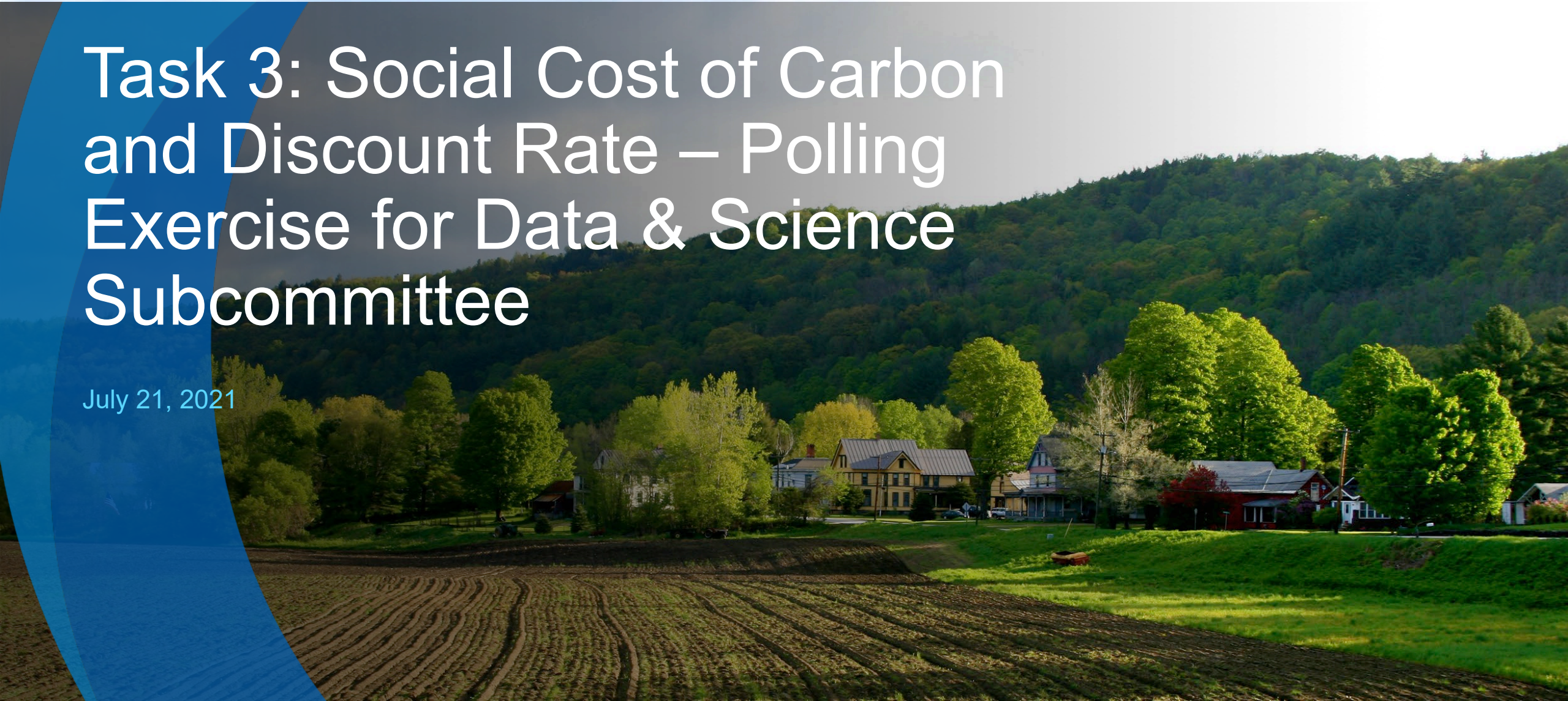
Task 3: Social Cost of Carbon and Discount Rate – Polling Exercise for Data & Science Subcommittee

July 21, 2021



Agenda

Objectives for Today

Background

Polling Exercise

Wrap Up and Next Steps

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Objectives

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Social Cost of Carbon & Discount Rate

- Economic Analysis of the Costs and Benefits of greenhouse gas emissions and abatement to Inform Climate Action Plan
  - Adopted by the Federal Government starting in 2007 and States for Policy and Climate Action Planning

- A discount rate is a method for economic analysis to account for impacts that occur in the future
  - The selection of discount rate has a significant impacts
    - “Social Discount Rate” – puts a higher value on future impacts
    - “Private Discount Rate” – puts higher value on near term impacts

- Today we will present some statements and positions reflecting these perspectives and ask for your feedback in a poll.

- Then we will provide a set of values (from recent New York State DEC assessment) representing a range of discount rates (at the social end of the spectrum) and ask for your feedback via the poll.

Social Cost of Carbon & Discount Rate

- Results from today's poll will be anonymous and will be reflected in our Team's Task 3 Social Cost of Carbon report.
- We will take feedback or comments on the poll and structure via email after today's session.
- We anticipate polling the full Climate Council with this (or revised on feedback) poll to inform the September 15th deliverables and economic analyses for the Climate Action Plan.
- For today, please keep questions and comments to clarifying to help us complete the poll as a group. We will welcome follow on questions and comments after today's session.

Background

Methods for Social Cost of Carbon Estimation

Damage Based Estimates

- Global Damages – economic, health, and environmental impacts
- Based on Integrated Assessment Models (IAMs) geophysical and economic models
- Include items such as value of human health/life impacts, also based on best estimates of feedback loops, climate and economy interactions.
- Multiple runs and models used to estimate distribution of values. Accounting for range of inputs on demographic, technical, representative concentration pathways, and other variables.
- Appropriate for cross sector analyses like the Climate Action Plan
- Mean values from range of model runs –
    - Applied discount rate has large impact on values

Marginal Abatement Cost Methods

- Estimate of cost of abatement for last measure needed to meet targets
- Technology, sector and geography specific
- Also sensitive to discount rate

Today's Poll Based on Damage Based Estimates

- Results on discount rates can also be applied to marginal abatement cost estimates

Polling Exercise

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Process for Today's Polling

- Link to Poll
- Please complete during the session
- Two Stages:
  1. Questions 1-6: Feedback on statements representing varying perspectives on value of future impacts.
  2. Question 7: Preferences based on monetary values of cost of carbon dioxide from New York Department of Environmental Conservation and Resources for the Future Research
     - Mean values from multiple runs of 3 IAM's
     - Impacts through 2300
     - Social discount rate of 0% to 3%
     - We are only considering the CO2 results, discount preferences would apply to other gases

Next Steps

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Feedback and Use of Results

- Please email comments or follow on questions on the survey and today's process to Dhill@energyfuturesgroup.com and Ebourguet@energyfuturesgroup.com

- Results from today's Poll will be included in the Task 3 Social Cost of Carbon report
- The Climate Council will be asked to take the same, or revised poll in August to inform economic analysis of the Climate Action Plan
- Thank you for your participation and contributions to this work!

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