Climate Action, Sustainability, and Energy Committee Meeting Minutes
September 25th, 2023
2:00pm
Zoom: https://virginiatech.zoom.us/j/89065651200?from=addon

Present: Mary-Ann Ibeziako (chair), Autumn Timpano, Benjamin Thomas, Luke Goodman, Erin Poff, Josh Clemons, Pat Donovan, Teresa Sweeney, Lam Vuong for Liza Morris, Cameron Hadley, Jamie King, Carrie Cox, Paul Winistorfer, Nancy Meacham for Ken Miller, Kendra Paisley, Annie Hassall Lawrence, Mae Hey, Emily Williams, Todd Schenk, Nam Nguyen, Jon Clark Teglas for Chris Kiwus, Matt Stolte, Wesley Gwaltney, Zhuo Fu,

Absent: Thomas Dalzell (no notice given), Claudia Budzyn (no notice given), Izzy Largen, Katie Smith, Gia Ha

Guests: Kristina Cook, Nathan King, Jack Leff, Ron Meyers, Paul Ely, Julianne Cerato, Enric Geli, Eli Meyer, Gillian Eastwood, Wendy Halsey, John Chermak, Shannon Maner, Marcy Schnitzer, Nick Quint, Brenda van Gelder, Durelle Scott, Chen-Ching Liu, Adia Long, Will Heltzel, Jamie Lau, Chris Tedder, Carol Franco, Patrick Hilt, Steve Durfee, Ted Faulkner, Ann Raridon, Simona Fried, Tripp Shealy, Erik Olsen, Charul Agrawal, Carol Davis, Barbara Wise,

Mary-Ann Ibeziako 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

Announcement of new and returning members

3. Presentation

Nathan King (Campus Sustainability Manager), Mary-Ann Ibeziako (AVP Sustainability and Chief Sustainability Officer), and Jack Leff (Climate Fellow) gave presentations that covered all agenda items for the committee meeting (attached).

4. Open Discussion and Announcements

- Meeting presentations went up to end time of meeting. Members and guests were encouraged to send any questions or comments to the Office of Sustainability.

6. Adjournment

There being no further business, a motion was made and seconded to adjourn the meeting at 3:00 pm.

Climate Action, Sustainability, and Energy Committee

September 25, 2023 – 2:00 PM

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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- 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

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”**

Welcome New and Returning Committee Members!

New Members (9)	Returning Members (20)	
Autumn Timpano	Annie Hassall Lawrence	Mae Hey
Benjamin Thomas	Chris Kiwus	Mary-Ann Ibeziako (Chair)
Cameron Hadley	Claudia Budzyn	Matt Stolte
Carrie Cox	Emily Williams	Nam Nguyen
Erin Poff	Gia Ha	Pat Donovan
Jamie King	Izzy Largen	Paul Winistorfer
Joshua Clemons	Katie Smith	Teresa Sweeney
Kendra Paisley	Ken Miller	Todd Schenk
Thomas Dalzell	Liza Morris	Wesley Gwaltney
	Luke Goodman	Zhuo Fu

2 more appointments coming soon!

Agenda

- Welcome, Opening Remarks, and Membership Updates
- Approval of Proposed Agenda (Poll Everywhere)
- Charge, Ground Rules, and Input
- Old Business
  - Zero Waste Consultant Update
- New Business
  - 2023 VT Climate Action, Sustainability, and Energy Progress Update
  - Green RFP Overview
- Open Discussion

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Charge

To provide guidance to the university administration on the implementation of the university's Climate Action Commitment and opportunities to enhance Virginia Tech's pursuit of environmental quality and social sustainability. The committee makes recommendations regarding the application of policies, infrastructural and operational changes, educational strategies and modifications, and other steps intended to foster broad engagement with the university's environmental goals. The committee oversees subcommittees that each carry out aspects of the committee's charge.

Reports to: University Council Cabinet.

Governance Protocols

- Please assign a proxy for meetings you cannot attend (notify Kristina Cook of your expected absence ahead of time).

- Please do not vote on items if you are not a member, but we are glad you are here!

- We follow Robert’s Rules of Order during meetings.

We Would Like Your Input!

- Agenda ideas
- Guest speaker suggestions
- Colleagues/Peers to add to meeting invites and subcommittees (list of subcommittees to the right in blue)

- **Agriculture, Forestry, and Land Use Operations (Arboretum Committee)**
- **CALL (Climate Action Living Laboratory)**
- **Carbon-Neutral Commuting & Carbon-Neutral Fleet**
- **Carbon Offset & Management**
- **Climate Justice**
- **Energy (New!)**
- **GHG Inventory**
- **Sustainable Financing (Under Development!)**
- **Sustainable Campus Culture, Engagement, & Sustainable Choices**
- **VT-Blacksburg Sustainability Collaboration (Sustainable Blacksburg)**
- **Zero Waste**

Zero Waste:
Composting Facility Development

Office of Sustainability

DIVISION OF CAMPUS PLANNING,
INFRASTRUCTURE, AND FACILITIES
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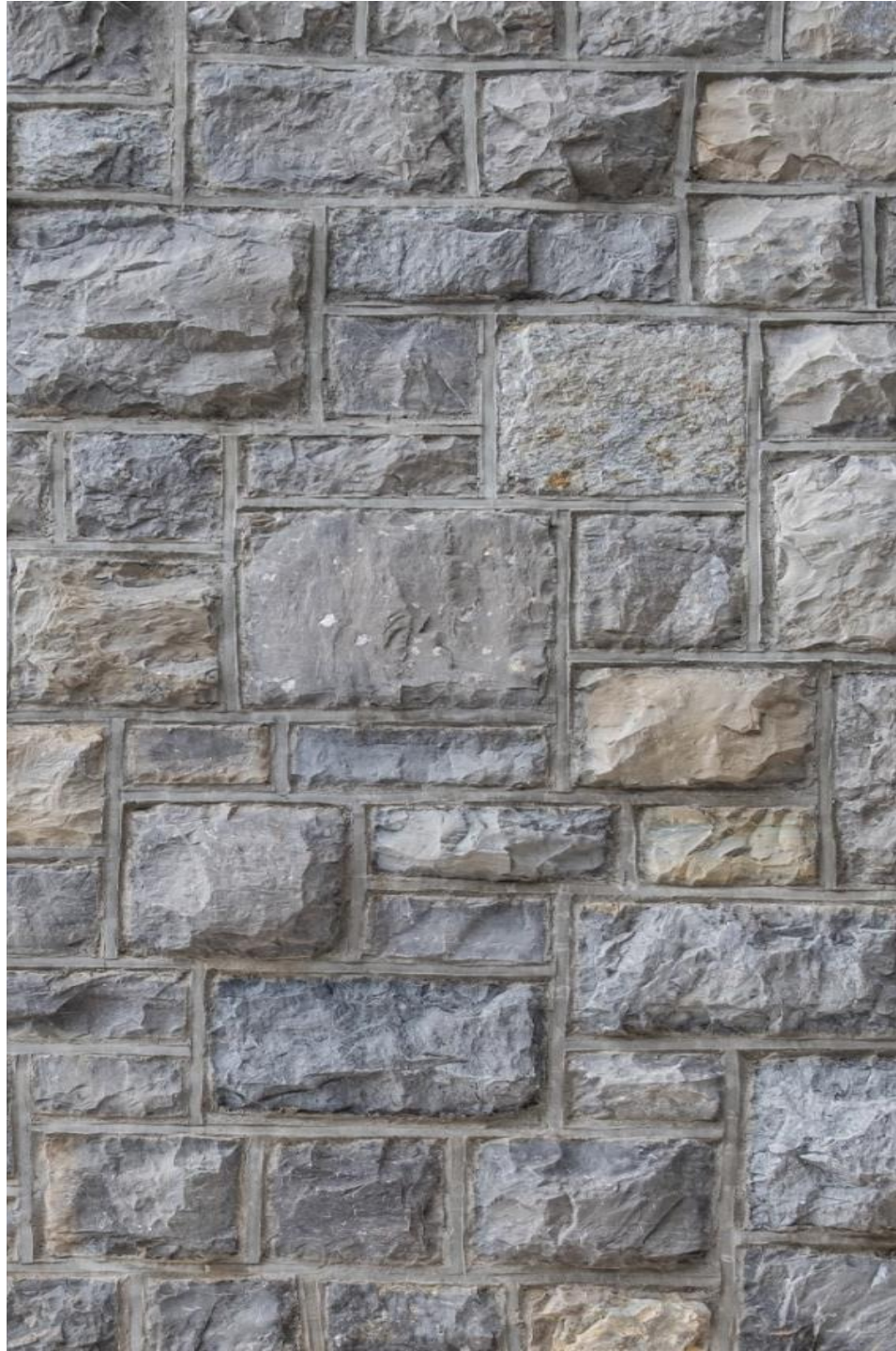

Waste Consultant Study

Reduction In Motion

making sustainability possible

- Virginia Tech hired Reduction in Motion to provide a high level review of our campus waste stream and composting plan
- Funded as part of our CAC zero waste goal
- Stakeholder meetings began in late September 2022
  - CPIF, CALS, DSA, Athletics, etc
- Reduction in Motion visited campus twice to perform assessments on our waste infrastructure, processes, personnel, and policies

- Final report was provided in July 2023

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Reduction In Motion
making sustainability possible

- Initial Recommendations:

1. Improve zero waste sub-committee **planning and reporting**.

2. Develop one consistent zero waste **communications plan** for the entire campus to follow.

3. Establish **equipment and communication standards** for all outdoor waste holding areas used by students and staff.

4. Use the zero waste communications plan to first improve **front-of-house & back-of-house recycling and composting** from dining services.

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Reduction In Motion
making sustainability possible

- Initial Recommendations (continued):

5. Establish a **zero waste events sub-committee** dedicated to developing tools and projects to reduce waste and increase waste diversion at small and large events of all types on campus.

6. Establish a **zero waste residents sub-committee** dedicated to developing tools and projects to educate all residents on waste separation guidelines and empower residents to be zero waste champions.

7. Use the zero waste committee to facilitate the steps necessary to produce a development and operating proposal for an **on-site composting facility at Kentland Farm**.

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Composting Site

Kentland Farm

- Acquired by VT in 1986
- Kentland Farm historic district is 350 acres
- Kentland supports dairy and agricultural teaching/research

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Composting at Virginia Tech

- **History**
  - We have been discussing the development of a composting for nearly 30 years.
  - The most recent plan was developed in 2018, but never moved beyond the initial business case.
  - Reduction in Motion and Veteran Compost were called on to review and revise the 2018 study and create an actionable implementation plan.

Composting at Virginia Tech

- **Strategic Vision**
  - Composting facility aligns with the university's land grant status and focus on agriculture/extension.
    - Other land grant universities have composting (PSU, etc)
  - Composting facility aligns with our CAC goals:
    - Goals 7, 9, 10, 12 – zero waste
  - Few composting facility options in the region – Only 2 DEQ compliant composting facilities west of Lynchburg and the nearest, Poplar Manor Enterprise (PME) in Riner, went out of business in 2015.

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Composting at Virginia Tech

- **Opportunities and Challenges:**
  - DSA currently pays to send ~600 tons of food waste to Royal Oak Farms (Evington, VA = 75 miles away)
  - Athletics generates ~70 tons of food waste from events that was being landfilled prior to this past year
  - CALS is losing agriculture land and land can't be used for manure applications ~500+ acres
  - VT can't store all the manure it produces
  - VT would have to purchase 300 – 500 acres in the next 5-10 years to continue spreading manure

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Composting at Virginia Tech

- **Opportunities and Challenges:**
  - Abundant partnership opportunities to divert materials:
    - Facilities - yard waste
    - Vet Med – animal bedding
    - Food Science – food prep waste
    - Town of Blacksburg – yard waste
  - Who owns and operates?
    - Facilities or CALS or other?

Composting at Virginia Tech

- **Process:**
  - Engage all stakeholders to understand waste flows
  - Evaluate feedstocks (carbon vs nitrogen)
  - Assess the proposed site
  - Determine best composting method
  - Prepare a site design
  - Engage with Virginia DEQ to understand the permitting process

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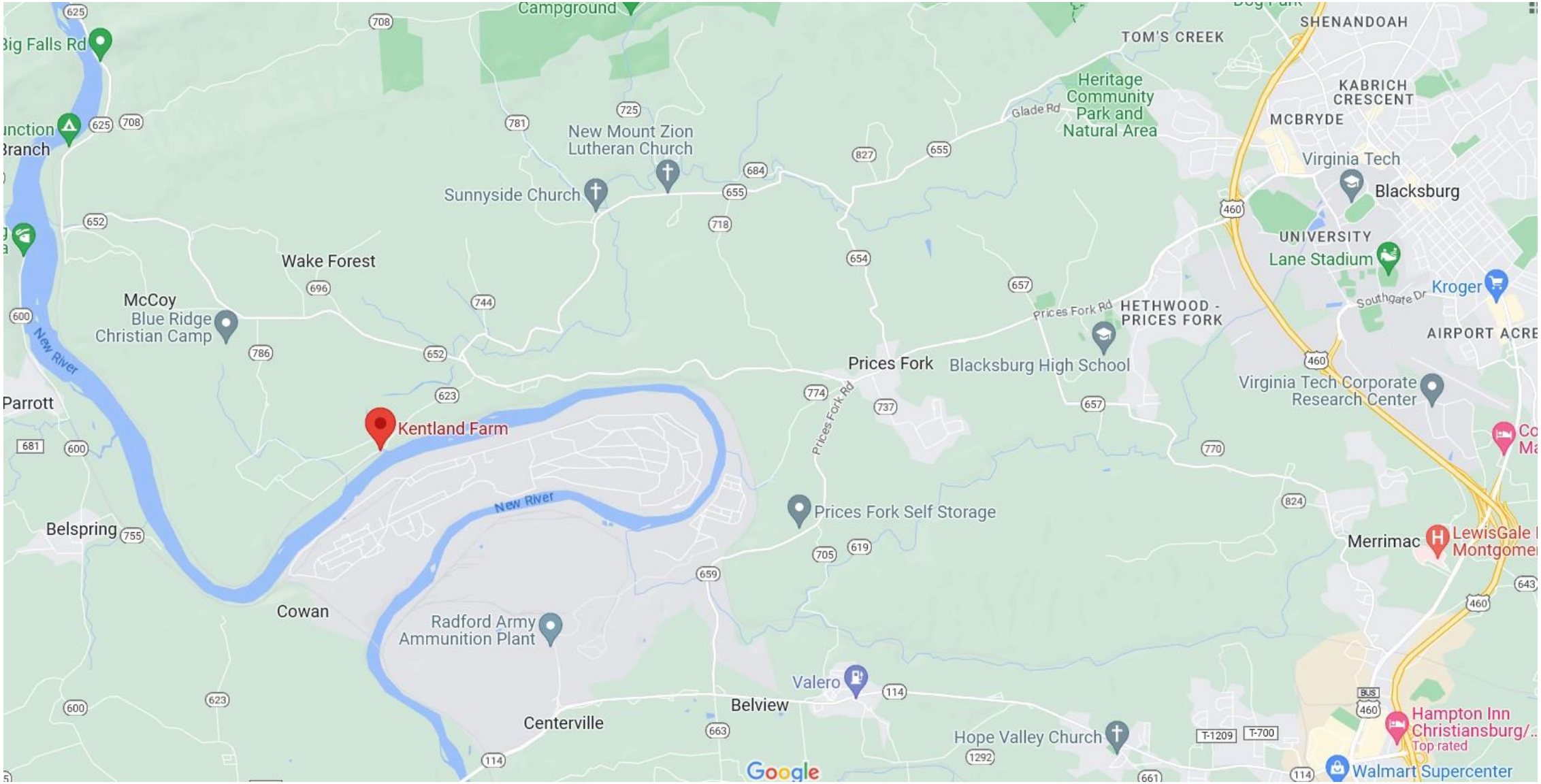
Composting at Virginia Tech

- **Site Overview - Kentland Farm**



Composting at Virginia Tech

- **Site Overview - Kentland Farm**

Composting at Virginia Tech

- **Site Overview - Kentland Farm - Dairy East**

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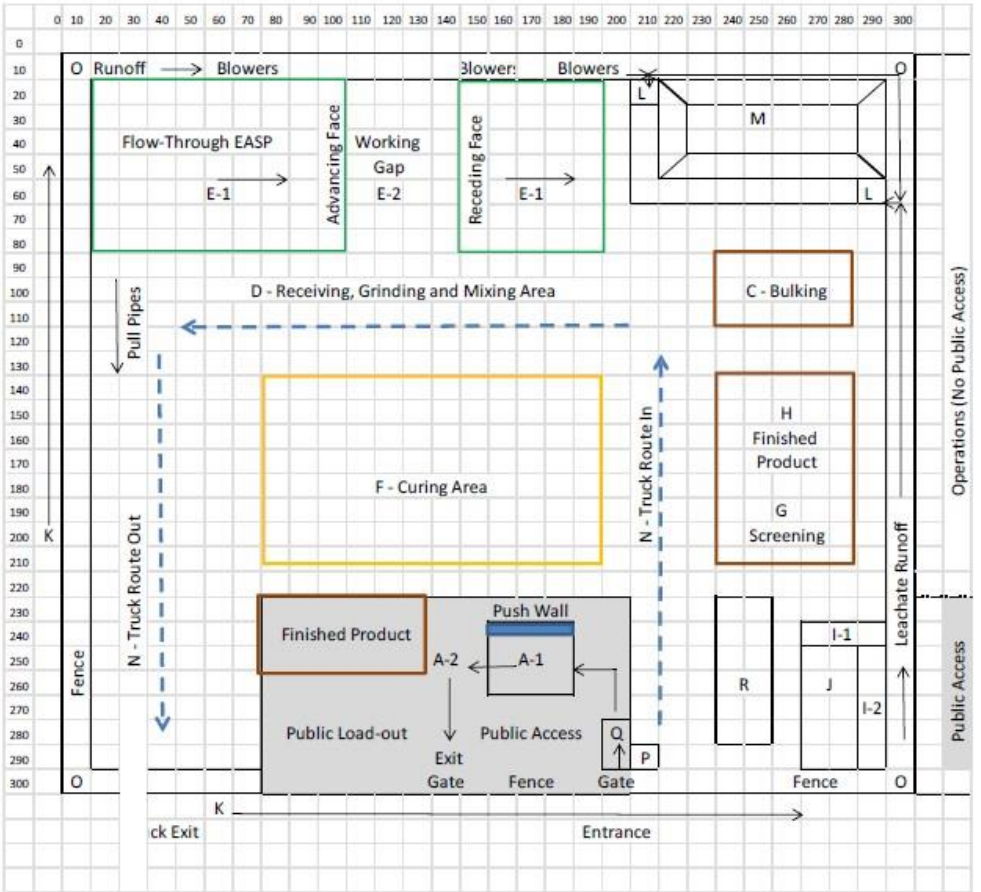
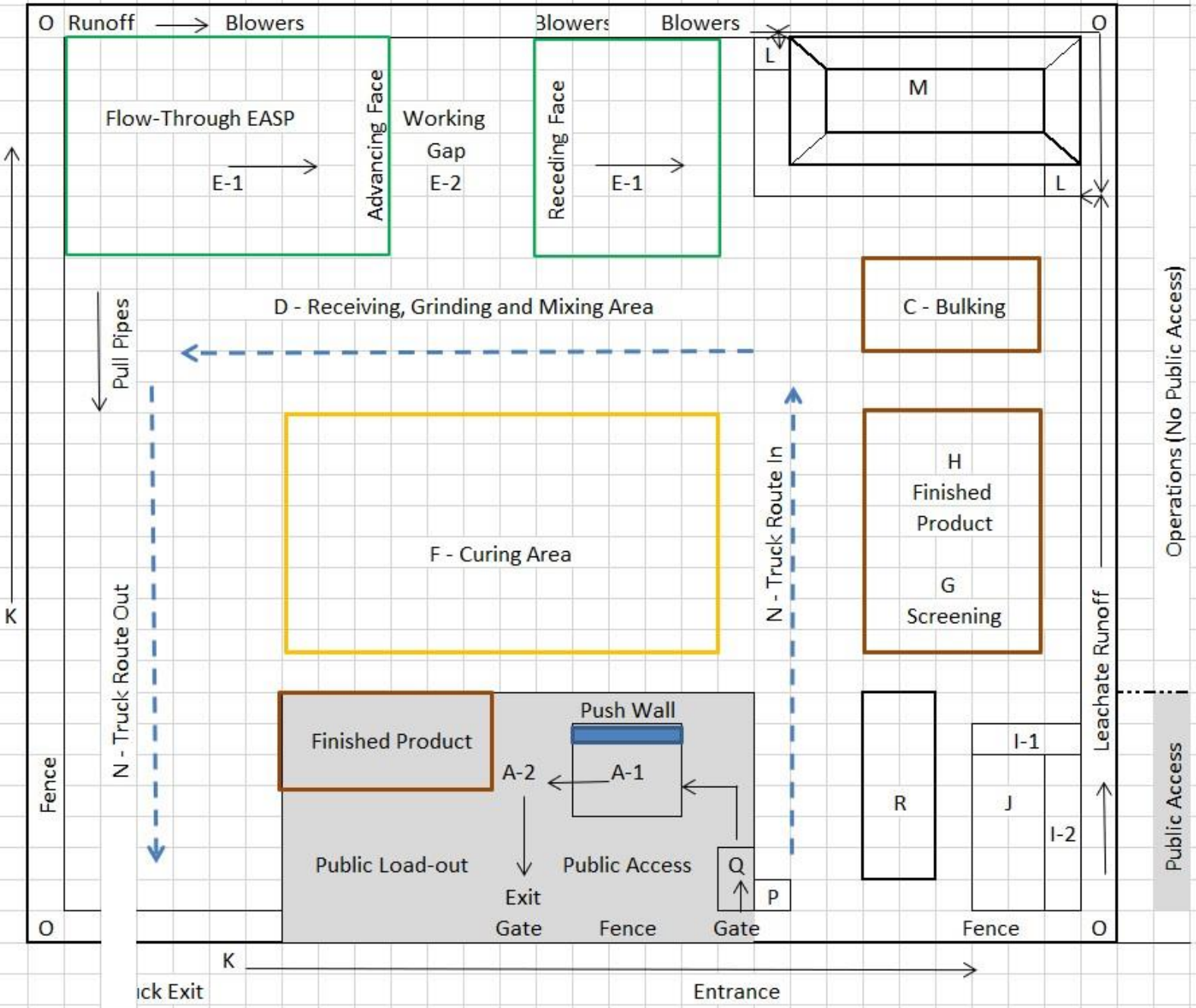
Composting at Virginia Tech

Figure ES-1. Windrow and ASP Composting

Kentlands Compost Site Planning



	Area Description
A-1	Receiving - Public Access
A-2	Load Out - Public Access
B	Receiving - Commercial Access
C	Bulking Agent / Screen Overs
D	Receiving, Grinding and Mixing
E-1	Active Composting
E-2	Working Gap
F	Curing
G	Screening - Continuous Flow Through
H	Product Storage
I-1	Office, Control Systems, Lab and 1st Aid
I-2	Employee Parking
J	Equipment Maintenance & Parts Storage
K	Stormwater Run-on Prevention
L	Leachate Sedimentation (Pre-Treatment)
M	Leachate Retention
N	Roads and Access-ways
O	Site Security (Fencing, Cameras)
P	Scale House
Q	Scales
R	Bin Washing and Storage Area



Composting at Virginia Tech

Aerated Static Pile (ASP) Composting w/ solar powered blowers

- Potential for off-grid or other innovation?

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Composting at Virginia Tech

- **Future – Next Steps**
  - Establish a working group composed of executive leadership and other key stakeholders to move the process forward.
    - Get buy-in on the business case and establish potential funding sources
  - Create an implementation plan
    - Planning and approval of site development and operations
    - Work with DEQ on the permitting process
  - Working group should consider the following:
    - Visit other schools with composting (Penn State, etc) to get feedback and lessons learned

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Any Questions?

Agenda

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- Old Business
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- **New Business**
  - 2023 VT Climate Action, Sustainability, and Energy Progress Update
  - Green RFP Overview
- Announcements and Open Discussion

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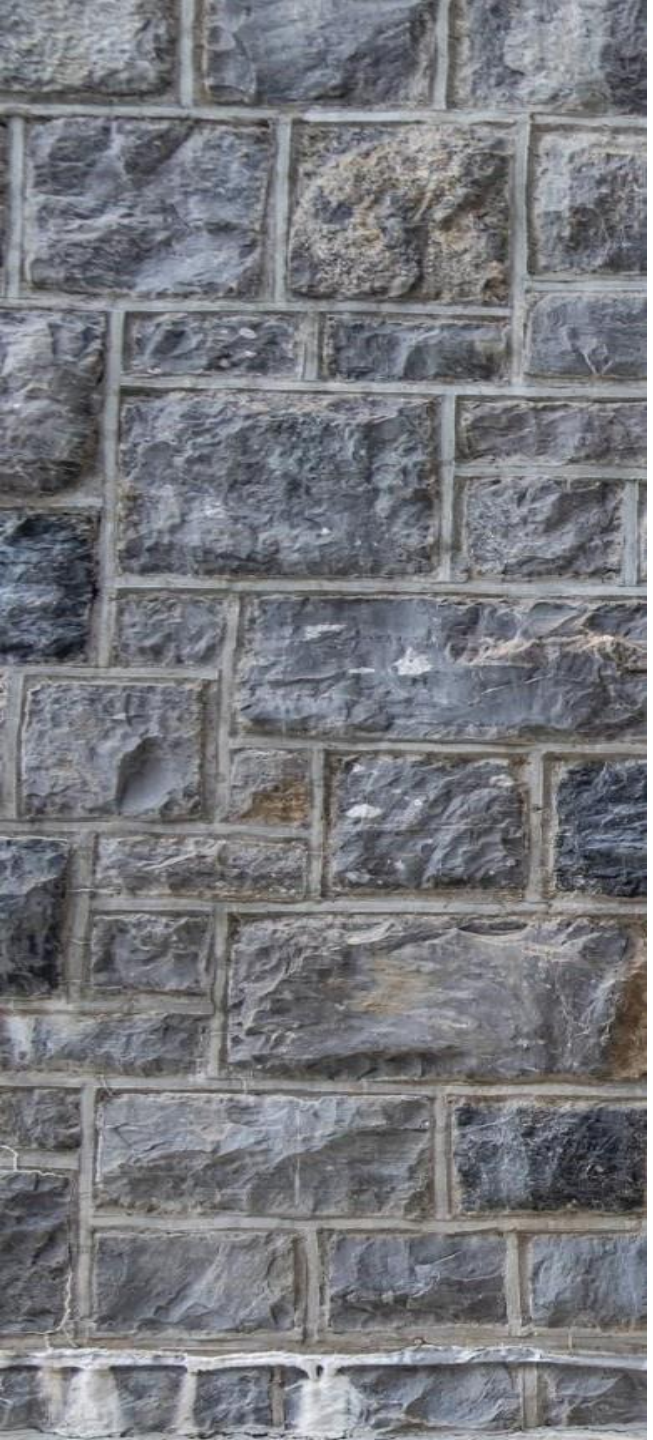

Update on Climate Action, Sustainability, and Energy Initiatives

Mary-Ann Ibeziako

Assistant Vice President Sustainability and Chief Sustainability Officer

2023 Progress

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Sustainability Annual Report Highlights

- Primary vehicle for reporting progress on Climate Action Commitment and sustainability goals
- 14 consecutive years of annual reports are available on our website at https://www.facilities.vt.edu/sustainability/sustainability-reports.html
- Developed in partnership with 50 student, campus, and community organizations

Awards and Recognition

- STARS – Gold Rating – Highest score in Virginia and the ACC
- 2023 Made List of Best Universities for Commuters
- Silver ranking as a Bicycle Friendly University from the League of American Bicyclists from 2019 to 2023
- 2023 Tree Campus Higher Education – 15th year
- Bee Campus USA – 2nd year
- Governor's Environmental Excellence Awards – 12 received to date
- Times Higher Education (THE) Impact Rankings – 92nd in the world and 5th in the US

Climate Action Commitment Progress to Date

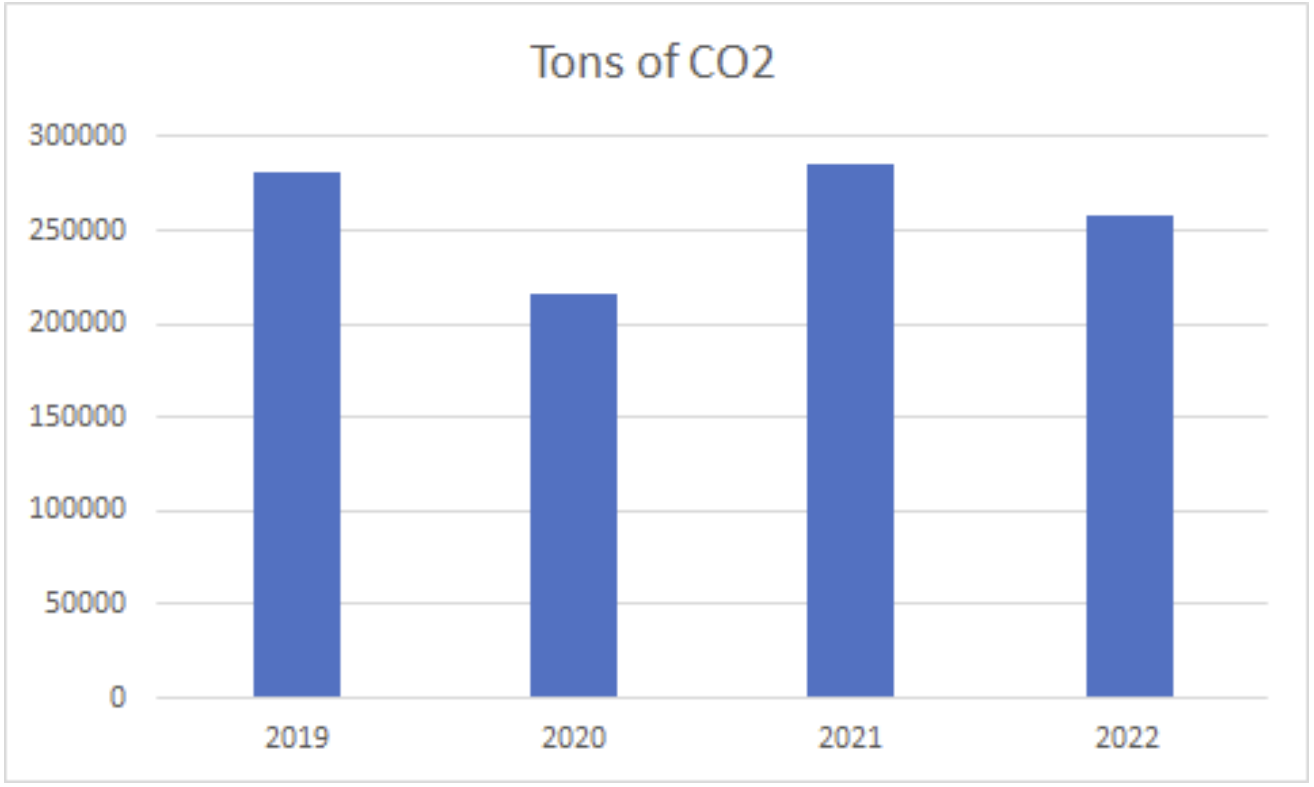
The 2020 Virginia Tech Climate Action Commitment, was approved by the BOV in March 2021 and sets the university on a path to carbon neutrality by 2030.

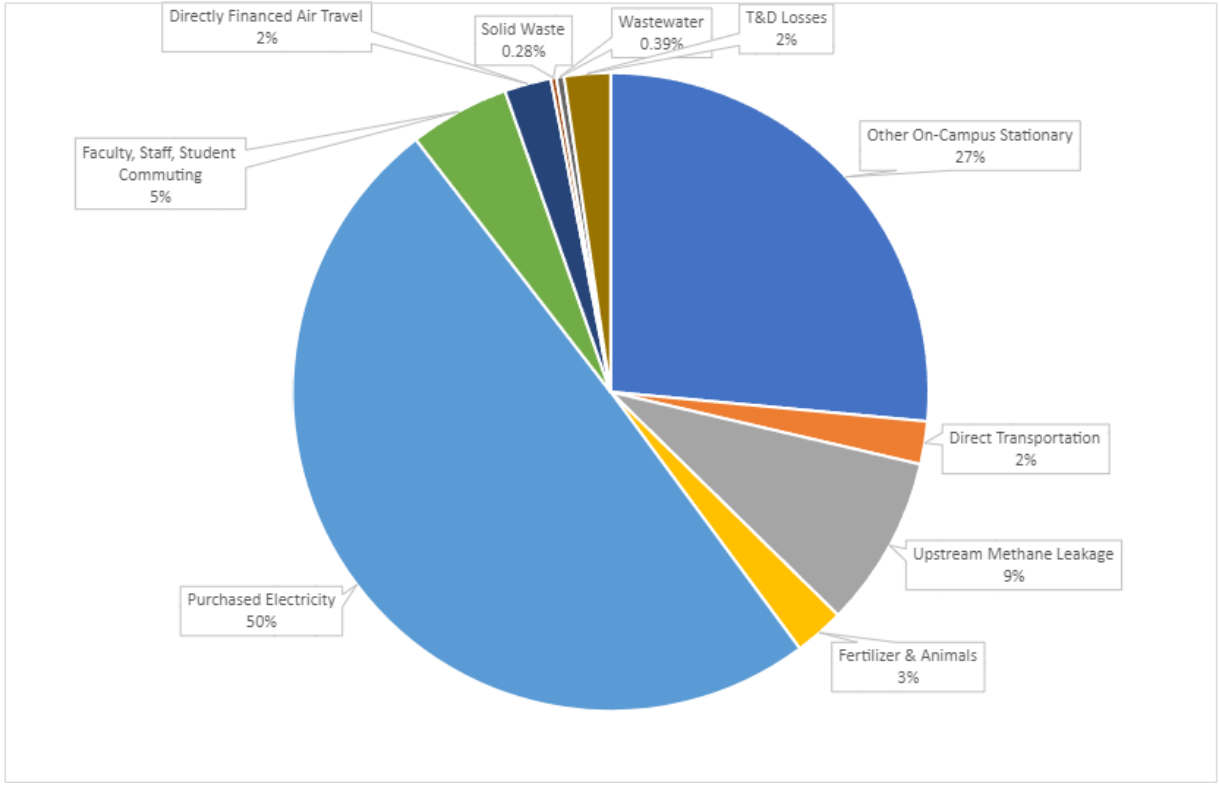
Other recommended actions in the commitment include:

- Achieve 100% renewable electricity by 2030
- Develop innovative financing mechanisms to achieve Climate Action Commitment goals
- Achieve a zero-waste campus by 2030
- Reduce building energy consumption
- Establish the Climate Action Living Laboratory to enhance educational opportunities

Shortly after the BOV approved the 2020 Climate Action Commitment, a Working Group was formed to develop implementation guidelines. The CAC Implementation Guidelines are delivering detailed pathways for achieving each of the 15 tenets in the 2020 commitment.

Annual CO_2 and GHG Emissions





When compared to the baseline year of 2019, there was an 8.5 percent decrease in total emissions.

Progress on Achieving 100% Renewable Electricity by 2030

- SunTribe will begin the installation of 1.3 MW of rooftop solar in the Fall of 2023 and operational by Fall 2024.
- VTES put out RFP for our energy purchasing contract, which will include a larger portfolio of renewable energy
- During summer of 2023, began a feasibility study into agrovoltaics potential of Catawba farm site that concluded and put forward a public report in October 2023

Innovative Financing Mechanisms to Achieve Climate Action Commitment Goals

- 133 approved Green RFPs at over $2.08 million
- Climate Action Fellow applied for over $100 million of support in federal infrastructure grant programs
- CPIF Sustainability Foundation fund established
- Giving Day participation
- Continuing to implement $6 million from Energy Action Plan 6

Progress on Achieving a Zero Waste Campus by 2030

- Waste consultant report was produced and shared internally with team
- Student Green RFP approved to continue successful battery recycling program
- Continued game day green team recycling program at home football games and piloted expansion to basketball
- Calendar Year 2022 Recycling Rate = 60%
- Calendar Year 2022 Waste Diversion Rate = 78%

Progress on Reducing Transportation Related GHG Emissions by 40% by 2030

- Construction of the Multimodal Transit Facility is underway and will create a hub for Blacksburg Transit by the Perry Street Parking Garage.
- EV charging stations located in the Squires parking lot have received 1000+ charging sessions from 417 unique vehicles since installation. A $1 million federal grant was submitted by the climate action fellow to add an additional 29 EV charging stations to campus.
- The Carbon Neutral Commuting and Carbon Neutral Fleet Task Force continued through the Climate Action, Sustainability, & Energy Committee.

Progress on Reducing Building Energy Consumption

- Campus-wide lighting audit complete; campus-wide LED conversion underway
- Electricity consumption down by 7%
- Ramping up HVAC retro-commissioning and BAS modernization
- Chilled water plant and distribution system upgrades and optimization
- LEED O+M Recertification Program – measurement for high-performance buildings
- Fume hood assessment completed in campus laboratory buildings; an investment could result in 4% annual campus energy reduction

Progress on Engagement

- Using Climate Action, Sustainability, and Energy (CASE) Committee task forces to move the program and policies forward that support the CAC implementation
  - Revising and expanding membership to include members of frontline communities and adding new subcommittees

- Continuing student engagement through Office of Sustainability programs and events

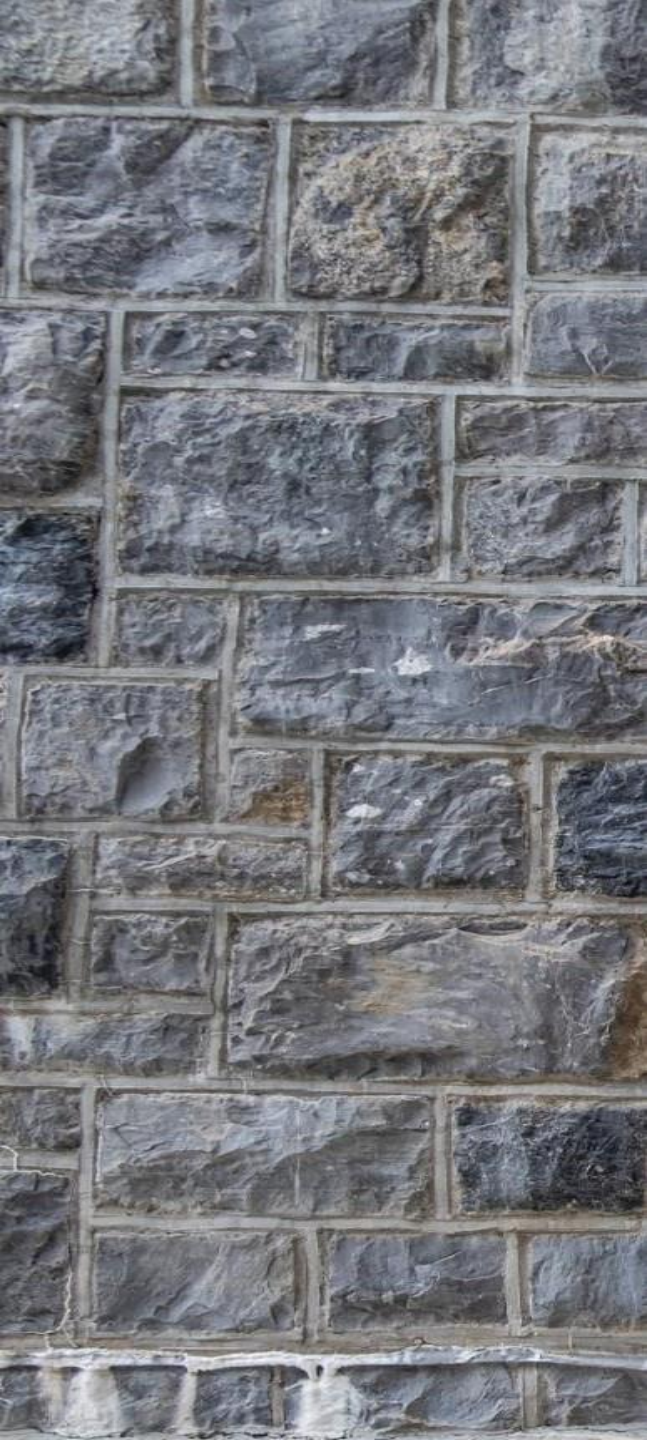
- Began the Utility Master Plan process and made substantial progress on our asset management plan.

- Climate action fellow expanded the Climate Action Living Lab (CALL) network and worked to formalize it.
- Piloted several projects to engage faculty and graduate students in CALL work
- Partnered with the Honor's College to pilot experiential education component to CALL
- Updated website and intake process to be more equitable and inclusive


GO LONG
LIVE GREEN
SAME DAY GREEN TEAM


INFORMATION DESK
NO TRASH
RECYCLE


BE AWARE, BE PREDICTABLE, BE A HOKIE.



Update on Green Request for Proposal Program

Jack Leff

Climate Fellow

2023 Proposed update

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Proposal Summary

After discussing the Green RFP program with the CASE team and rethinking how we center students throughout the process, we have decided that a 2-year timeline is in the best interests of the staff and students to ensure we can focus on community engagement as well as maintain the high level of implementation we've come to expect for funded programs.

This includes:

- Extending the application cycle to two years
- Putting students in charge of evaluating and ranking proposals
- Having CASE staff focus on implementation efforts and mentoring students

Proposed Timeline

Step	Start Date	End Date	Task
1.	August of AY23-24	September AY23-24	Green RFP subcommittee members will be appointed and an advertising plan developed alongside approving the application document
2.	October AY23-24	March AY24-25	Green RFP applications open up and are considered on a rolling basis
3.	October AY23-24	December AY23-24	Green RFP subcommittee members will meet to finalize review criteria for reviewing submissions
4.	January AY23-24	May AY23-24	Green RFP proposals will be ranked by students working with subject matter experts and a rough draft of submissions will be submitted to the CASE committee
5.	Summer 2024	August AY24-25	CASE staff will work with CPIF staff to determine project progress and implementation plans
6.	August AY24-25	September AY24-25	Students will reflect on the last year of Green RFP program and work on advertising plan for this academic year.
7.	February AY24-25	March AY24-25	Students will wrap up reviewing proposals as the window for applications closes at the end of March
8.	March AY24-25	April AY24-25	Students will prepare final report for CASE committee approval and present final list of recommendations to committee in April
9.	April AY24-25	May AY24-25	Students and CASE team members will take recommendations to budget office to solicit funding for projects and write up a reflection on the successes/challenges of the program
10.	May AY24-25	July 2025	CASE team will work with CPIF and budget to determine two year implementation plan for all approved projects
11.	July 2025	August AY25-26	Students will be notified about funded projects and website will be updated to include successful projects from the last two years
12.	August AY25-26	September AY25-26	Process repeats

Advantages

- More fiscal reliability in terms of project estimates
- Longer implementation lead time and more consistent schedule of delivery
- Student-focused projects rather than having staff prioritize
- Stronger mentorship for students and a higher capacity to evaluate more projects
- Can increase the scale of projects and project planning
- Staff team can shift to maintenance and implementation role so that implemented projects are well-maintained

Disadvantages

- Longer timeframe from proposal to implementation
- Requires ongoing maintenance of training materials and expert directories to ensure students are equip to prioritize projects
- Some students might not immediately see the results of their work while they’re enrolled and will have to visit campus after they graduate and stay engaged

Open Discussion

- Zero Waste Consultant Update
- 2023 VT Climate Action, Sustainability, and Energy Progress Update
- Green RFP Overview

Next Meeting: **October 23, 2023**
2:00 p.m. via Zoom

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