

## Climate Action, Sustainability, and Energy Committee Meeting Minutes

March 25th, 2024, 2:00pm

Fralin Auditorium and Zoom: <https://virginiatech.zoom.us/j/83170972131>

**Present:** Nathan King (proxy for Chair), Ken Miller, Emily Williams, Gia Ha, Diane Bonsall, Pat Donovan, Cameron Hadley, Zhuo Fu, Josh Clemons, Bob Broyden, Erin Poff, Leslie Stevens, Lane Robertson, Autumn Timpano, Carrie Cox, Wesley Gwaltney, Jamie King, Todd Schenk, Nam Nguyen, Dean Paul Winistorfer, Teresa Sweeney, Isabelle Largen, Luke Goodman, Matthew Stolte, Lizeth Jaramillo Taborda for Annie Hassall Lawrence, Katie Smith; Mike Dunn for Liza Morris

**Absent:** Benjamin Thomas, Nidhi Gangadharan, Kendra Paisley (prior notice given), Mae Hey

**Guests:** Kristina Cook, Yasmin Momenian, Jack Leff, Steve Durfee, Charul Agrawal, Adia Long, Nick Woods, Simona Fried, Ralph Hall, Ron Meyers, Yugasha Bakshi, Paul Ely, Alisha Ebert, Ann Raridon, Jon Clark Teglas, Meghan Marsh, Rob Lowe, Barbara Wise, Nick Quint

Nathan King called the meeting to order at 2:00 pm. A quorum was present.

### 1. Adoption of Agenda

A motion was made and seconded to adopt the agenda. The motion carried.

### 2. Membership Updates

Welcome Nidhi Gangadharan who is serving as an undergraduate student representative and finishing out Thomas Dalzell's term.

### 3. Presentation and Vote

Nathan King (Campus Sustainability Manager), Sean McGinnis (Associate Professor of Practice and Director, Green Engineering Program), Simona Fried (Manager of Energy Projects and Analytics), and Jack Leff (Climate Fellow) gave presentations that covered all agenda items for the committee meeting (attached).

### 4. Open Discussion and Announcements

- 2023-2024 Green RFPs [Nathan King]
  - Meeting with Budget office this week. More updates will be shared at the next CASEC meeting.
- VT GHG Emissions Presentation [Sean McGinnis + Simona Fried]
  - Emissions Report will be posted on the sustainability website within a couple of days-weeks.
  - Questions -
    - Jaime King: Will tree canopy (carbon sequestration) on other VT campuses be included in the calculation?
      - Sean: Considering adding tree canopy to next year.
      - Jamie: The ARECS have an untold number of timber acres of unknown quality and quantity. So, that's a missing piece. During the beginning processes of the CAC, someone drew a line for what forestry we would include and what we would not include.
      - Sean: I think currently ARECS are out of scope. The goal with the ARECS, campus in Arlington, the medical school in Roanoke, and

many other associated locations was that once we had a good handle on this we would roll it out for them to have their own version of this and keep it separate from this particular scope so we didn't keep adding. What we would envision is a number of separately scoped projects.

- Jamie: The campus number is easy for us. I'm realizing now the DOF had an initiative over the past several years to write forest management plans for each area and that needs to dovetail with this. I think that's one way we can collaborate to fill in that gap.
- Sean: Good idea. Any project whether it's in scope or not that can help us understand our emissions better and help students understand how to calculate them and communicate about them are projects that we would like to do. The CALL should be encouraging that.
- Todd Schenk: What's the lowest hanging fruit for us to tackle to meet our emissions goal? What is very surprising is the proportion of purchased electricity. It's an incredible proportion. Given this, what does this suggest is the most important and low hanging fruit to get ourselves back on the path.
  - Sean: part of it is if you believe the utilities will reach their goals. Part of what we do depends on how aggressive the utilities are- and which things we can control and which things we can't control. Some of the things we can control end up being really small pieces of the pie. For example: if nobody drove to campus at all, that would only account for 5%. It's a big number in itself but it's not a big number in the pie. We should still work on it because you have emissions and health considerations.
  - Wesley Gwaltney: One of the pieces on the pie is for animals. Is that referring to herds of animals on campus?
  - Sean: Yes, stock animals on campus, emissions and waste from those animals, as well as the amount of fertilizer used to grow agricultural sections on campus.
  - Wesley: Is there any accounting for the carbon sequestration at the facilities that support the animals that are being referred to as the campus animals? We're not looking at ARECS but the animals on campus have a land base that supports them that I would think would sequester some carbon?
  - Sean: Yes, and that is open for analysis but we need an expert and someone to help us with that. It is a category in the current platform we use.
- Nam Nguyen: is the "upstream methane leakage" outside of our control?
  - Yes, but we have control over the leakage that happens on campus. There's leakage at: wells, transport, and connection points. There's no other college (that I know of) that's calculating this number. But there was a real push from the students. We don't need new technology to solve this, just need to tighten up the system.
  - Ron: How much of that is power generation or electricity versus use of methane for other activities on campus?
  - Sean: It's both. Saving either natural gas in buildings or saving electricity generated by natural gas, both of those things will drop this back without doing anything except not using the sources that use natural gas.

- Ralph Hall: you have faculty air travel, but what about student air travel?
    - Sean: Out of scope: students traveling to/from campus for the first time, during holidays, trips abroad, etc.
    - There's data on the travel that's been booked by the travel agency, but don't have data on travel that people pay for out of pocket and get reimbursed.
    - When we reach out to departments, sometimes we get the data easily and sometimes the data is never sent to us.
  - Steve: why is "diesel for generators" and "refrigerant management" considered out of scope?
    - Data is hard to collect
    - The data does exist, but trying to not expand the scope too much now.
- Subcommittees Reviews of CAC Goals and 2025 CAC Revisions and Timeline [Jack Leff]
  - Ralph Hall: for the update for the CAC, what resources are available?
    - Nathan: we're still trying to piece that all together.
    - Jack: until we get the chair, it's open. Ideally, a full-time staff member to handle logistics in addition to the chair.
    - Want grad students who can handle research + run down problems.
    - Ralph's idea: make an ask of department chairs to give a line, since there might be students who are already working on this. Task existing resources on this that would make sense.
    - Sean: Who asks whom for these positions? Who has enough authority to give a line?
      - College Deans? Who asks the college deans?
  - Rachel: Well, would it be the chair? Do we expect that chair to be appointed soon? How is that process going? And, do we expect that it will be a faculty member again?
    - Jack: For the chair: We're waiting for an opportunity to communicate that up to the President or Amy Sebring. They will be the ones to make the decision.
      - faculty member is possible, but it would require a lot of resources/experience.
      - More likely member: it'll be a staff member who already has this experience/time/connections.
  - Todd: there's been a lot of conversation about WHY we're doing CAC revisions. What are you hearing from above- from upper leadership?
    - Upper leadership is engaged in this process and wants this to be a robust revision process:
    - VT Advantage + Global Distinction speak to the need to prioritize this.
      - History of VTES
- Announcements [GAs]
  - VT Bee Campus
    - Apr 23 – VT Bee Day
  - Campus Waste to Zero Waste
    - 8-week long competition
  - Freezer Challenge

- Earth Week Update
  - Apr 1 - Deadline to submit an event to Emily

## **6. Adjournment**

There being no further business, the meeting adjourned at 2:59 pm.



Climate Action, Sustainability, and Energy Committee

**March 25th, 2024 – 2:00 PM**





*Please Use Poll Everywhere to Sign in for Attendance!*

*(detailed instructions are in the chat box and were also sent out via email)  
All attendees- members, proxies, and guests **affiliated with VT** should sign in*

## **Participating on Your Phone or Tablet**

### **Using a QR to Participate on Poll Everywhere**

1. Open camera app on your phone
2. Place QR code in frame but DO NOT take a photo
3. Focus shot until yellow pollev.com indicator appears



4. Tap QR code on screen to open Poll Everywhere

[Pollev.com/kristinacook711](https://Pollev.com/kristinacook711)

To participate on your computer:

1. **Open web browser and enter web address provided to go to Poll Everywhere**
2. **Enter your VT email in the text box and select “next”**
3. **Select “Log in with Virginia Tech University Governance”**
4. **Sign in with VT SSO and complete two-factor authentication**
5. **Select “Join Presentation”**



## Agenda

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- Mingle Time
- Welcome, Opening Remarks, and Membership Updates
- Approval of Proposed Agenda (Poll Everywhere)
- Meeting minutes: Electronic Vote Results
- Business
  - 2023-2024 Green RFPs
  - VT GHG Emissions Presentation
  - Subcommittees Reviews of CAC Goals and 2025 CAC Revisions and Timeline
- Announcements
- Open Discussion



## 2023-2024 Green RFPs



# 2023-2024 Green RFP Process and Timeline

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<u>DATE</u>	<u>ACTIVITY</u>
Nov 11	Green RFP 2023-24 announcement
Dec 11	Proposal deadline to sustainability office
Dec 15	Sustainability office coordinates review with subject matter experts
Jan 22	CASEC Subcommittee to review & prioritize proposals
Feb 26	Subcommittee presents recommendations to CASEC <u>for approval</u>
<b>March</b>	<b>CASEC presents proposals to the Office of Budget &amp; Financial Planning</b>
Mar/Apr	OBFP convenes Budget Review Committee- identifies funding sources
June/July	Select proposals approved - implementation initiated

A scenic view of a lake surrounded by lush green trees, with a white rectangular box in the center containing the title text.

# VT GHG Emissions Presentation

# Virginia Tech GHG Emissions Trends & Goals



# Virginia Tech GHG Emissions Scope & Boundaries

Scope Boundaries	Scope Type	Past Scope	2019 Scope
Coal (steam plant)	1	In	In
Oil (steam plant)	1	In	In
Natural Gas (steam plant)	1	In	In
Natural Gas (buildings)	1	In	In
Fleet Vehicles (Gasoline and Diesel)	1	In	In
Maintenance/Landscape Vehicles	1	In	In
Aviation Fuel (university planes)	1	In	In
Diesel for Generators	1	Out	Out
Refrigerant Management	1	Out	Out
Purchased Electricity	2	In	In
Purchased Electricity T&D losses	3	Out	In
Upstream Natural Gas Drilling/Distribution	3	Out	In
Solid Waste	3	In	In
Wastewater	3	In	In
Water	3	In	In
Faculty/Staff/Student Commute	3	In	In
University Bus System	3	Out	In
Faculty/Staff Business Travel (airlines)	3	Out	In
Dining Hall Food	3	Out	Out*
Compost/Landfill/Recycling	3	Out	In
Agriculture Operations (fuel and livestock)	3	Out	In
Agriculture/forest land use	3	Out	In

\*Planned for 2020 assessment

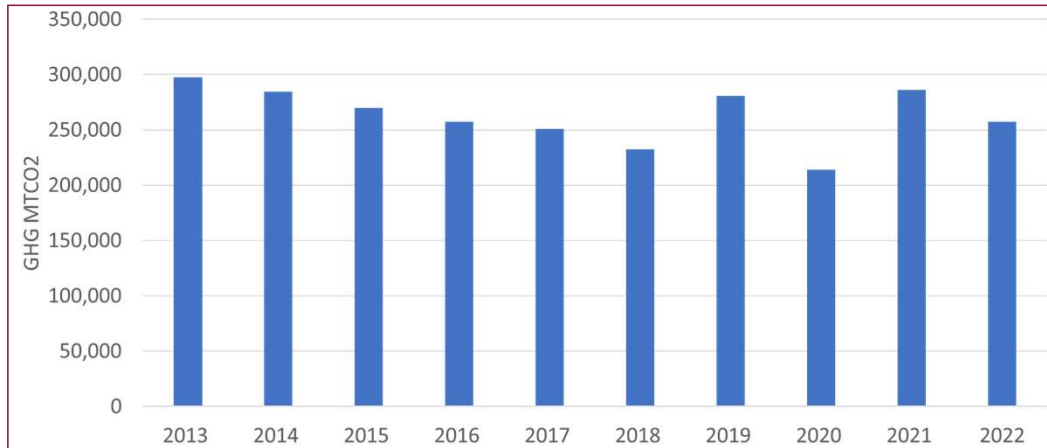
Table 2. Comparison of previous and new (2019) scope elements

Scope Boundaries	Past Scope	2019 Scope
Main Campus	In	In
Athletic Facilities	In	In
University Airport	In	In
Agricultural Facilities	In	In
Foundry	In	In
Architectural Research Building	In	In
International Campus Sites	Out	Out
Virginia Tech Carilion School of Medicine	Out	Out
Leased and Foundation Properties/Buildings	Out	In
Fralin Biomedical Research Institute at VTC	Out	Out
Virginia Tech Roanoke Center	Out	Out
Virginia Tech Foundation	Out	Out
Hotel Roanoke and Conference Center	Out	Out
Agricultural Research Extension Centers (ARECS)	Out	Out

Table 1. Comparison of previous and new (2019) geographical scope boundaries

\*Dining Hall GHG emissions are part of the 2020 CAC Scope, but have not yet been calculated due to the “big data” scale of the data analysis

# Virginia Tech GHG Emissions By Year & Scope



- **Scope 1 – Direct University Emissions**

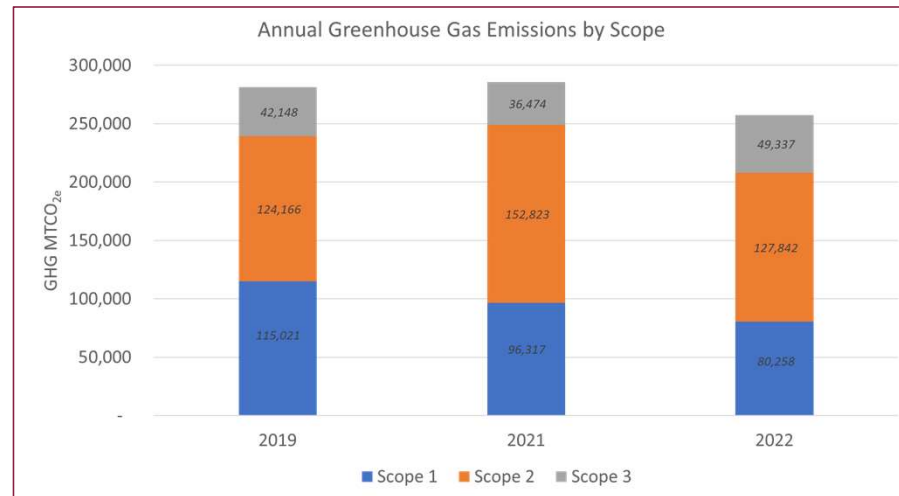
- Power Plant Natural Gas and Oil
- Campus fleet and bus fuels
- Animal and fertilizer direct emissions

- **Scope 2 – Utility Emissions**

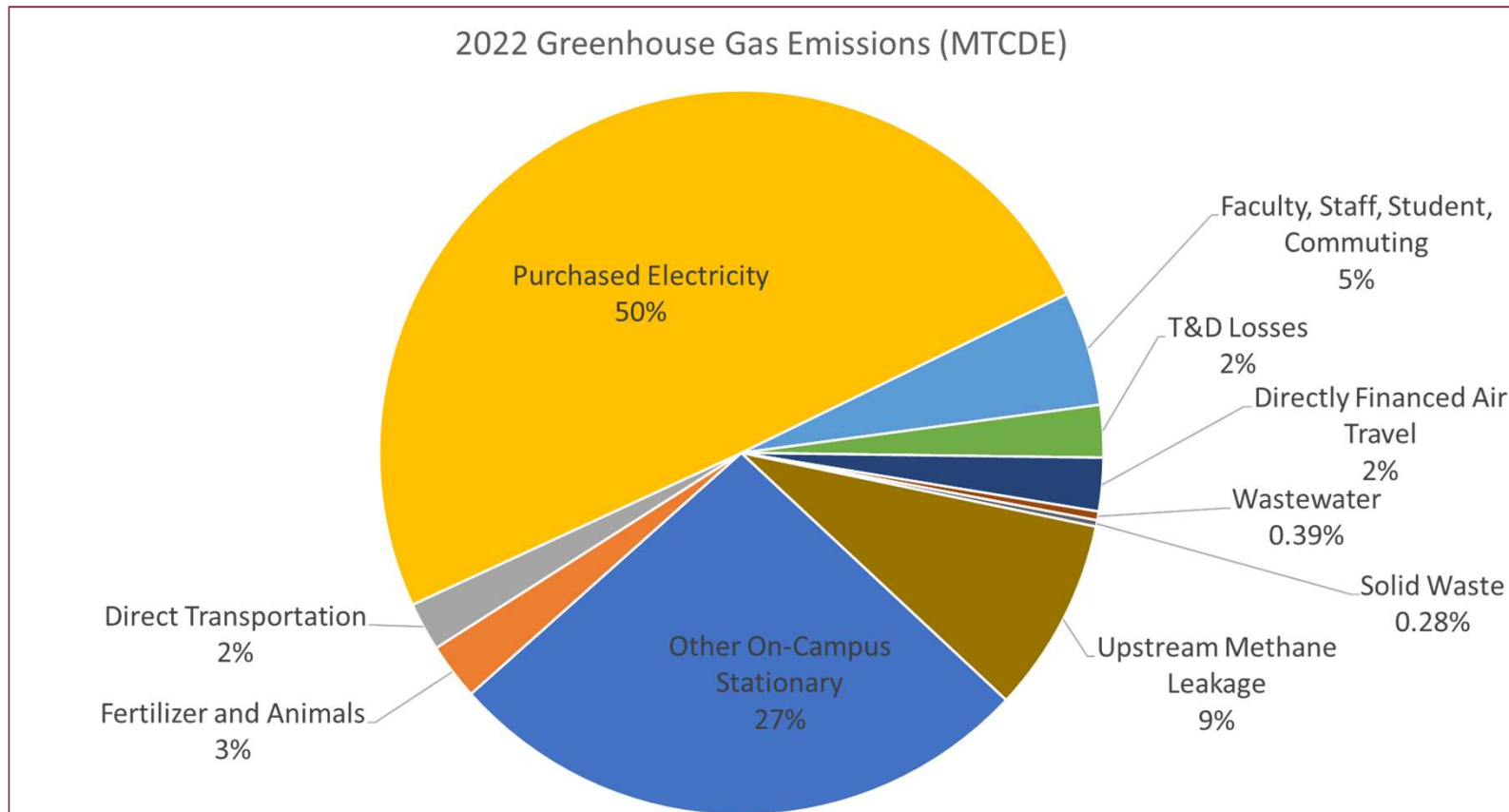
- Purchased electricity from APCO Utility

- **Scope 3 – Ancillary Emissions**

- Faculty, staff, student commuting fuels
- Faculty and staff air travel (some)
- Electricity Transmission & Distribution Losses
- Natural gas (methane) upstream leakage
- Solid Waste and Wastewater emissions



# Virginia Tech GHG Emissions Distribution

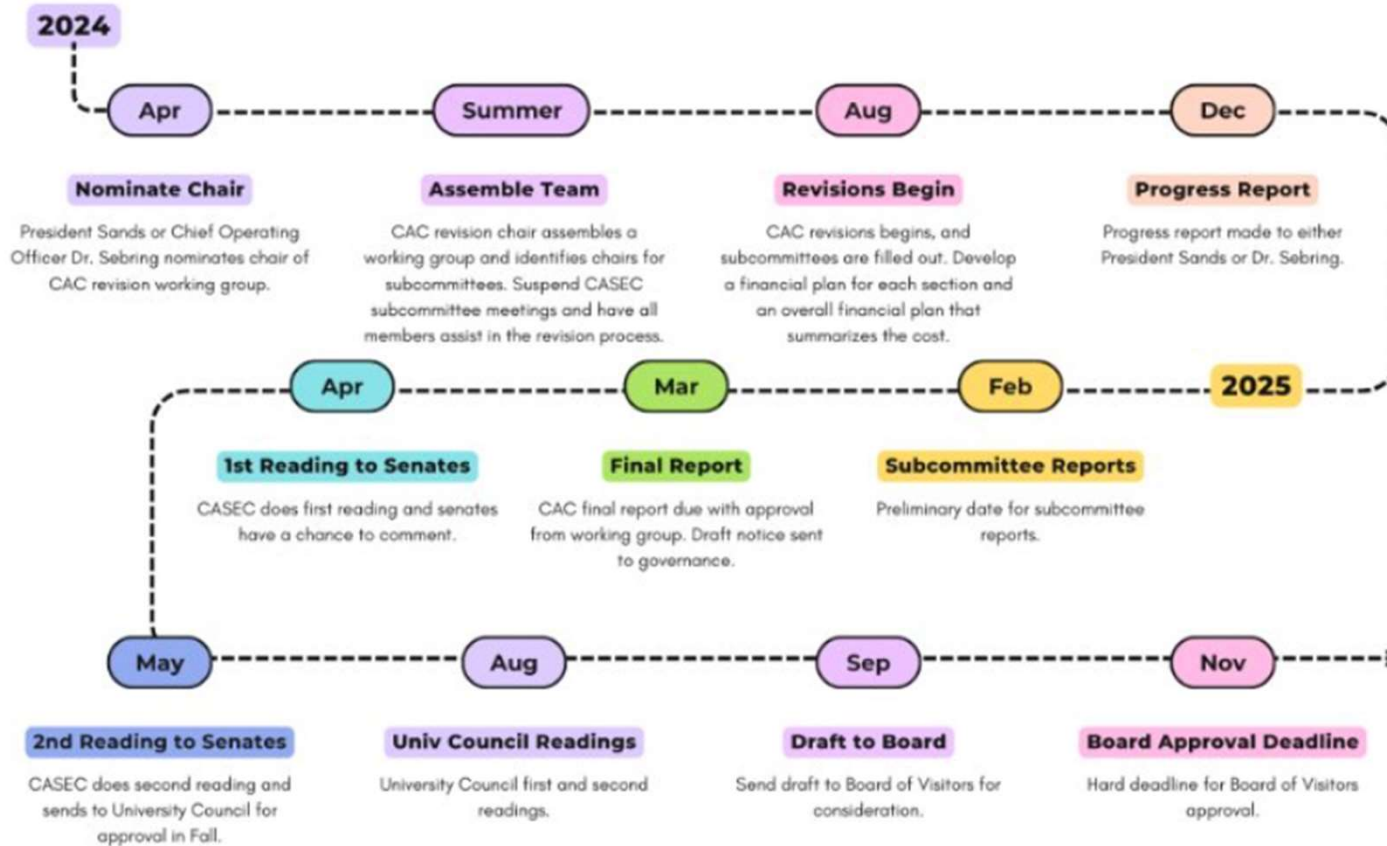


A scenic view of a lake surrounded by lush green trees, with a white text box overlaid in the center. The text box contains the title of the document.

Subcommittee Reviews of CAC Goals  
& 2025 CAC Goals Revisions Overview

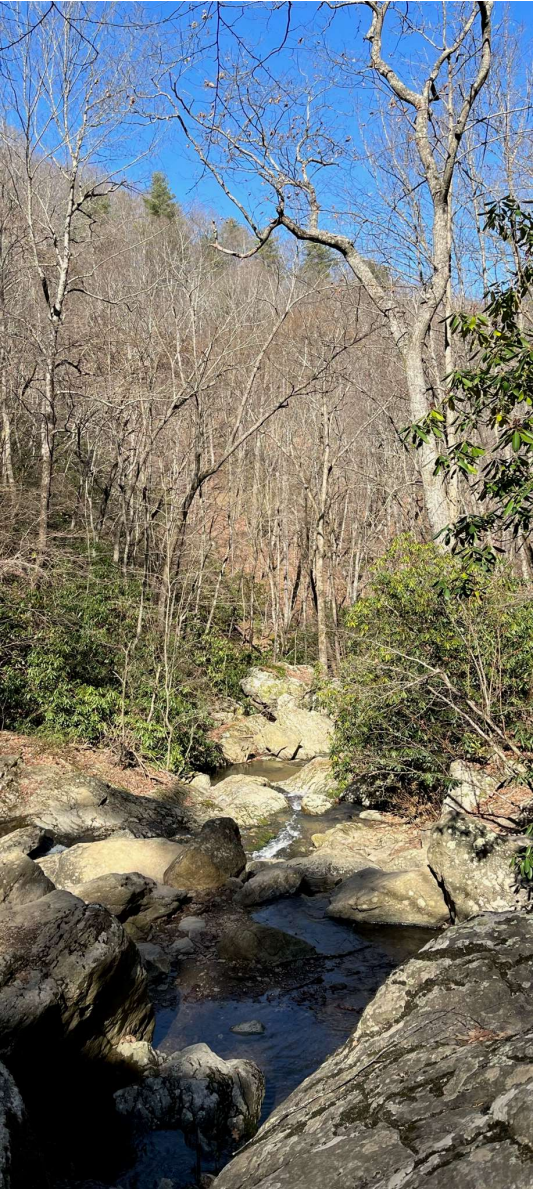
# Climate Action Commitment Revisions

2024-2025 | 19 Months



Created Feb 2024





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- **Announcements**
- Open Discussion





# Announcements



## VT's Bee Campus

- We are ready to take volunteers for year-round habitat maintenance! For more information please contact Kristina Cook who leads the Habitat Creation and Maintenance Team.
- VT's Bee day is April 23rd. Projects include converting some annual beds into perennials which saves VT money and is beneficial to pollinators!



**Update:**

- **Competition is complete!**
- **Most recent tabulations:**
- **Diversion: 70th place**
- **Per capita: 68th place**

# **FREEZER CHALLENGE**

Interested Faculty,  
Staff, and Students can  
reach out to Yugasha  
Bakshi for more  
information:  
[yugashabakshi@vt.edu](mailto:yugashabakshi@vt.edu)



## **WHAT?**

International competition to  
promote best practices in cold  
storage management.

## **WHY?**

Reduce your lab's  
environmental impact!

## **WHEN?**

Get credit for your actions till  
July 31st 2024.

For more information write to [sustainability@vt.edu](mailto:sustainability@vt.edu)



**2024 Results for the Campus  
Planning, Infrastructure, and  
Facilities (CPIF) Sustainability  
Fund:  
\$960**

A scenic view of a lake surrounded by lush green trees, with a white rectangular box in the center containing the text "Earth Week Update". The background shows a calm body of water reflecting the sky, framed by dense green foliage and tree branches. The text is centered in a blue font.

## Earth Week Update

# Earth Week

- April 18-24 (split week!)
  - Events from April 15-26
- Planned in partnership with Environmental Coalition
  - Student Earth Week planner is Jordyn Lewis
- 15 events on the calendar so far
- Partnering with students, staff, faculty, and community members
- Submit your event: <https://forms.office.com/r/rzZhEX5KEY>
  - Deadline to submit your event is Monday, April 1



## APRIL 2024

SUN	MON	TUE	WED	THU	FRI	SAT
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18 ★	19 ★	20 ★
21	22 ★	23 ★	24 ★	25	26	27
28	29	30	1	2	3	4



# Open Discussion

- **2023-2024 Green RFPs**
- **VT GHG Emissions Presentation**
- **Subcommittees Reviews of CAC Goals and 2025 CAC Revisions and Timeline**

**Next Meeting:**

**April 29th, 2024  
2:00 p.m. via Zoom**

