

# Act on Climate Sharing Session

Technical questions about zoom: email  
[Matthew.Moretta.CTR@energy.ri.gov](mailto:Matthew.Moretta.CTR@energy.ri.gov)

We will get started shortly!



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**Quick poll before we get started!**

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# Act on Climate

Sharing Session #7  
July 13-14, 2022

RIEC<sup>4</sup>



# Act on Climate Mandates

**2022 Update:** By 12-31-2022, the EC4 shall submit an update to the 2016 Greenhouse Gas Emissions Reduction Plan

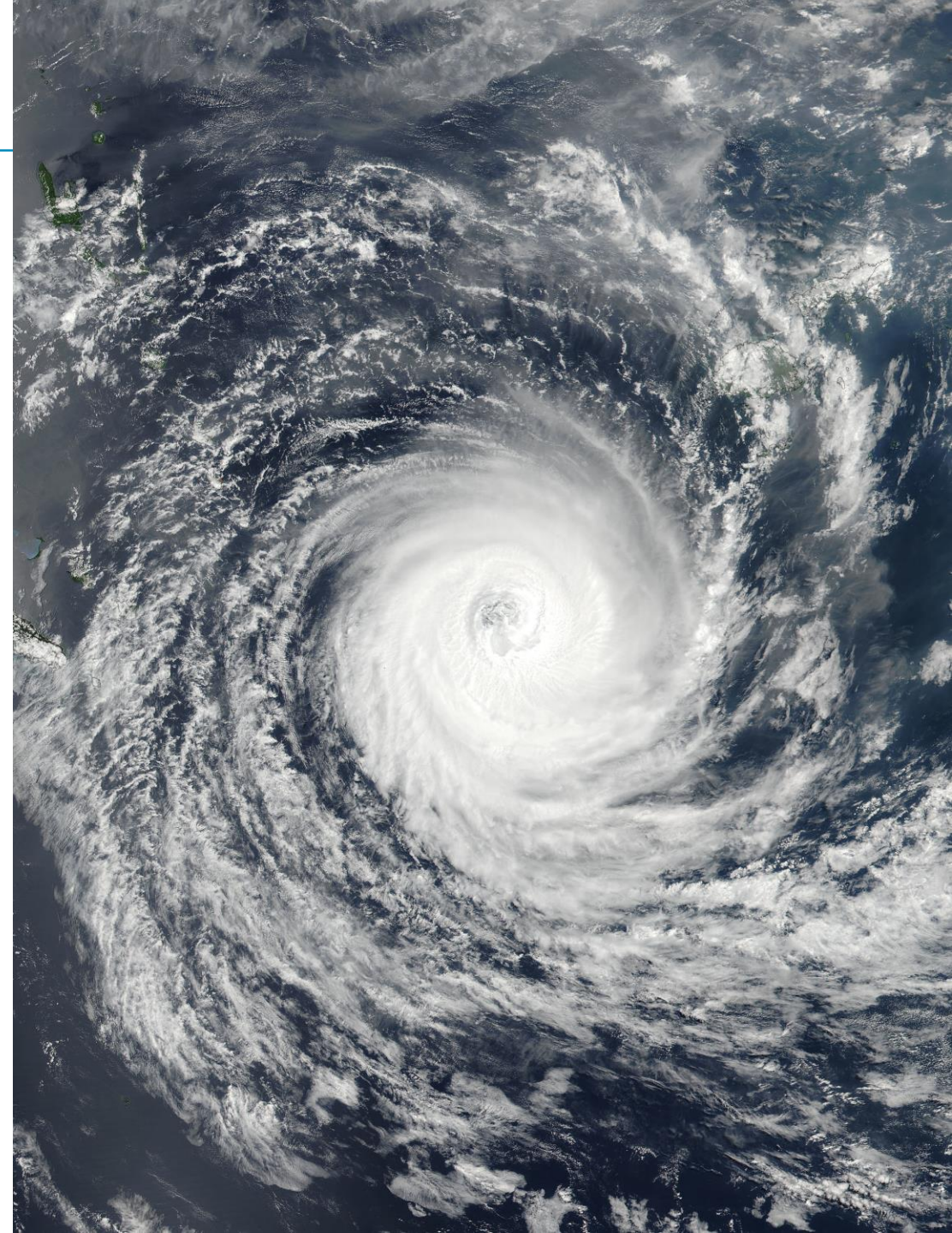
- For more info on the scope of the 2022 Update, visit [www.climatechange.ri.gov/aoc/](http://www.climatechange.ri.gov/aoc/)
- Today's discussion informs priority actions we take over the next few years to set Rhode Island on a path to meet our 2030 emissions reduction mandate

The 2021 Act on Climate establishes economy-wide emissions reduction mandates of:

- 10% below 1990 levels by 2020
- **45% below 1990 levels by 2030 ← Today's focus**
- 80% below 1990 levels by 2040
- Net-zero emissions by 2050

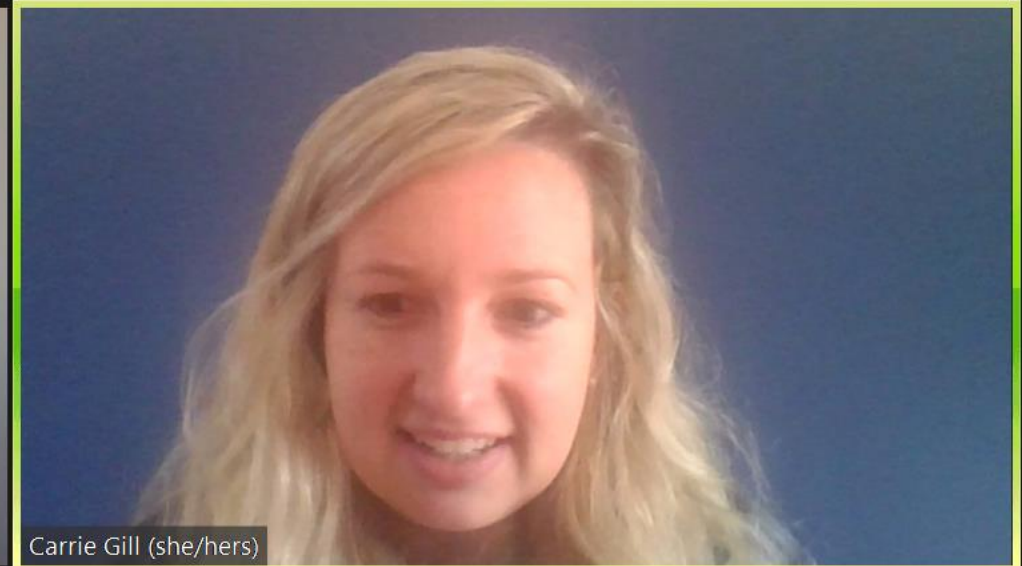
## Facilitated Discussion

1. What do we need to do to decrease emissions resulting from how we use and develop land?
2. What do we need to do to increase the amount of carbon our land can sequester?
3. Other considerations?





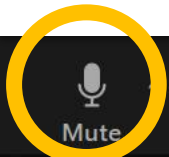
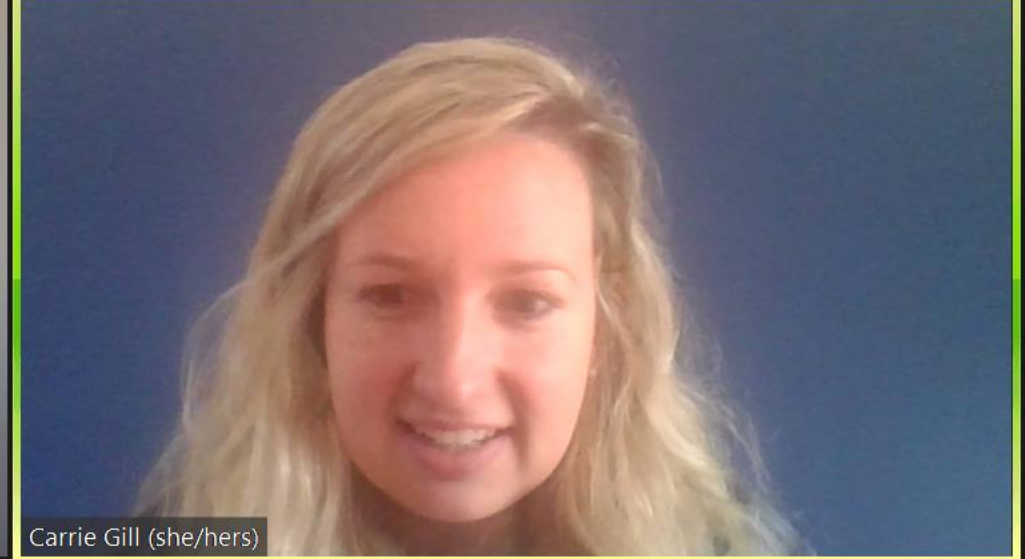
# How to Participate



Leave

# How to Participate

- **Unmute** yourself using the icon at the bottom right of the screen and speak your question or comment.



Stop Video

Participants 4

Chat

Share Screen

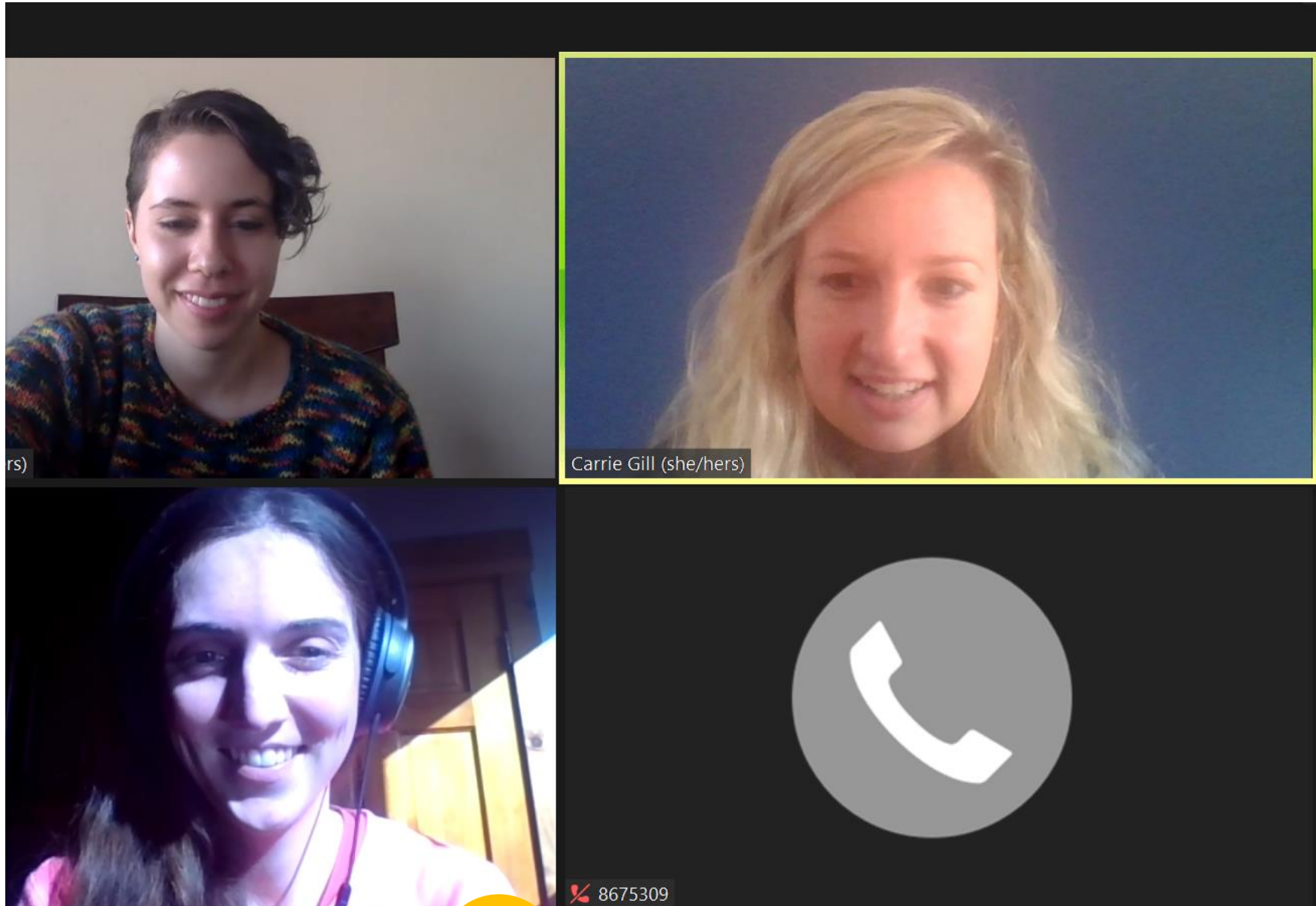
Record

Reactions

Leave

# How to Participate

- Open the **chat box** by clicking on the icon at the bottom of your screen.
- Type your question or comment into chat.
- Type that you would like to speak in the chat.
- We will either read your comment or call on you to speak.





# How to Participate

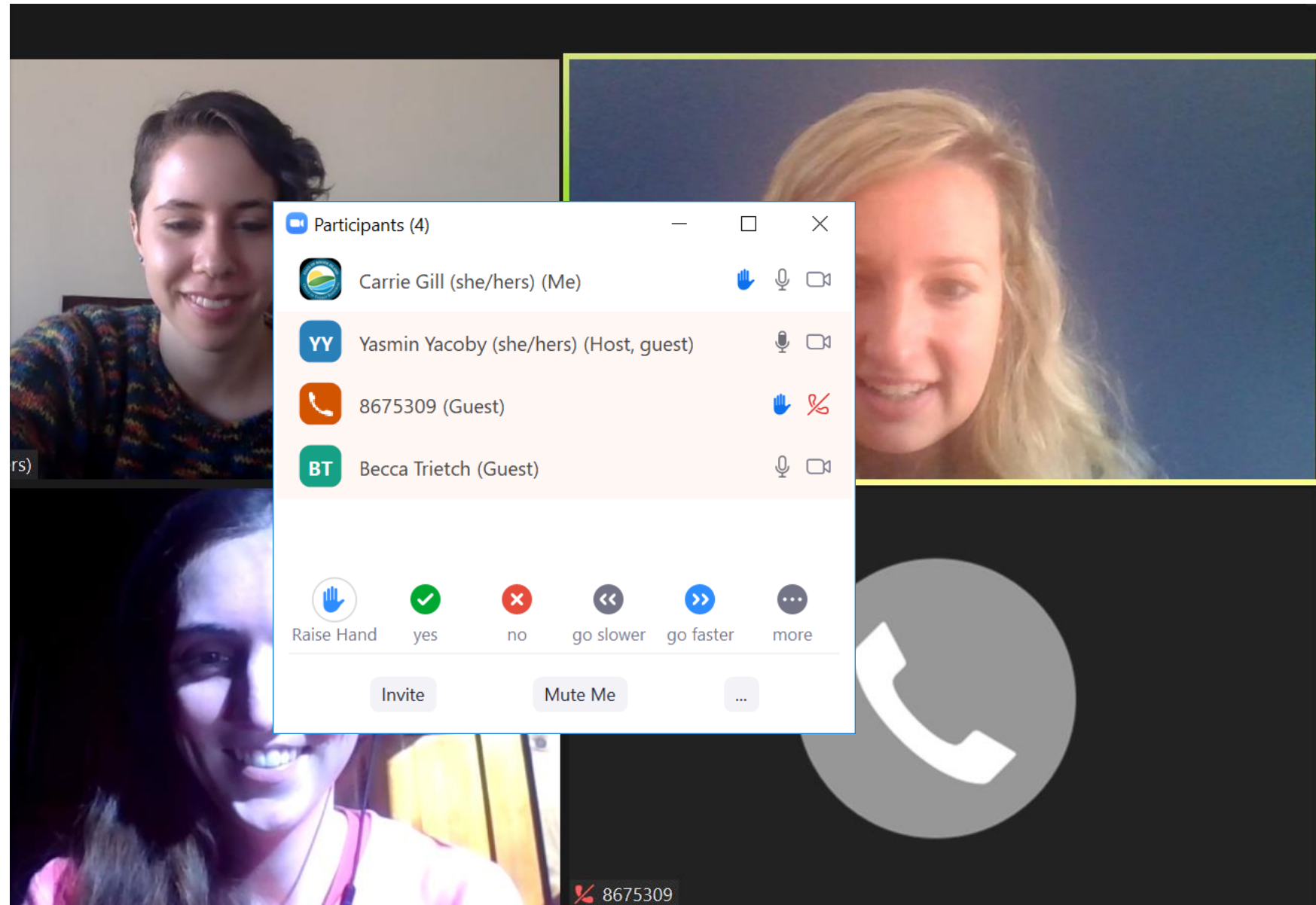
- Click the participants icon at the bottom of your screen then click the **raise hand** icon at the bottom left of the pop-up window to raise your hand.
- We will call on you to speak.





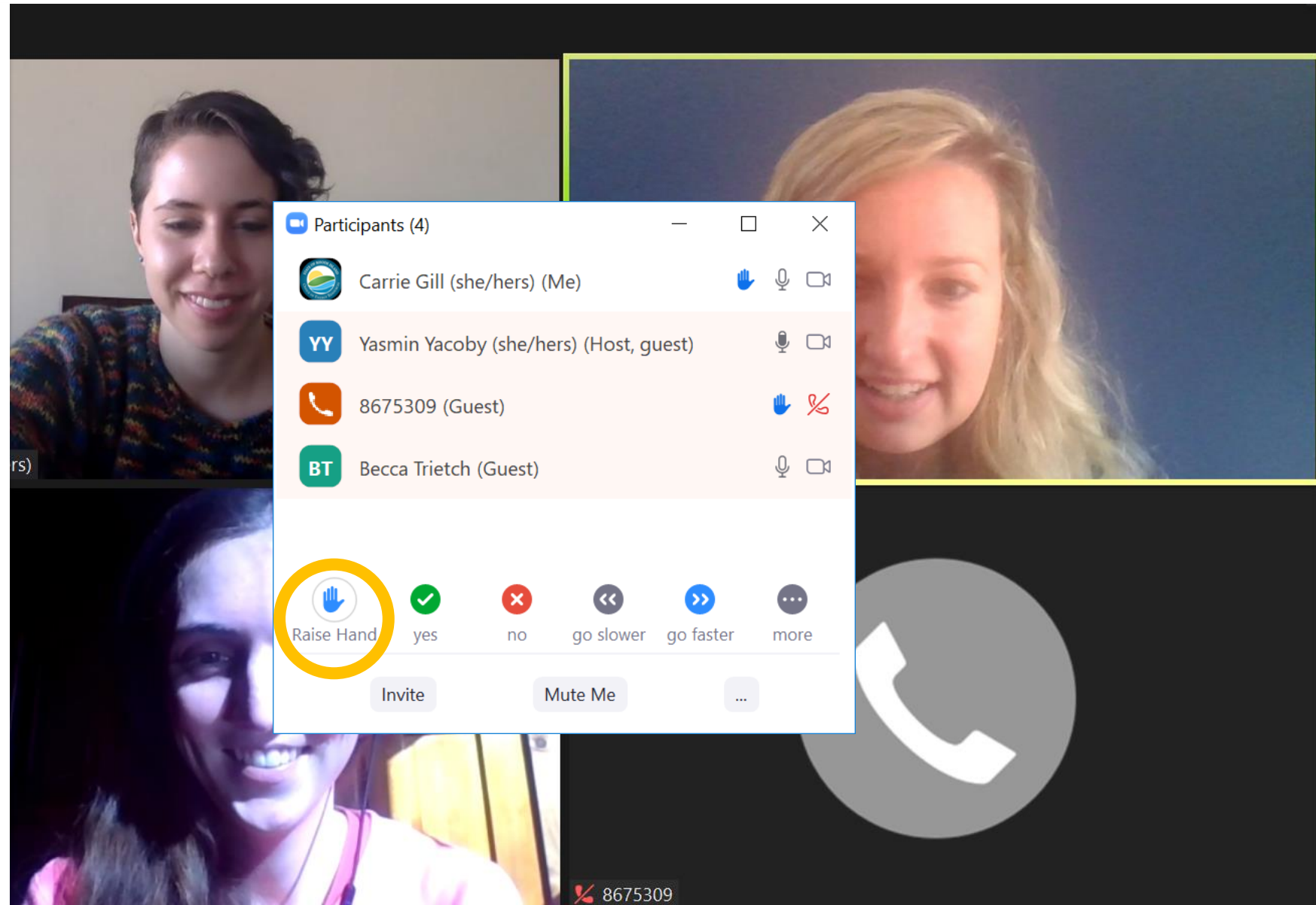
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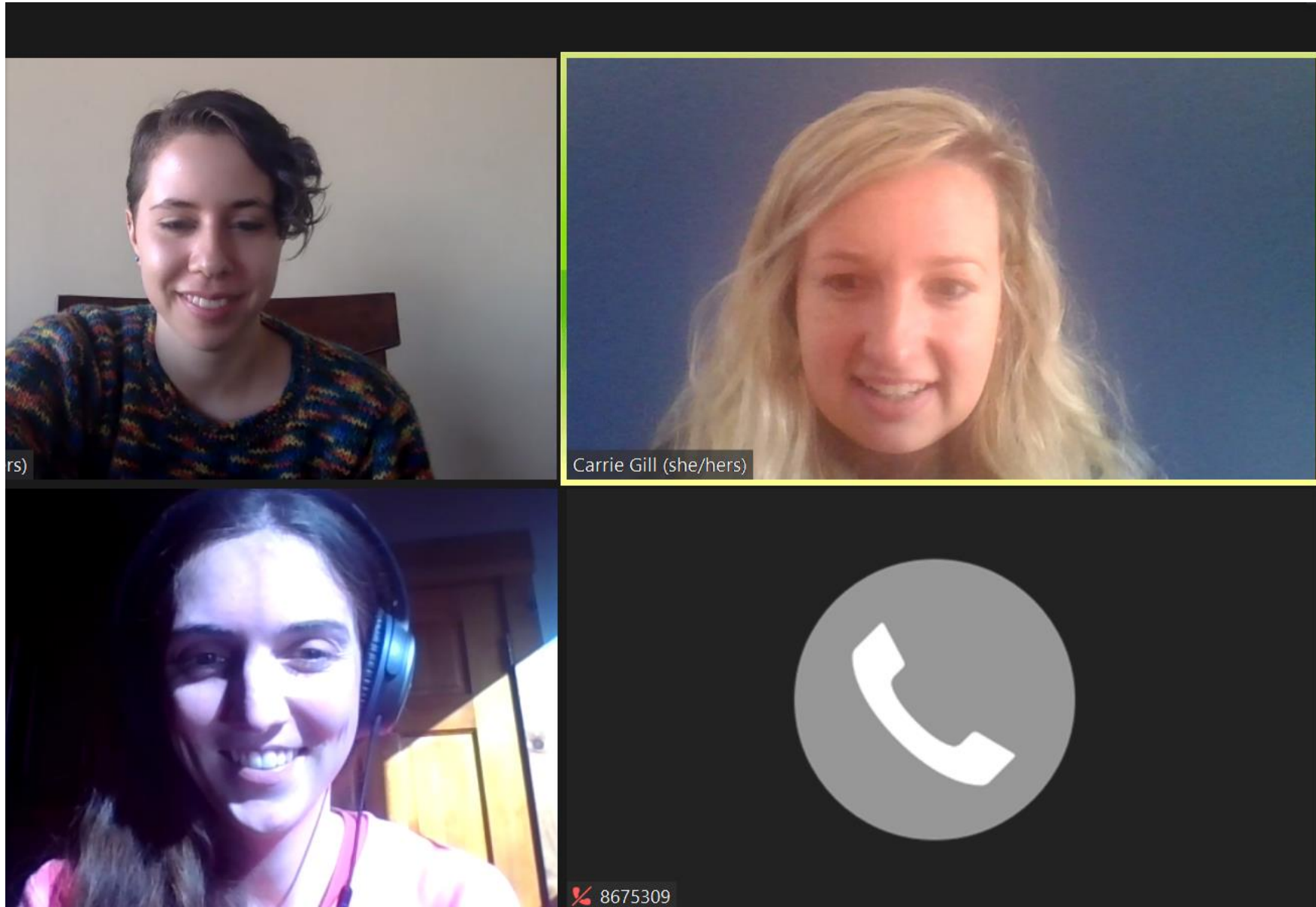




# How to Participate

## If you're calling in on the phone:

- Unmute yourself from your phone options and speak your question or comment.
- **Hit \*6 to unmute** yourself and speak your question or comment.
- **Hit \*9 to raise hand** and we will call on you to speak.



# How to Participate

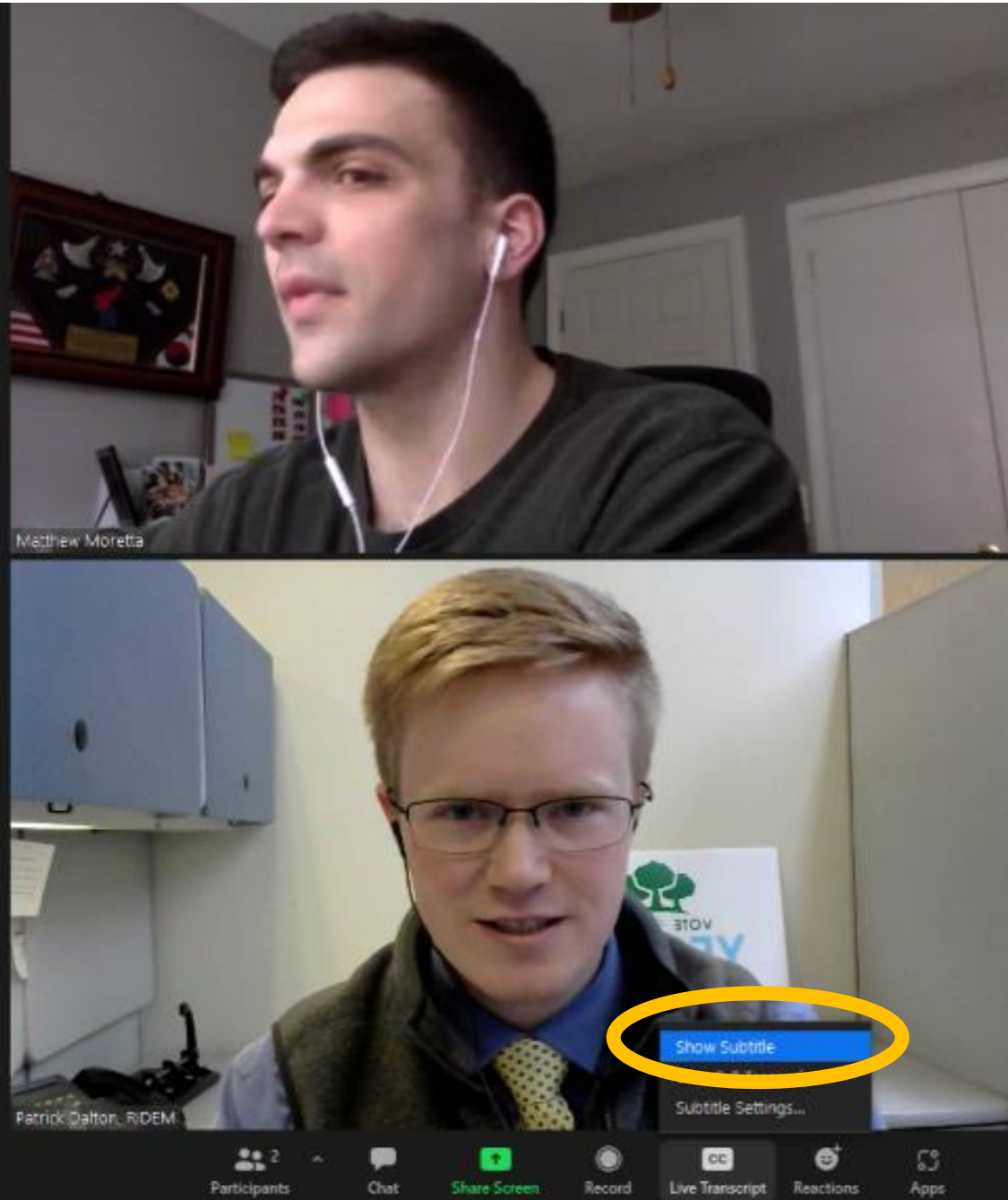
- To see live captioning, click the '**Live Transcript**' icon and then select 'Show Subtitle'
- You can also change the subtitle settings from this menu.





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# How to Participate

- Please direct technical zoom **questions** to Matthew.Moretta. CTR@energy.ri.gov





# Housekeeping and Logistics



- This meeting is being **recorded** so we can be sure to capture your comments.
- We do not intend to post this recording publicly.



- Please **mute** your mic when not speaking.
- OER will monitor noise levels and mute folks who may have accidentally unmuted themselves.



- **Make space and take space**
- Each person will be allotted a maximum of 3 minutes to speak initially to ensure we are allowing everyone an opportunity to be heard



- We recognize there may be inherent **power dynamics** in this conversation.
- We **encourage** everyone to voice both support and concerns, and invite you to challenge our assumptions and our thinking.



- Thank you in advance for your good intentioned comments and questions and for your **respect** toward everyone present.
- Please refrain from interrupting or speaking over others – this will ensure we hear and understand all speakers.

# Background Information

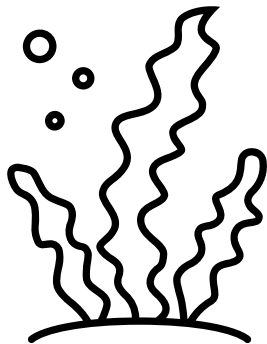
## Carbon Sequestration and Emissions from Rhode Island's Land Use

1. Land use impacts on carbon sequestration
2. Efforts since 2016
3. Recommendations from recent key studies

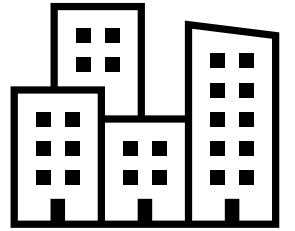
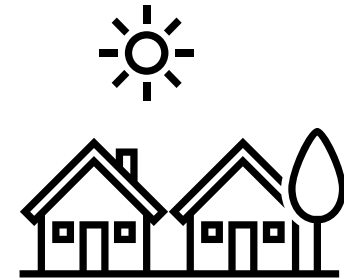
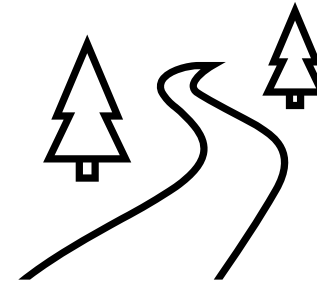


# Land Use Impacts Carbon Sequestration

Plants on land and in our oceans absorb or “sequester” the greenhouse gas carbon dioxide, acting as a “sink” for emissions...



...but removing natural elements of our land to develop the built environment can take away the land's ability to sequester carbon dioxide



# Estimating Carbon Sequestration from Land Use

RIDEM typically relies on US EPA's State Inventory Tool, but the Land Use, Land Use Change, and Forestry (LULUCF) default data has previously been inaccurate for RI

So, RIDEM contracted with experts at NESCAUM to apply the LEAP model to estimate LULUCF

NESCAUM used this model to estimate carbon sequestration from LULUCF in years 1990 and 2010

But NESCAUM's model is not replicable, so RIDEM chose to omit LULUCF between 2011-2018. RIDEM is working to reinstate LULUCF in future inventories





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## Carbon Sequestration increases when:

- **We preserve natural lands** (e.g., by preserving forests, not disturbing wetlands, and strategically replanting trees)
- **We use our lands more efficiently** (e.g., by developing walkable and bikeable neighborhoods, by switching to greener agricultural practices)

# LULUCF in the Context of Overall Emissions



Based on estimates for years 1990 and 2010:

Land use, land use change, and forestry (LULUCF) reduces RI's overall emissions

The magnitude of this net reduction is small (roughly 2% of gross emissions)

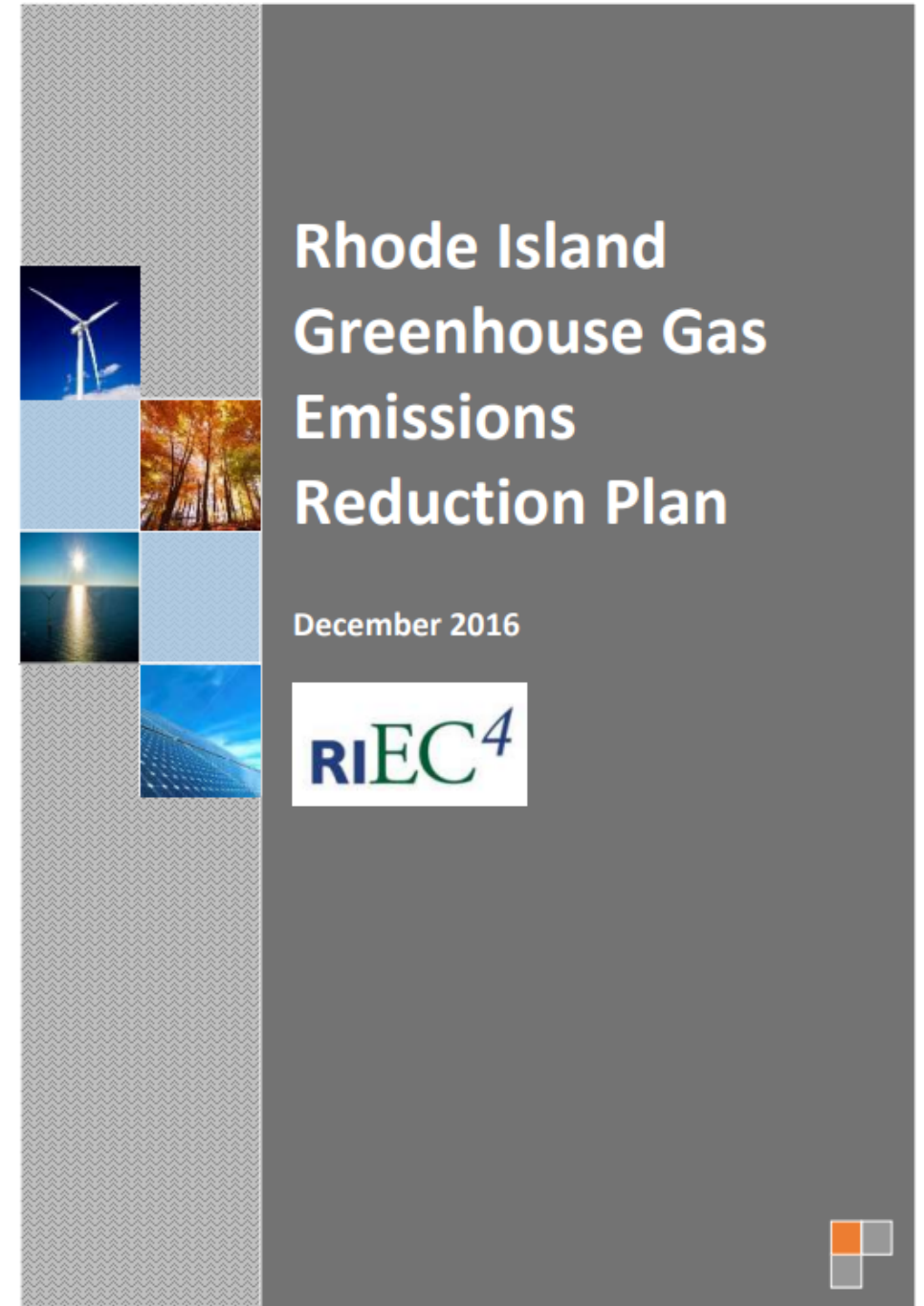
The emissions impact of LULUCF probably doesn't change much from year-to-year



# Pathways from the 2016 Plan

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- **Land Use Conservation**
  - Adopt 'no net-loss of forests' policy
  - ✓ Strengthen land and forest conservation
- **Other pathways**
  - Reduce emissions from solid waste
  - Lead-by-Example, regional collaboration, etc.



# Select Key Studies

- **The Value of Rhode Island Forests**
- Solar Siting Opportunities Study
- Resilient Rhody
- Other reports and plans related to land use



## The Value of Rhode Island Forests

A Project of the Rhode Island Forest Conservation Advisory Committee and the Rhode Island Tree Council

August 2019





# Policy Recommendations to Promote Forest Conservation

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1. Develop and Implement a **Rhode Island Forest Conservation Act**
2. Devote **More Public Funding** to Forest Conservation
3. Leverage **Private Funding** for Forest Conservation
4. Encourage Long-Term Conservation through the **Farm, Forest, and Open Space Program**
5. Increase **Landowner Benefits** from Conservation Easements
6. Incorporate Forest Conservation Into **Land Use Planning**
7. Avoid Forest Loss from State or Municipal **Incentive Programs** that Encourage Development
8. Implement **Forest Management Best Practices** at the State and Local Level
9. Support the **Cultural Value** of the State's Forestland
10. Improve Private Landowner **Education and Outreach** on the Importance of Forest Conservation

# Facilitated Discussion

## Meeting our 2030 Mandate – Prioritizing Actions for Land Use

1. What do we need to do to decrease emissions resulting from how we use and develop land?
2. What do we need to do to increase the amount of carbon our land can sequester?
3. Other considerations?

# Scope

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- Actions required over next 1-3 years
  - Limited to actions related to land use
  - Consider 2030 Mandate (45% emissions reduction)
- Some principles to consider
    - Prioritize low-hanging fruit – biggest impact with lowest cost
    - Prioritize actions we can control
    - Prioritize actions that balance and advance multiple policy objectives
    - Others?



# Priority Actions

#1 session 7/13



## Decrease emissions resulting from how we use and develop land

- Clarify what policies the state is already undertaking that nudges development away from forests.
- USDA resource on climate change & agriculture – impacts on ag and forestry together re/ emission levels.
- Food systems are interwoven with land use and many other elements of this report.
- Solar impacts on land (agriculture, forests); re-think codes; aim to keep land in agriculture production.
- Wetlands (inland and coastal) development can impact sequestration; preserve current stores of carbon.
- Pursue Transit Oriented Development (TOD); minimize use of cars; focus on active mobility.
- How does the work of the state Land Use Commission overlap with the work of the EC4 and 2022 Update. Aggressive enough on climate issues?



## Increase the amount of carbon our land can sequester

- No net loss of forests policy – please include in 2022 Update. Be more aggressive on this topic.
- Account for all other forest values moving forward.
- Utilize forest management as a tool to improve sequestration.
- Increase funding for land protection (and include focus on sequestration) – state funding; allows for flexibility.
- Line item in state budget (not just in state green bonds).
- Reforest acres.



## Refining our actions

- Recycling solar panels; looking ahead to decommissioning solar panels – can guidance be given to landowners who may want to return the land to its natural habitat.
- Intent to cut permits issued by DEM – can this be “re-thought” or refined to help ensure we aren’t losing forests.
- 2022 solar development law – concerned about future efforts to minimize impacts on forests.
- All sectors need to be engaged in this conversation – does require long-term strategies (to change behavior and infrastructure).
- Note - RIIB has programs that can promote land conservation.

# Priority Actions

#2 session 7/14



## Decrease emissions resulting from how we use and develop land

- Urban forests/trees: let's look at urban forests benefits on health of RI's. Utilize tools (tree equity score) that have been developed; Statewide tree goals (make progress).
- RE growth program – developers are limited to rooftop solar; other options were removed from program (car ports adders, etc); stakeholder survey.
- We need crazy all out investments in RE and forest/land use conservation.
- Virtual Net Metering is leading to forest loss; lets focus on developing disturbed sites; RI doesn't have policies in place to avoid these conflicts.
- EC4 - Advisory Board is developing new climate dashboard – new elements can be considered (land loss; landfill capacity).
- Consider emissions associated with exporting waste (if and when we get to that point); incineration (linking heat and incineration).
- A more strategic look at handling of organics (small policy issues can become stumbling blocks); main goal is to keep organics out.



## Increase the amount of carbon our land can sequester

- NRCS (forests and farms) – collaboration is important; soil sequestration is important to pursue. RI is one of few states that does not have matching funds for NRCS programs (maybe a state matching fund program for soil sequestration).
- Agriculture lands: 2% is small, but is important; funding for preservation is needed; no money in 2022 green bond for ag lands preservation funding; development pressures are very high (solar!).
- Carbon intensity of food – important; relates to health of local farming community (economic dev.)
- Healthy soils sequester carbon; we can incentivize this and do more.
- Urban tree cover – “the more we support tree canopy, the less energy we will use to heat and cool our homes”. (Providence Tree Plan survey).
- Organics in landfills – redirecting from disposal.
- How much land loss is happening to renewables? Track this as part of state climate dashboards. (RI Land Trust data available).



## Refining our actions

- Note: American Farmland Trust (data source)
- Note – track landfill diversion of organics.

# Priority Actions

#3 session 7/14



## Decrease emissions resulting from how we use and develop land

- Solar panels – happy to see them but concerned about what was lost in developing that RE resource; are we fragmenting our forest resources
- Trees are important for water quality and mental health as well (more trees in RI's urban core); focus solar on disturbed lands/existing structures.
- Providing incentives and educational materials on climate change– outreach is key; promoting “different ways of doing things” (e.g. impervious pavement, building materials).
- Solutions can be targeted at individuals AND larger group (to maximize impacts).
- Consider tradeoffs between RE development and deforestation.



## Increase the amount of carbon our land can sequester

- Equity and Justice; the way we use lands will have a much bigger impact on the quality of life of RI's than many of the other emissions reduction strategies on the table; it's a much bigger issue than just an equation about emissions.
- Will need to use more land for food security issues; need a broader policy discussion to address competing land uses; diversify people and groups in this discussion – focus more state brain power on this specific issue; breaking down silos in and out of government to collaborate on these issues.
- Regenerative agr. practices – the state can explore those benefits (RIDEM, NRCS) and advertise this info. with RI farming community. Beneficial for farming practices.



## Refining our actions



# Other considerations?

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- Notes

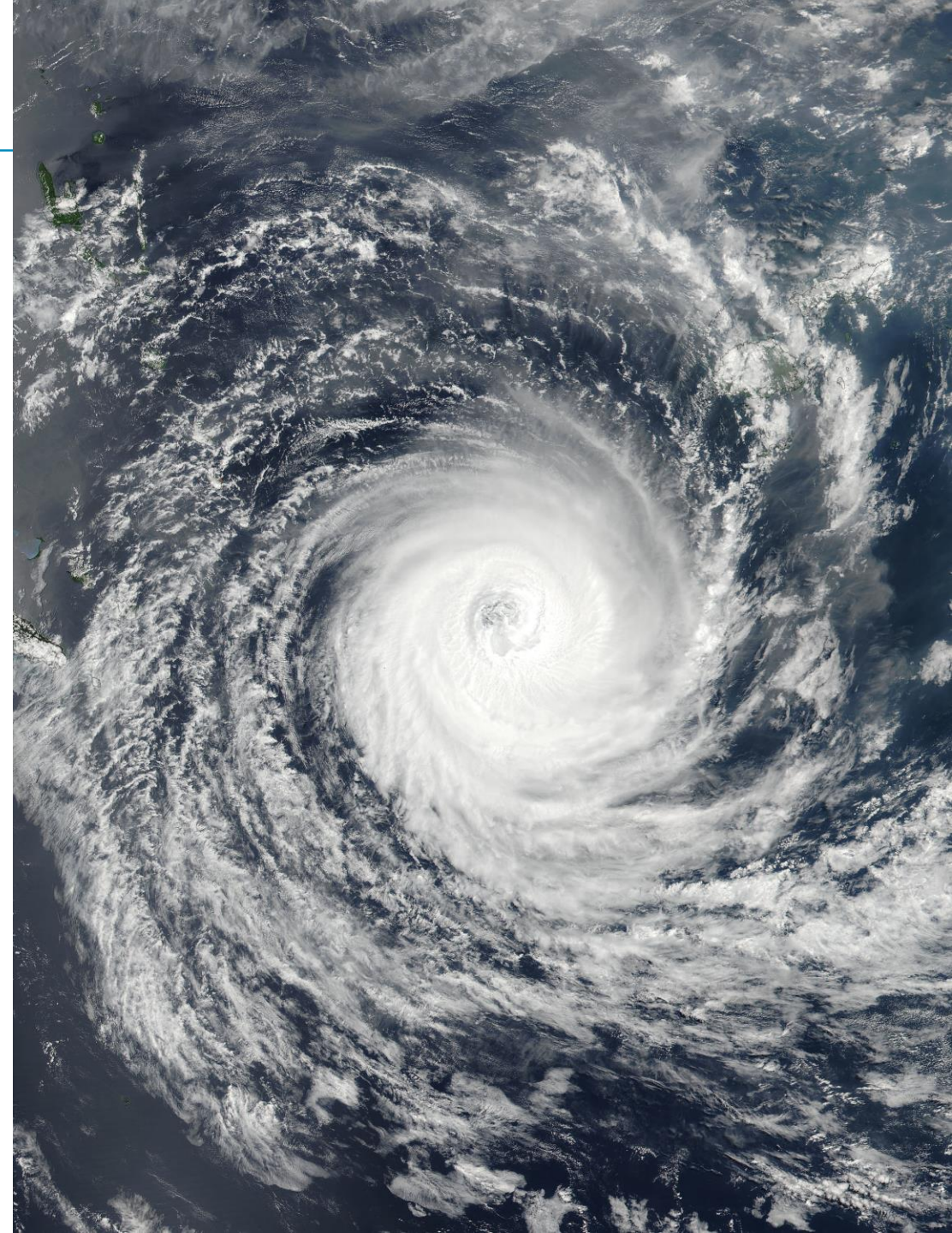
# Next Steps

## Quick post-session poll!

July

- 7/13-14 Land Use Sharing Sessions
- 7/27 Climate-Food Systems Workshop

**More info & comment form:**  
**[www.climatechange.ri.gov/aoc](http://www.climatechange.ri.gov/aoc)**





# Act on Climate

## Thank you!

Comments may be submitted: [www.climatechange.ri.gov/aoc](http://www.climatechange.ri.gov/aoc)

Check back for updated project materials: [www.climatechange.ri.gov/aoc](http://www.climatechange.ri.gov/aoc)

All climate-related activities will be posted to the EC4 calendar: [www.climatechange.ri.gov](http://www.climatechange.ri.gov)