

# 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!



# Act on Climate Sharing Session

**Quick poll before we get started!**

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We will get started shortly!





# Act on Climate

Sharing Session #5

May 17-18, 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

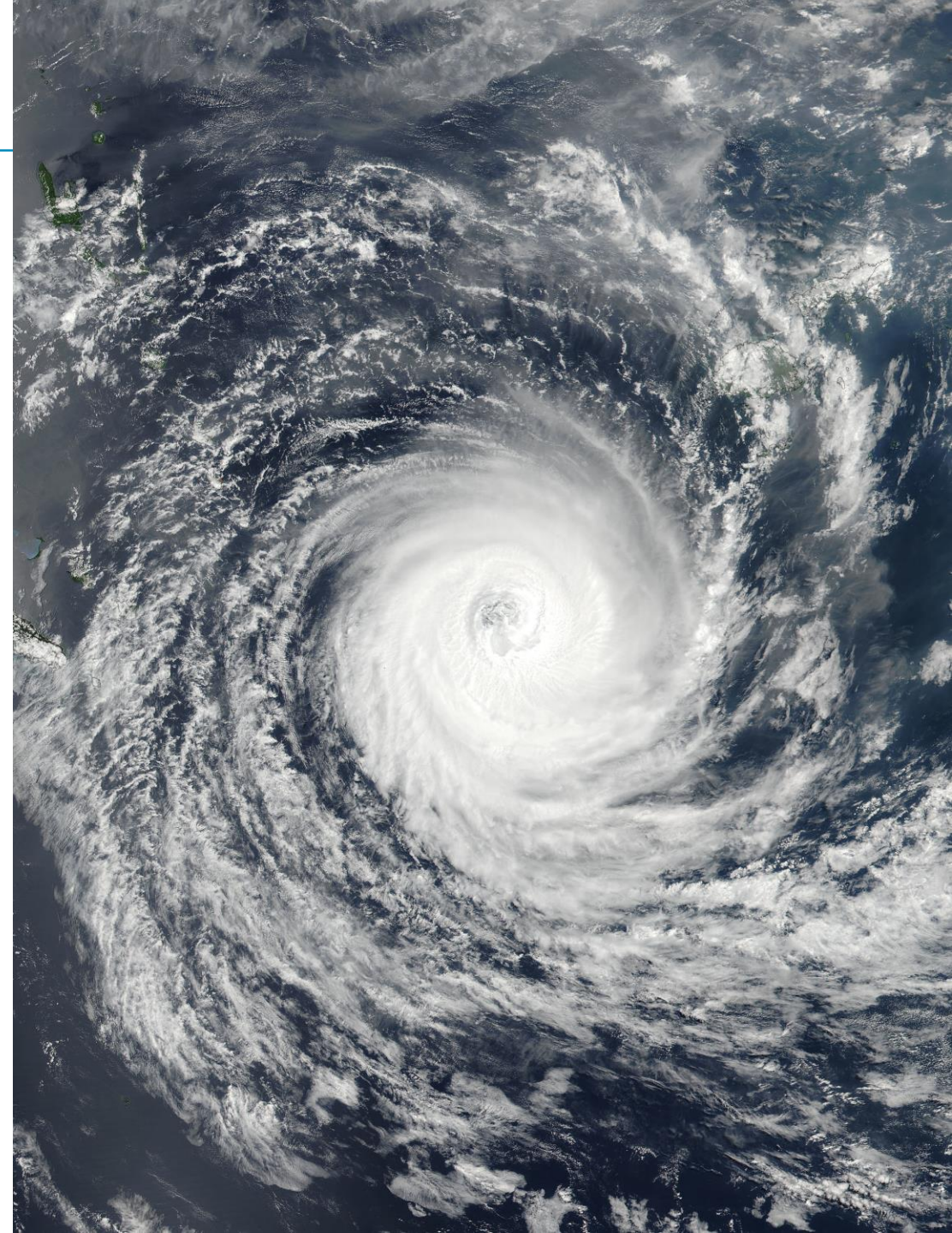
- For more info on the scope of the 2022 Update, visit [www.climatechange.ri.gov/aoc/](http://www.climatechange.ri.gov/aoc/)
- Today's discussion informs priority actions we take over the next few years to set Rhode Island on a path to meet our 2030 emissions reduction mandate

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

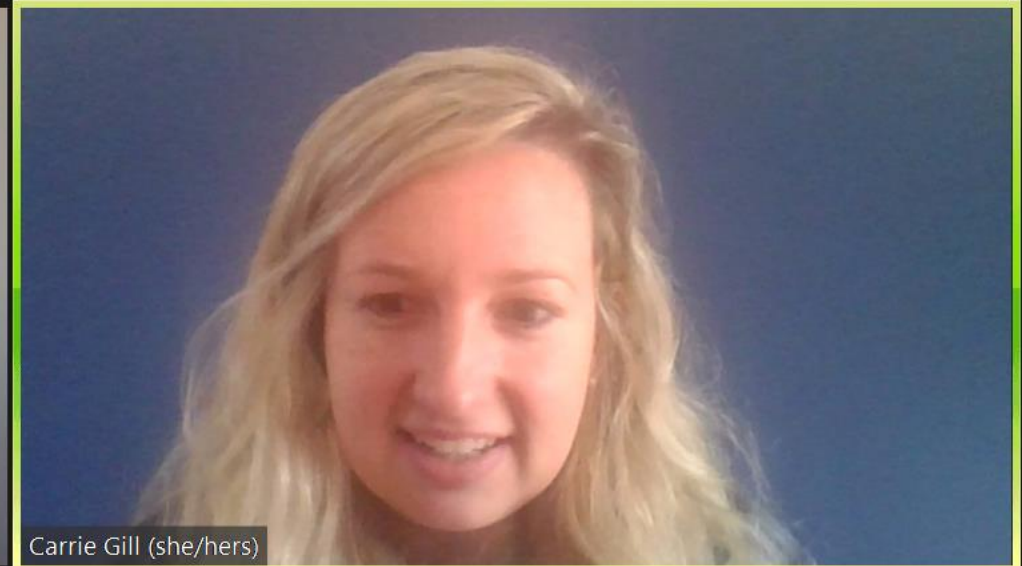
## Facilitated Discussion

1. What do we need to do to reduce vehicle miles traveled?
2. What do we need to do to electrify transportation?
3. Other considerations?





# How to Participate



Mute

Stop Video

Participants 4

Chat

Share Screen

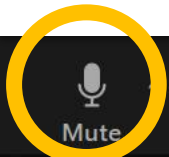
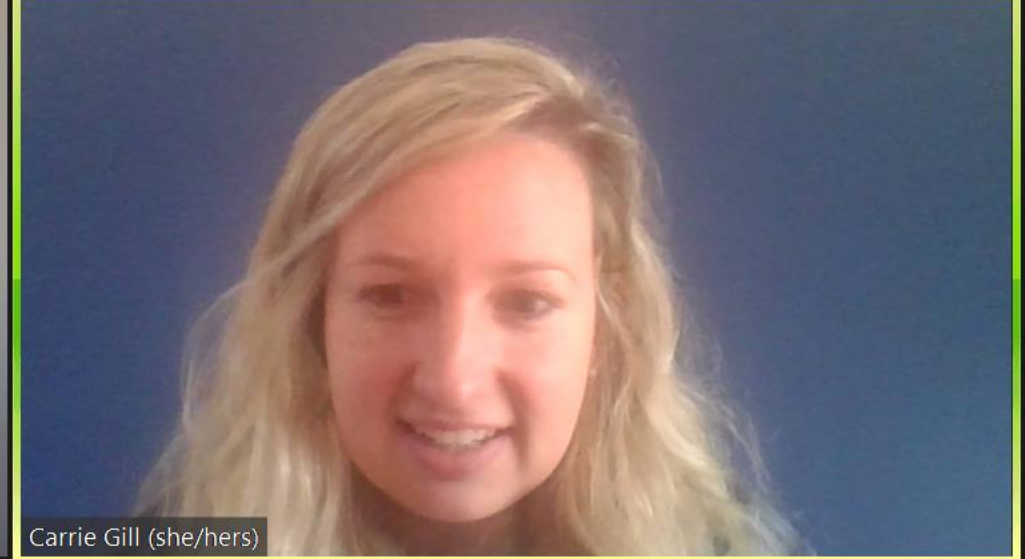
Record

Reactions

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

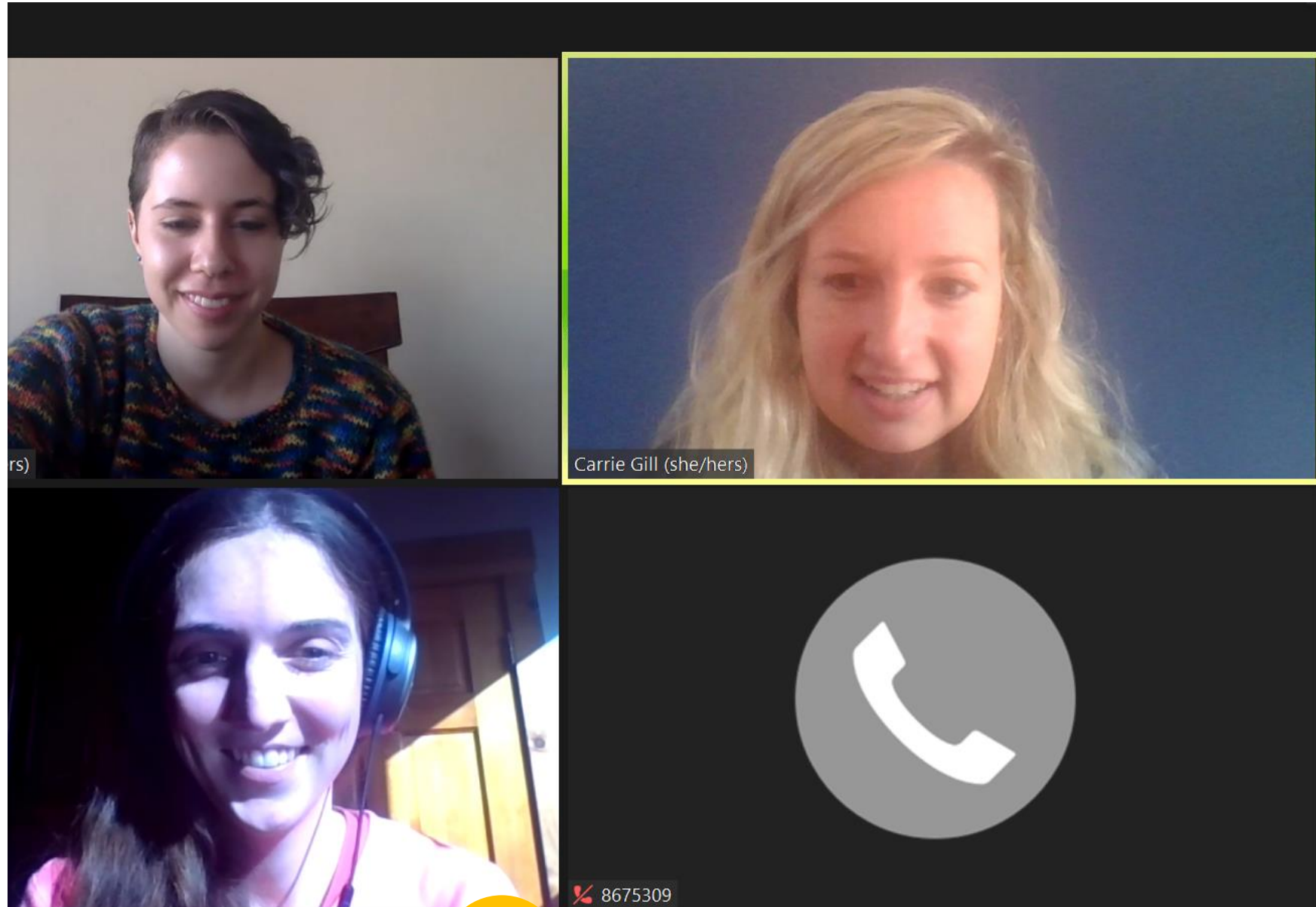
Record

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

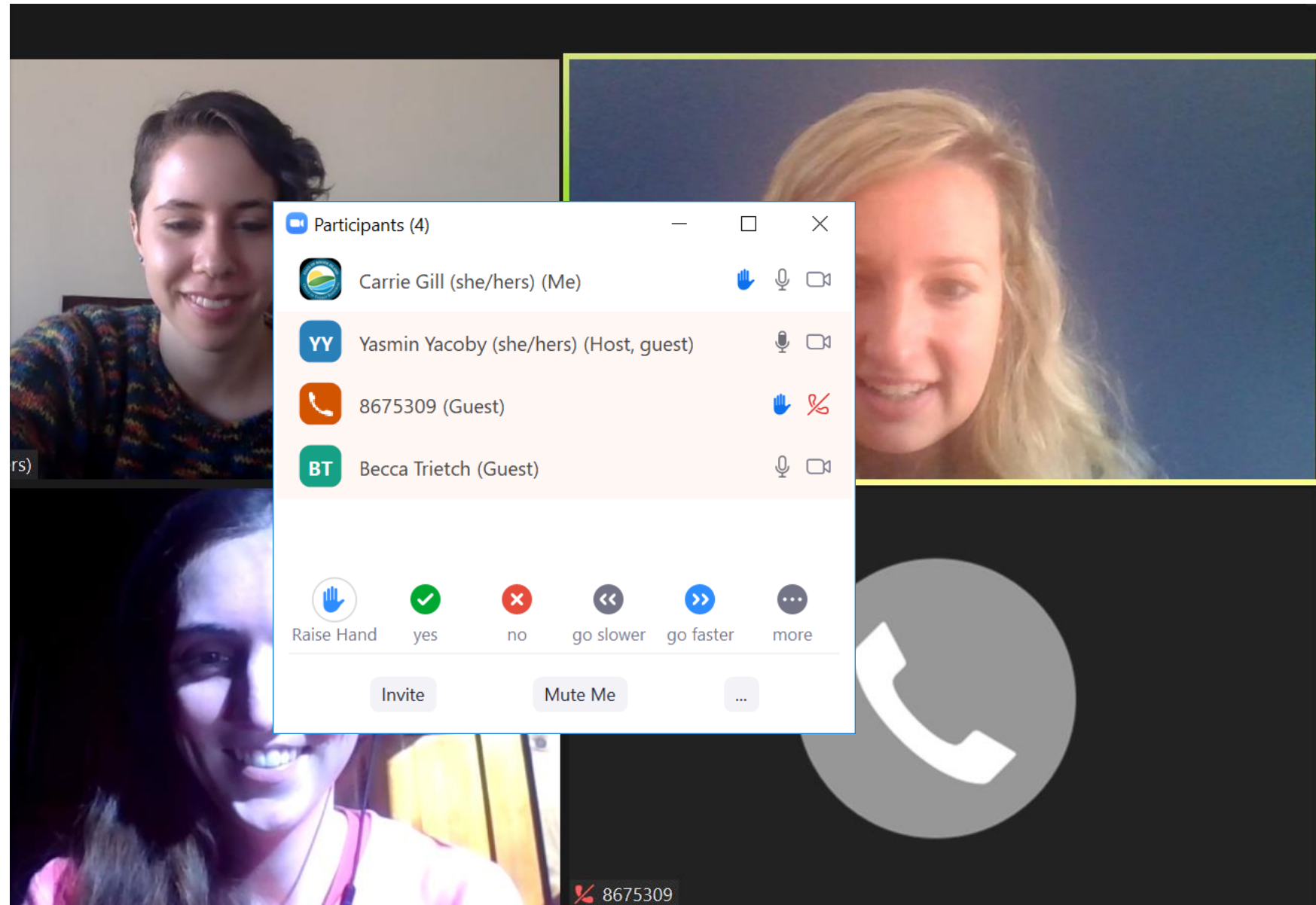
- Click the participants icon at the bottom of your screen then click the **raise hand** icon at the bottom left of the pop-up window to raise your hand.
- We will call on you to speak.





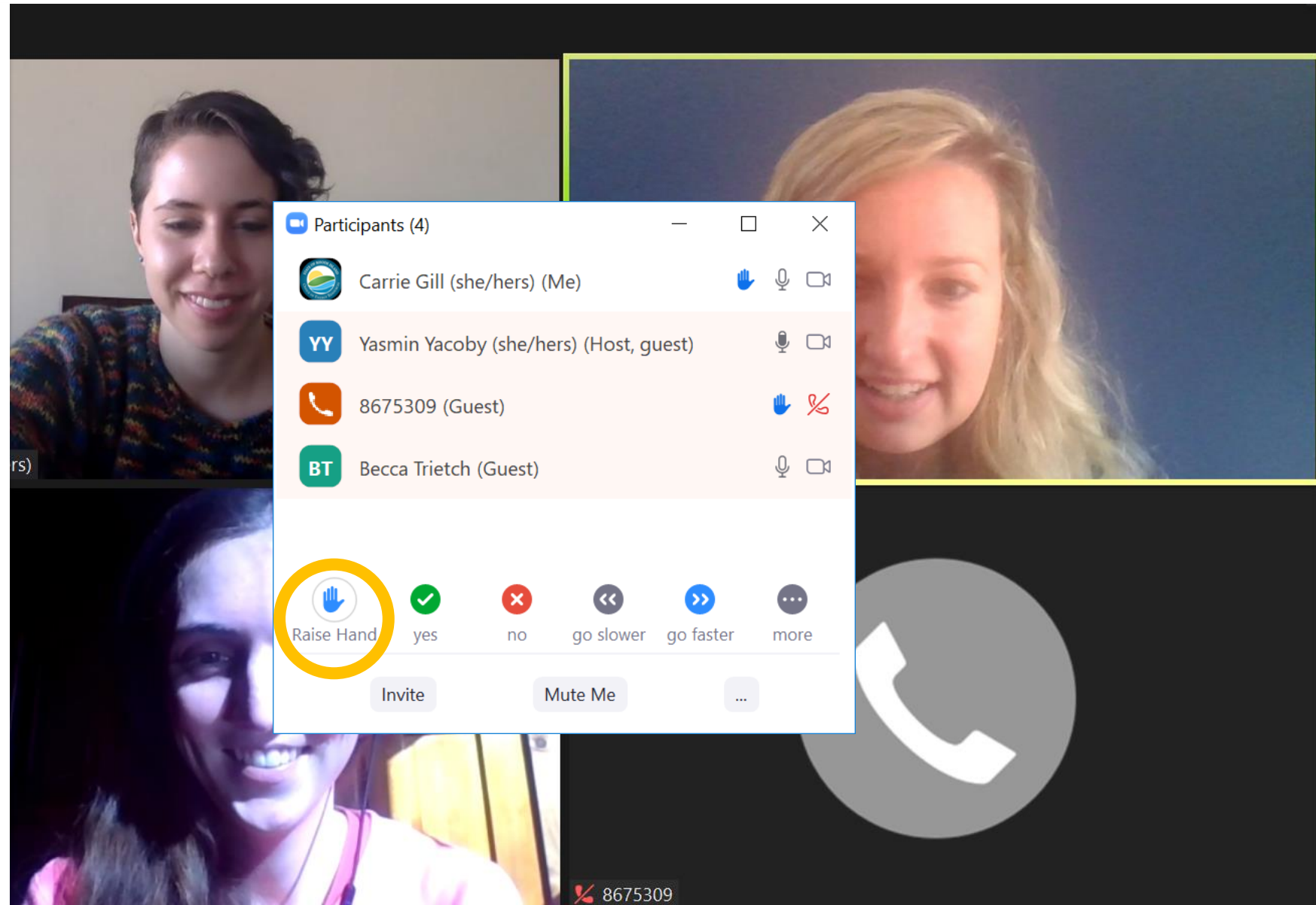
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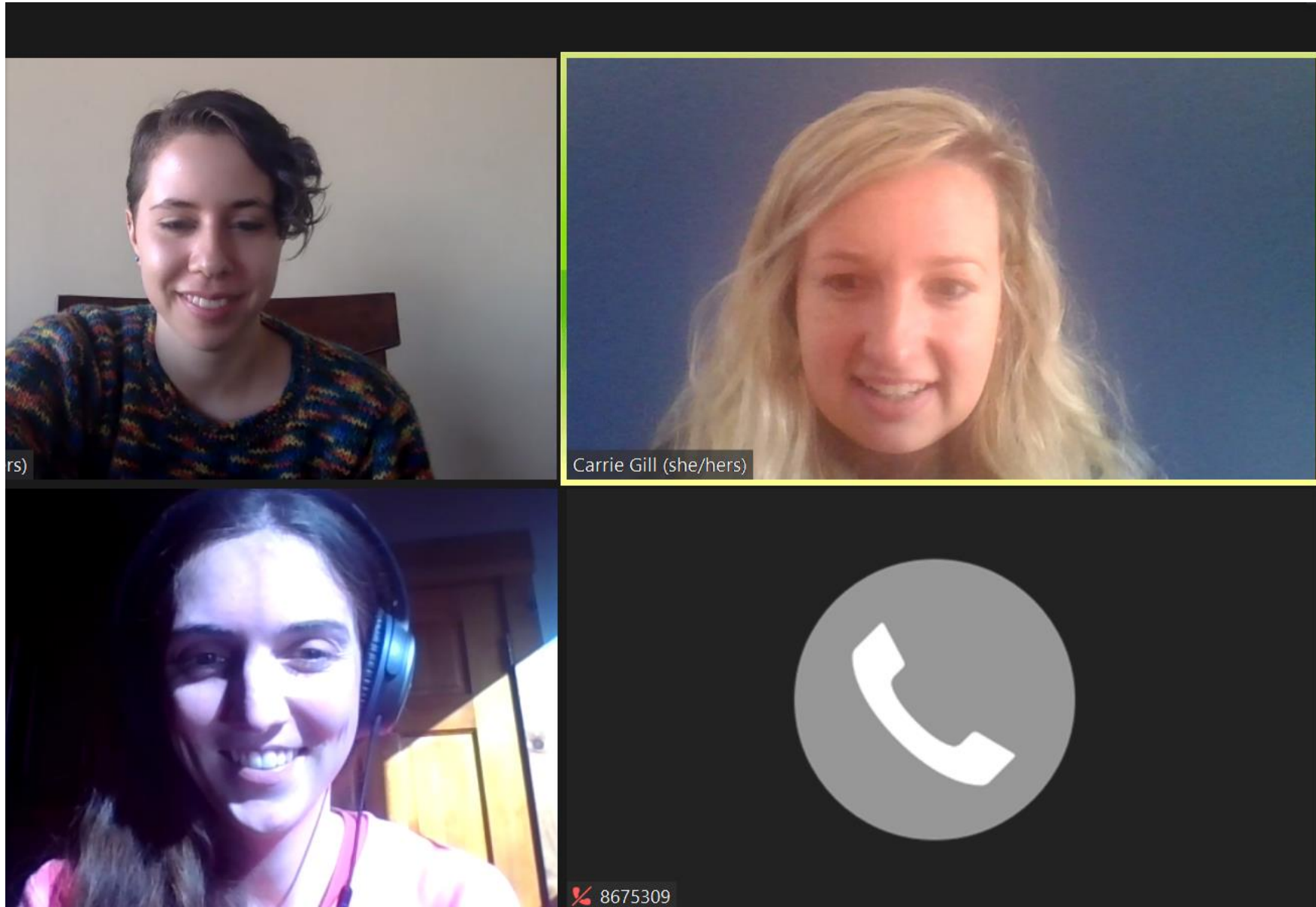




# How to Participate

## 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

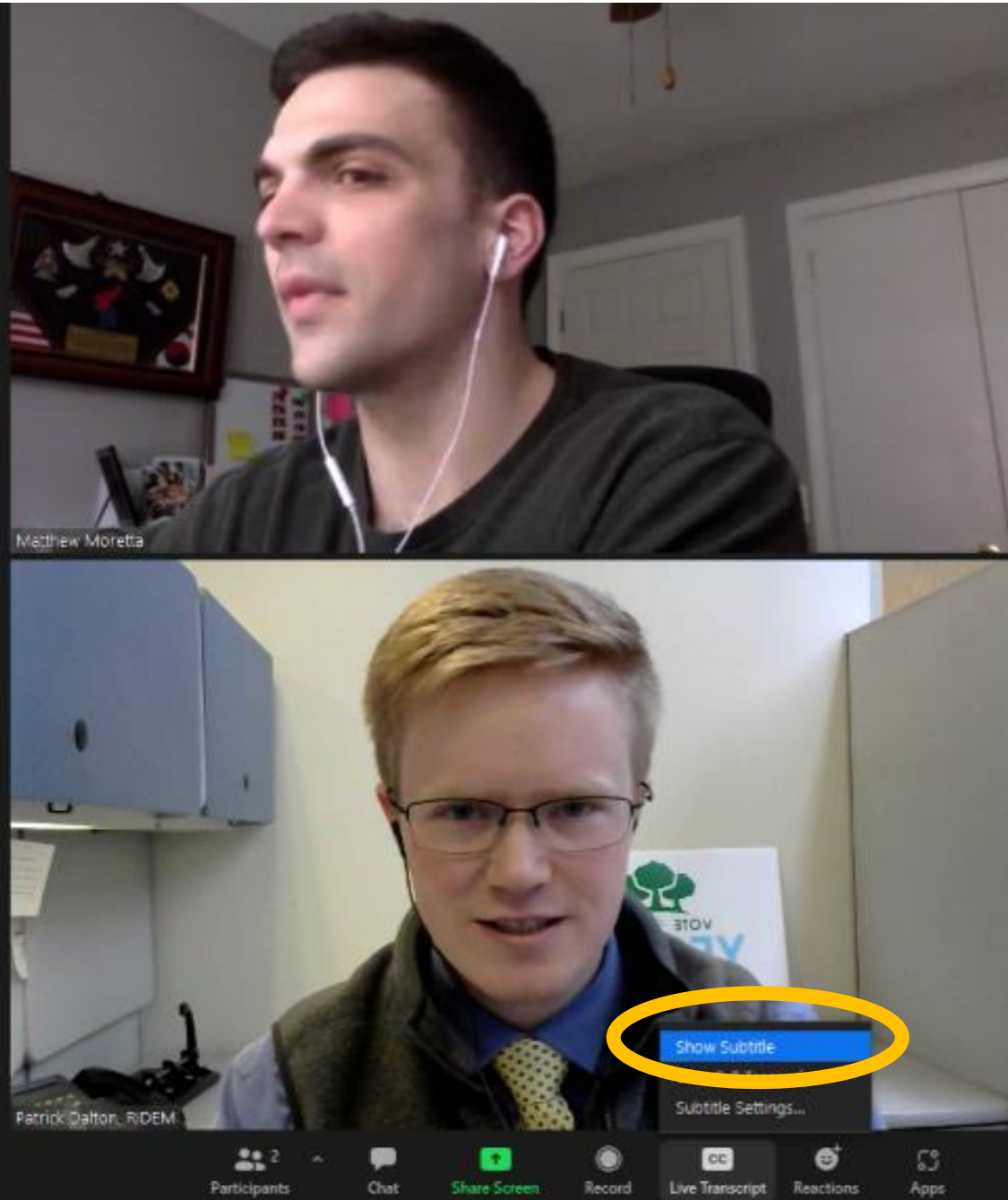
- To see live captioning, click the '**Live Transcript**' icon and then select 'Show Subtitle'
- You can also change the subtitle settings from this menu.





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# How to Participate

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

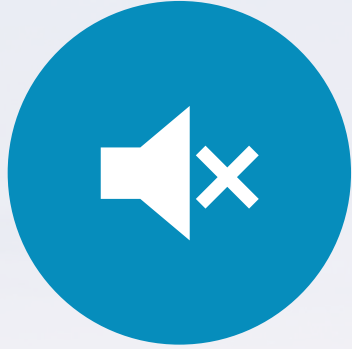




# Housekeeping and Logistics



- 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.



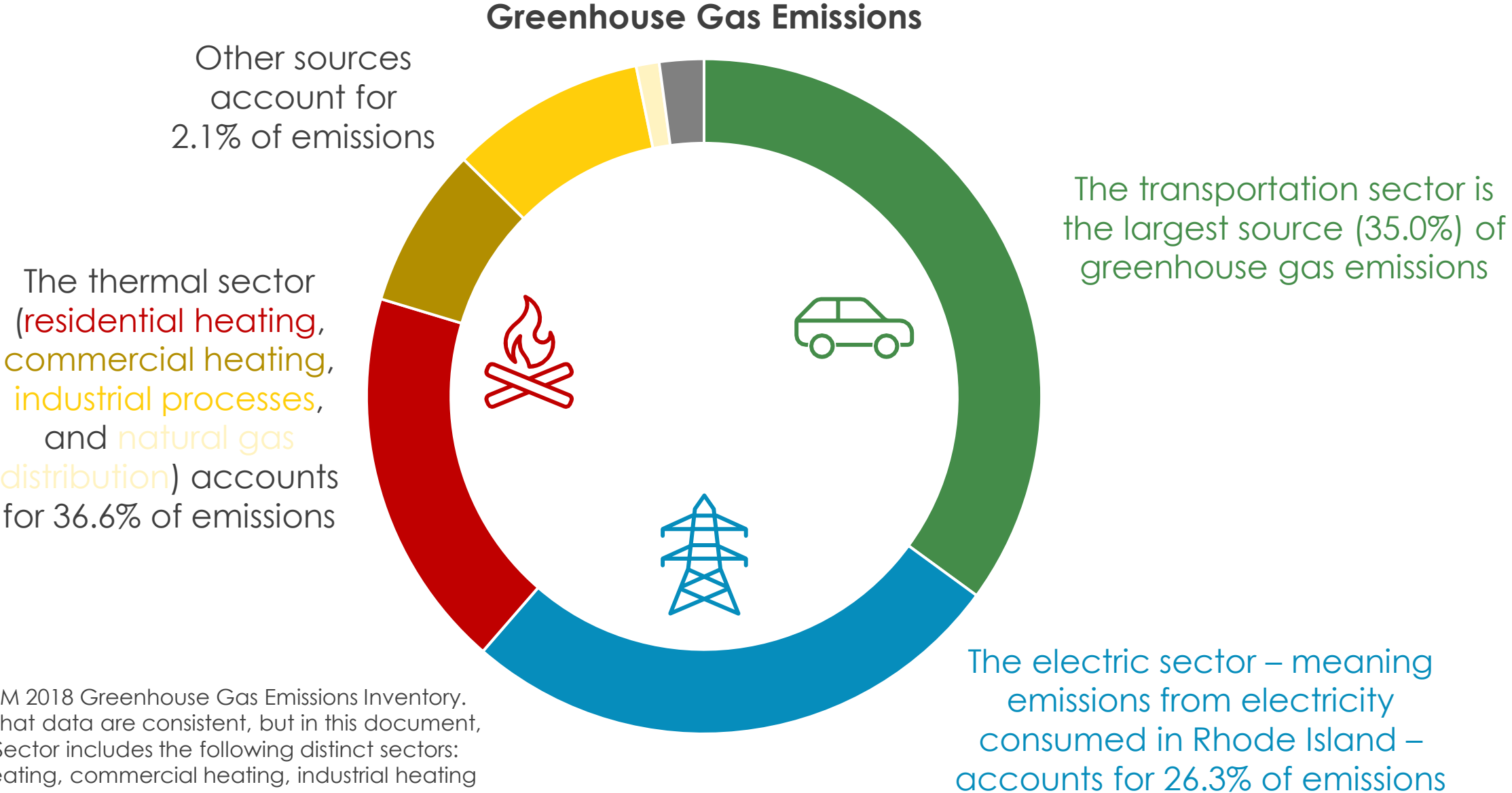
# Background Information

## Emissions from Rhode Island's Transportation Sector

1. 2018 Emissions
2. Efforts since 2016
3. Recommendations from recent key studies



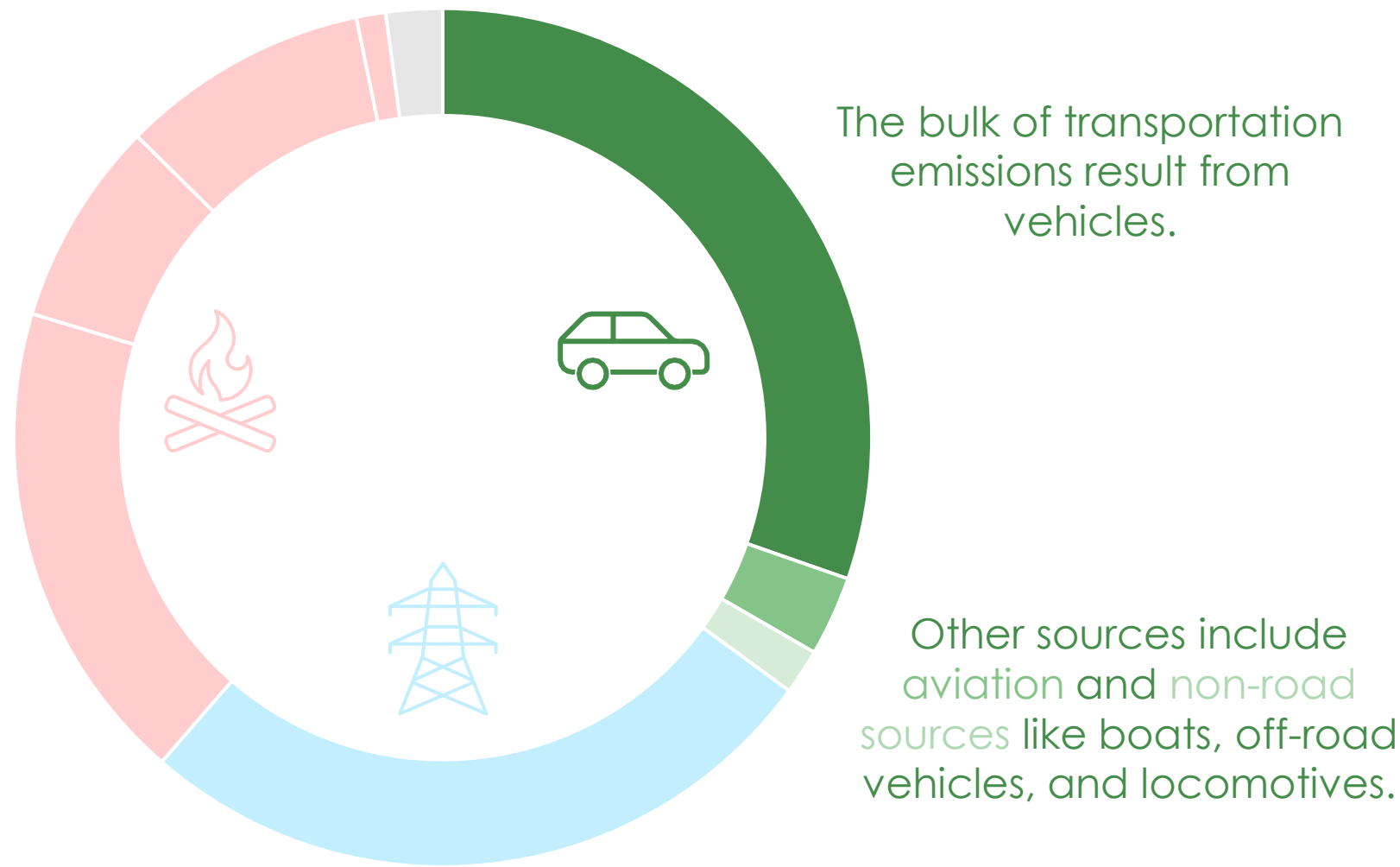
# Rhode Island's 2018 Greenhouse Gas Emissions Inventory



Source: RI DEM 2018 Greenhouse Gas Emissions Inventory. Please note that data are consistent, but in this document, the Thermal Sector includes the following distinct sectors: residential heating, commercial heating, industrial heating and processes, and natural gas distribution.

# Rhode Island's 2018 Greenhouse Gas Emissions Inventory

## Focus on Emissions from the Transportation Sector





# Estimating Emissions from Highway Vehicles

Data about vehicles and travel behavior are collected

RIDEM enters the data or uses preset default data into a tool from the US EPA called MOVES

MOVES simulates driving conditions based on the data provided...

... and estimates the resulting amount of greenhouse gas emissions



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MOVES simulates driving conditions based on the data provided...

... and estimates the resulting amount of greenhouse gas emissions



## Emissions decrease when:

- **We consume less fuel** (e.g., by biking instead of driving a car or by driving fewer miles)
- **We consume lower-emissions fuel** (e.g., by driving an electric vehicle instead of a gas-powered vehicle)



# Pathways from the 2016 Plan

- **Reduce Vehicle Miles Traveled**
  - Increase transit and mode share ridership
  - Integrate transportation and land use planning
  - Use price signals to discourage solo driving
  - Invest in alternative modes of mobility
- **Electric Vehicles**
  - ✓ Incentivize adoption of electric vehicles
  - ✓ Incentivize electric vehicle charging infrastructure
  - ✓ Electrify RIPTA's bus fleet
  - Electrify passenger and freight rail
  - ✓ Strengthen RIDEM regulations
- **Transportation Biofuels**
  - No standards enacted to date
- **Other pathways**
  - Lead-by-Example, regional collaboration, jobs, etc.

## Rhode Island Greenhouse Gas Emissions Reduction Plan

December 2016

**RI**EC<sup>4</sup>



# Select Key Studies

- Clean Transportation and Mobility Innovation Report
- Electrifying Transportation
- Carbon Pricing Study
- Other reports related to the electric sector



## Electrifying Transportation: A Strategic Policy Guide for Improving Public Access to Electric Vehicle Charging Infrastructure in Rhode Island

December 2021



With the support of:





- Create a **healthier environment** for all Rhode Islanders with specific benefits for residents of our most **overburdened and underserved communities**
- Establish Rhode Island as a **national leader** in bold transportation and climate commitments
- Modernize, expand, and invest in **state transit and transportation assets** to more effectively move people and improve accessibility
- Improve air quality by taking steps to **electrify** the transportation sector
- Create a 21st century **mobility infrastructure** that capitalizes on the emerging changes in transportation technology
- Unlock **economic opportunity**, promote green job creation, and support business and supply chain industries

# Electrifying Transportation



## Summary of Top-Level Priorities

- Reinvest in **incentive programs** for EVs and charging infrastructure
- **Refine EV and charging infrastructure programs** to align with priorities & equity considerations herein
- Demonstrate progress in **electrifying transit**, school buses, and medium- and heavy-duty vehicles
- Conduct an analysis to understand **transportation revenue impacts** and develop recommendations
- Support a **100% Renewable Energy Standard**
- Develop a clean transportation **dashboard**
- **Demonstrate action** through state agency commitments



# Facilitated Discussion

## Meeting our 2030 Mandate – Prioritizing Actions for the Transportation Sector

1. What do we need to do to reduce vehicle miles traveled?
2. What do we need to do to electrify?
3. Other considerations?

# Scope

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- Actions required over next 1-3 years
  - Limited to reducing emissions from transportation
  - 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 – Reduce Vehicle Miles Traveled

May 17, 2022 @ noon



## Reduce High-Emissions Driving

- Tailor approaches to reducing emissions based on type of vehicle/fuel
- Consider price signals from gas taxes
- Consider how road conditions influence mobility choices (e.g. bumpy roads make driving less appealing)
- Consider discouraging signals like lower speed limits
- Transportation and Climate Initiative
- Consider biodiesel as an immediate emissions-reduction pathway (especially in medium- and heavy-duty vehicles)
- Example: CA low-carbon fuel standard
- Enhance and expand public transportations system
- Transit Master Plan ← strategy to improve transit and ridership



## Increase Low-Emissions Mobility

- Bicycle Mobility Plan ← strategy to improve low-emissions bicycle mobility

### Reduce High-Emissions Driving, Continued

- Free fare zones (e.g. in Central Falls) – appropriate action
- Address stigmas about public transit
- Consider how to ensure major purchases avoid fossil-powered vehicles, consider impacts on Act on Climate



## Refining our actions

- Electric transportation and improved mobility can provide more and noticeable benefits as we decarbonize (e.g. affordability, health, etc.)
- Unmaintained roads can be dangerous, including for non-driving mobility modes
- Importance of considering long-term outcomes from 'harder-to-reach fruit' – this is an opportunity to reimagine our infrastructure
- Consider Act on Climate in all decisions
- Avoid making mistakes now, which may have longer-term consequences
- What can we learn from other cities and states to incentivize ride-sharing, public transit, etc.



# Priority Actions – Reduce Vehicle Miles Traveled

May 17, 2022 @ 6pm



## Reduce High-Emissions Driving

- Advanced fuel/emissions regulations – see CA as a leader/good example for future regulations
  - Promulgating regulations takes time, especially if we wait for CA to act first: how can RI fast-track this process?
  - Advanced clean cars 2 regs (CA) commits to phasing out sale of gas-powered cars by 2035
- Is there a goal for reducing vehicle miles traveled from the Mobility Innovation Working Group? A clearly defined goal for reduced VMT by 2030 would be helpful to benchmark our progress
  - Falling short of benchmarks could signal more investment is needed in mobility
- Need to expand transit and make it easier to use – how can we encourage folks to try transit for the first time?



## Increase Low-Emissions Mobility

- Bicycle Mobility Plan and Transit Master Plan offer strategies – and projects – to reduce transportation emissions (and VMT)
- Consider road conditions that can make alternative forms of mobility more preferential (e.g. biking)

### Reduce High-Emissions Driving, Continued

- Consider important destinations when determining transit routes and schedules (e.g. beaches in the summer)
- “Our state has wonderful bones to support a first-rate transit system”! ☺ But currently there is a lack of frequency, hours, destinations, etc.; we have a blueprint for improvement: Transit Master Plan
- Intersection of land use and transportation needs: transit-oriented development (live and work in close proximity)



## Refining our actions

- Accelerate transportation investment to those that are consistent with climate goals
- Consider climate/greenhouse gas emissions impacts of investments when determining the merit of those investments
- Consider existing state transportation improvement plans and their impacts on greenhouse gas emissions – how can we accelerate the process of estimating climate impacts from these projects
- Importance of balancing policy objectives including but not limited to safety, climate, etc.
- Nearly 80% of RI population lives within 10 minutes of a transit stop
- Intersection of transportation and housing needs: how can we build out housing near transit

# Priority Actions – Reduce Vehicle Miles Traveled

May 18, 2022 @ noon



## Reduce High-Emissions Driving

- See report on gasoline super-users for suggestions on how to reduce their emissions
- Free RIPTA (and maybe rail?) pass for state employees
- Consider the role of parking in discouraging solo driving and driving at all (e.g. parking cash-out law: employers provide parking or different benefit like cash for not using a parking space)
- Municipalities may have a role in parking regulations as well
- Transportation demand management (TDM)



## Increase Low-Emissions Mobility

- Fund and implement existing plans, like Transit Master Plan and Bicycle Mobility Plan
- Improve safety of biking and walking



## Refining our actions

- Consider data collection and how data collection may result in biases in our analyses (e.g. VMT does not capture folks who walk or ride transit)
- Consider how we can capture and best reflect all Rhode Islanders in our data, dashboards, and analyses
- Understand emissions impacts of specific projects and portfolios of investment, and use that information in decision-making (e.g. in the STIP)
- “Personnel is policy”: full-time climate policy should be reflected in staffing (e.g. at RIDOT)
- Principles: equity and making sure benefits flow to communities that have been overburdened
- Some communities may be skeptical of ‘Complete Streets’ – must mitigate impacts of potential displacement

# Priority Actions – Electrify Transportation

May 17, 2022 @ noon



## Switch to Electric Vehicles

- Electric vehicle purchase incentive needed  
← comments on DRIVE accepted through May 22
- Consider long-term, sustainably funded electric vehicle incentives (folks only buy a new car once every 10 years)
- Linkages between vehicle batteries and home resilience, grid benefits (i.e. 'vehicle-to-home and vehicle-to-grid technologies')



## Expand Electric Vehicle Charging

- Concerned about charging as new buildings are being built – how can we ensure new buildings (and lots) have access to charging (e.g. should be requirement in building or zoning regulations analogous to number of spaces required for new buildings)
- Need to pay special attention to multi-unit dwellings
- Maintenance and management plan for electric vehicle charging stations, especially as we expand infrastructure – very important!
- Zoning changes should consider requirements for electric vehicle charging and also other changes that improve access by alternative forms of mobility (e.g. fewer parking spaces, more greenways, more sidewalks, more transit)



## Refining our actions

- Importance of at-home charging: robust, strong off-peak charging programs to encourage charging at off-peak times (saves money for all customers), opportunity to lower fuel costs for electric vehicle drivers, incentive derived from avoided costs (no new funding needed)
- Capture differences in fuel type in our data collection
- Need to avoid re-isolating environmental justice communities by electrifying transportation with unbalanced focus on individually-owned vehicles
- Need to consider how benefits of electric transportation flow to people who do not own vehicles
- Transportation and electric sectors will become increasingly integrated as we electrify transportation – should consider impacts of electric sector actions/priorities on our ability to decarbonize/electrify the transportation sector
- Grid modernization as a way to optimize use of electric grid and mitigate costs
- Current legislation aims to address some of these concerns and recommendations



# Priority Actions – Electrify Transportation

May 17, 2022 @ 6pm



## Switch to Electric Vehicles

- Goal for electric vehicles needed (~100,000 electric vehicles by 2030)
- Incentive programs for electric vehicles – consider broadening incentives to more types of electric transportation like e-bikes
- Most folks buy used cars, so we need to stimulate the secondary market for electric vehicles
- Must make it easy for new-car buyers to choose an electric vehicle over a gas-powered vehicle
- Can we expedite the turnover of new electric vehicles to the secondary market?
- Good job RIPTA! ☺ Coordination to continue to support RIPTA's electrification efforts



## Expand Electric Vehicle Charging

- Planning out electric vehicle adoption trajectory and associated charging infrastructure required



## Refining our actions

- Recognize that RI competes with CT and MA to build a secondary market for electric vehicles
- MA and CT are debating legislation to encourage e-bikes
- Alternative tax revenue

# Priority Actions – Electrify Transportation

May 18, 2022 @ noon



## Switch to Electric Vehicles

- Increase and find sustainable funding streams for programs
- Truck emissions in traditionally overburdened communities needs to be prioritized. Can we reroute or eliminate trucking routes? Electrify truck fleets (buses, garbage trucks, construction trucks, etc.)
- Electrify RIPTA bus fleet – target electrifying routes that travel through environmental justice and frontline communities
- Continue incentives for electric vehicles; make sure benefits/incentives are available for used cars, etc. to better equitably distribute incentives across population
- Broaden incentives for electric transportation technologies (e.g. e-bikes)
- Broaden incentive programs to support trade-in/trade-up



## Expand Electric Vehicle Charging

- Consider charging infrastructure intersection with 'complete streets' planning
- Note: Complete Streets law from 2014



## Refining our actions

- Tailor strategies to specific use cases (e.g. contractors driving)
- Target vulnerable communities – first-come first-serve can be inherently inequitable
- Prioritize equity benefits
- Workforce development and training needs to be accessible (can people living in frontline communities get there? Are the trainings available and encouraged for folks? Etc.)
- Look at PVD Climate Justice Plan as example
- Need an action plan: who what and when
- Look at California Air Resource Board and see if any actions apply in RI

# Other considerations?

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May 17, 2022 @ noon

- Notes



# Other considerations?

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May 17, 2022 @ 6pm

- Notes

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May 18, 2022 @ noon

- Notes

# Next Steps

## Quick post-session poll!

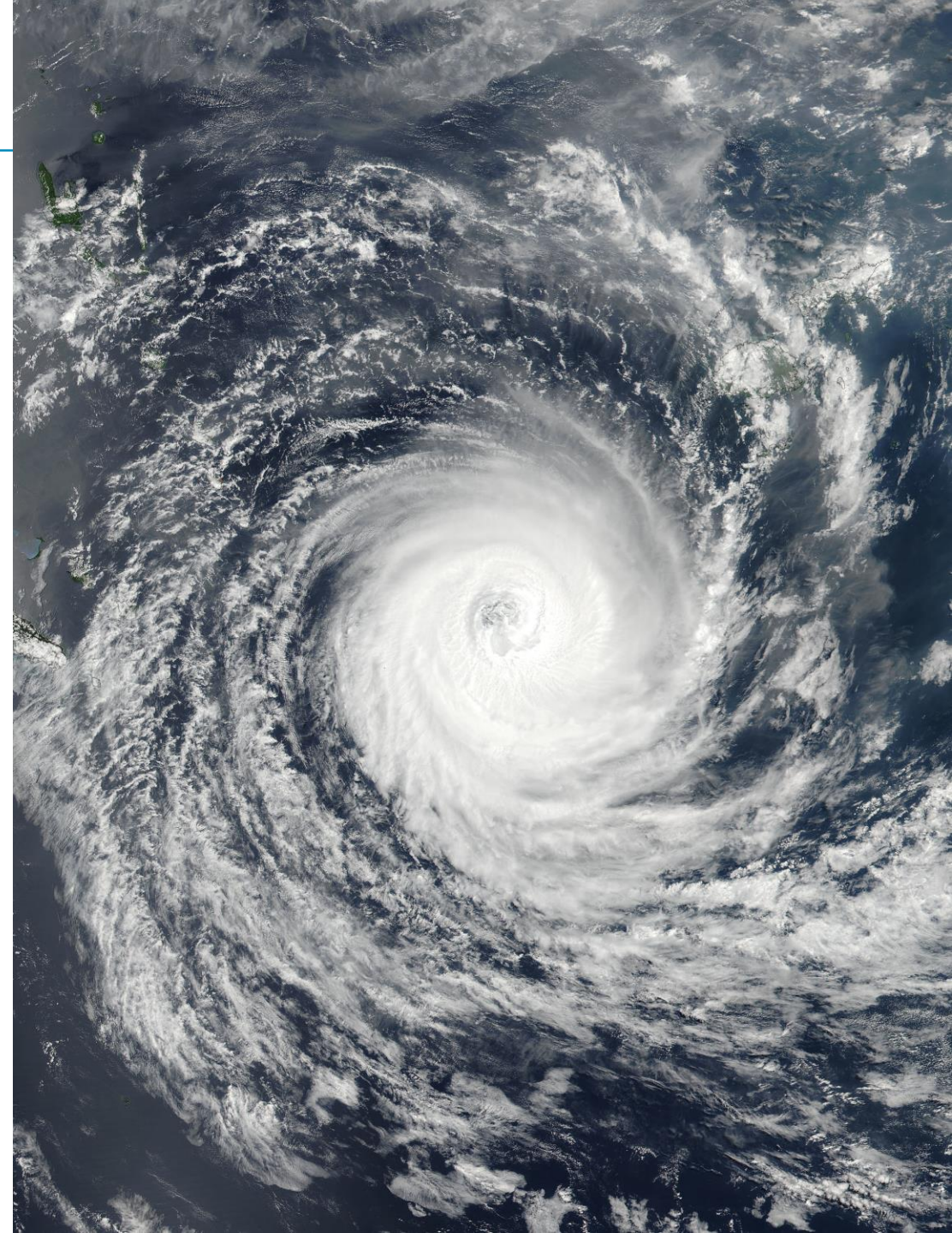
May

- 5/17-18 Sharing Sessions on Transportation
- 5/19 Workshop on Climate-Health Nexus

June

- 6/14-15 Sharing Sessions on Thermal Sector
- 6/23 EC4 Council Meeting

**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)