

Climate Action, Sustainability, and Energy Committee Meeting Minutes
October 24th, 2022
2:00pm

Zoom: <https://virginiatech.zoom.us/j/86569762896?from=addon>

Present: Jack Leff for Mary-Ann Ibeziako, Teresa Sweeney, Amy Hogan, Jeri Baker, Gwyneth Martin, Rob Lowe, Paul Ely, Rachel Kohl for Wesley Gwaltney, Jen Rainville for Zhuo Fu, Lilian Prins, Sally Shupe for Pat Donovan, Madison Betts, Todd Schenk, Nick Woods for Ken Miller, Kas Church, Nathaniel Humphreys, Rachel Maizel, Gia Ha, Brandon Hendricks, Scott Nachlis, Annie Hassall Lawrence, Matt Stolte, Dana Hawley, Rosalba Ledezma for Liza Morris, Paul Winistorfer

Absent: Chris Kiwus, Princess Merritt, Claudia Budzyn, Katie Smith

Guests: Kristina Cook, Nathan King, Sean McGinnis, Trish Porter, Barbara Wise, Matt Earnest, Larissa Gimmy, Emily Vollmer, Lowell Jessee, Simona Fried, Steve Durfee, Ted Faulkner, Wendy Halsey, Patrick Hilt, Eli Myer, Scott Kerklo, Autumn Timpano, Yugasha Bakshi, Meghan Marsh

Jack Leff 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. Announcement of approval and posting of minutes of September 26, 2022

Jack Leff noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (<https://governance.vt.edu>).

3. Presentation

Todd Schenk (Associate Professor – School of Public and International Affairs), Sean McGinnis (Associate Professor of Practice – Materials Science and Engineering, Jack Leff (Sustainability Office Graduate Assistant), Nathan King (Campus Sustainability Manager), and Emily Vollmer (Sustainability Coordinator) gave a presentation that covered all agenda items for the committee meeting (attached).

4. Open Discussion

CALL Destination Area 2.0 Proposal:

Matt Stolte: This seems like it has potential under our Utility Master Plan that is underway, so I would invite you to participate in the academic stakeholder group. And, let me know if there is a way I can send you the information.

Todd Schenk: It would be wonderful for someone from the group to be there.

Sean McGinnis: Yes, I'll reach out. Happy to be a part of that.

Scott Nachlis: This might be a little bit later down the road, but as I look at the graphic, the figure one and the initial core topic areas, when I look at the built environment and energy systems and who the target involvement groups are, I would encourage you to also think about if there are any multi-purpose space buildings such as the different student centers and any other non-academic related spaces that are managed by different areas of campus. I think they would be a key contributor as these spaces function very differently than academic buildings. To integrate them into some of the decision-making as well.

Todd: Thank you, Scott. That's helpful. Certainly, as part of the wider CAC process, we had been engaging with the auxiliary units and the Foundation and so on. I can't see why we wouldn't want that to resume with this, as you say, it's important. Managers of space with a lot of impact.

Gia Ha: Could you talk about the scope of the call phase one, how long it will take for you guys to do all of that comprehensive analysis and a little bit more about what that actually looks like once you get started?

Todd: That's a great question. The timeline is pretty short, not by our choice necessarily. That's what the call for proposals dictates. If we're successful, we'll learn by the end of the month. I believe we'll have to support and conduct the work by the end of the spring semester. So, we're talking a pretty short timeline. The whole point of this first phase is ultimately to prepare a phase II proposal. So, a lot of the attention and analysis will be toward that end. How do we conduct this in a timely way to inform the preparation of a much larger phase II proposal? In terms of how it will be conducted, we've included a few different things in our brief two-page or three-page proposal. One of the things we certainly will do is some sort of workshop. We plan on bringing some consultants to campus. We identified some folks that we'd like to include in that pool of consultants. Of course, whether or not that works out is a different question. But we'd like to bring some external folks in to do some external analysis with us plus engaged members of the community to do some internal analysis and coordination and thinking. So that's how we plan to do it. And, as I said, a lot more detail, but we're thinking of gap analysis and swot analysis as certainly two different tools we would employ.

Sean: We do want to encourage you if you have any ideas at all, whether you saw them connected to the diagram or you thought that they were missing. Please reach out to us directly because we are looking for as much feedback as we can get and as Todd has indicated, we do have a little bit of opportunity in this phase one, if we get the funding, it's not fully fleshed out. So, if new ideas come in, better ways to do this analysis come up, we are happy to take them and to move forward with them.

Jack Leff requested Todd and Sean type their emails in the chat for reference.

Todd: We'd love to have feedback on DA 2.0 proposal but this is not by any means the only way we plan to advance goal 10 of the Climate Action Commitment. Please reach out if you have ideas on the curricular side or in other domains that are not explicitly dealt with here but under that umbrella.

Zero Waste Consultant:

Eli Myer asked in the chat: Are they going to be using or building on the results from the older Coker consulting compost study.

Nathan King: Yes, we certainly will be taking a look at that. They will be reviewing the old 2018 study. As well as just taking a fresh look in terms of any new or innovative ideas in the composting field. I think we should hopefully get a good blend of both.

Ted Faulkner asked in the chat: Nov. 15-17 Reduction in Motion Tour and meeting with key stakeholders, are there formal times, site visits or sessions to be scheduled?

Nathan: we are hoping to start scheduling those later this week. I think that'll be one of our deliverables coming out of the meeting with reduction in motion tomorrow. I know they have begun to put together just a very bare-bones outline for some tours for that day. So certainly we will pass along a calendar and we'll start wrapping in our key stakeholders to provide input on what days and times can work best during that window.

Brandon Hendricks: You mentioned something about Athletics and starting a composting pilot incentive. Do you know are they using Royal Oak farms too or is this a different setup that they have?

Teresa Sweeney: We beefed up the recycling, composting and everything at the stadium this year. And the composting has been collected at each game and it's gotten better each and every time. Meridian has their route that they pick up each morning anyway for VT and they just pick those containers up after each game. There's a certain location where they pick them up. It gets shipped out to Royal Oak.

CASEC Subcommittees:

Gia asked in chat: Are there currently any plans to start a water subcommittee?

Emily Vollmer: There are not currently plans but if you would like to take the lead in chairing that subcommittee you are more than welcome to.

Jack Leff: Just as a matter of governance protocol, we can form sub-committees at will. They are basically an informal group that is tied to us as a committee. They report to us as a committee. We have to vote on any of their tangible action items so they don't operate on their own. But anybody can be a part of a subcommittee and we can form sub-committees as a group at will.

5. Adjournment

There being no further business, a motion was made and seconded to adjourn the meeting at 2:41pm.



Energy & Sustainability Committee
October 24th, 2022 – 2:00pm



Agenda

- Welcome and Opening Remarks
- Approval of Proposed Agenda (if a quorum is present)
- Meeting Minutes: Electronic Vote Results
- New Business
 - CALL Destination Area 2.0 Proposal
 - Welcome New Members
 - Zero Waste Consultant
 - CASEC Subcommittees
- Open Discussion

Welcome New and Returning Committee Members!

New Members		Returning Members
Jeri Baker	Katie Smith	Mary-Ann Ibeziako (Chair)
Zhou Fu	Madison Betts	Chris Kiwus
Wesley Gwaltney	Gia Ha	Ken Miller
Gwyneth Martin	Matt Stolte	Liza Morris
Annie Hassel Lawrence	Teresa Sweeney	Rob Lowe
Pat Donovan	Brandon Hendricks	Dana Hawley
Nathaniel Humphreys		Todd Schenk
Dean Paul Winistorfer		
Rachel Maizel		
Lilian Prins		
Princess Merritt		
Claudia Budzyn		
Amy Hogan		
Kas Church		
Scott Nachlis		

3 New
Appointments
Highlighted



Agenda

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Zero Waste

- Virginia Tech's 2020 Climate Action Commitment – Goal 7: Achieve zero waste by 2030 with an intermediate goal of 85% waste diversion and 55% recycle rate by 2025.
- **Zero waste is defined as ~ 90% waste diversion. Can be achieved through methods such as green purchasing, recycling, composting, reuse, and reducing consumption.**



Campus Waste

- CAC implementation guide for goal 7:
 1. Conduct a campus waste audit
 2. Assess current comprehensive waste management plan
 3. Develop a composting facility at Kentland Farm
 4. Establish a zero waste committee or taskforce to assist with education, outreach, and engagement



Implementation Progress

- Climate Action Commitment funding was provided for hiring a waste consultant (\$50,000)
- Zero Waste Search committee met during the spring semester to vet proposals and hire a waste consultant team
- CPIF hired a full time waste and recycling manager – Teresa Sweeney
- CAC “Roadshows” have initiated discussions on waste reduction and composting with key departments
- CPIF worked with Athletics and Meridian to revamp our Green Game Day Team program
- Virginia Tech hosted the SWVA Waste Managers Conference in late September
- Waste team interns with the office of sustainability continue to offer their plastic bag recycling program through NexTrex and are working on various waste related projects/Green RFPs



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Waste Consultant Study



Reduction In Motion

making sustainability possible

- Virginia Tech recently hired Reduction in Motion to provide a high level review of our campus waste stream and composting plan
- Stakeholder meetings began in late September
- Many of you are key stakeholders in this process - we encourage you to participate and provide input
- Reduction in Motion will be touring campus **November 15 – 17**
- Final report will be provided at the end of **May 2023**



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CASEC Subcommittees

CAC Implementation Subcommittees

- Review and Revision of Policy 5505
 - Nathan King (Convener), Todd Schenk, Jack Leff
- CAC Goal Subcommittees
 - GHG Inventory
 - Simona Fried (Convener), Sean McGinnis, Steve Durfee, Matt Hagy, Rob Lowe, Eli Meyer
 - Climate and Sustainability Education and Research (CSER)
 - John Randolph (Convener), Mary-Ann Ibeziako, Todd Schenk, Jack Leff
 - Climate Justice
 - Jack Leff (Convener), Emily Satterwhite, Shannon Bell, Teresa Thornton
 - Sustainable Campus Culture, Engagement, and Sustainable Choices
 - Jack Leff (Convener), Brandon Hendricks, Todd Schenk, Simona Fried, Gillian Eastwood

*Task Forces are encouraged to meet in December as there is no December committee meeting.

CAC Task Forces Update

- CAC Goal Task Forces (continued)
 - Town-Gown Sustainability
 - John Randolph (Convener), Wendy Halsey, Emily Vollmer, Carol Davis, Ann Raridon
 - Sustainable Procurement
 - Reed Nagel (proposed convener), Brandon Hendricks, IT participant to be identified
 - Carbon-Neutral Commuting and Carbon-Neutral Fleet
 - Nick Quint (Convener), Mike Dunn, Durelle Scott, Erik Olsen
 - Carbon Offset and Management
 - Sean McGinnis (Convener), John Randolph, Mary-Ann Ibeziako, Billy Dudding, Rob Lowe, Eli Meyer, Kristina Cook
- **NEW: Zero Waste
- **NEW: Equitable Housing

Open Discussion

- Zero Waste Consultant
- CASEC Subcommittees
- Other

Next Meeting:

November 28, 2022

Climate Action Living Laboratory



Destination Area 2.0 Proposal
CASE Meeting – 10/24/22



Goals of 2020 Climate Action Commitment

Approved by BOV in March 2021

1. Achieve a carbon-neutral Virginia Tech campus by 2030.
2. Achieve 100 percent renewable electricity by 2030.
3. Complete the total conversion of steam plant fuel to natural gas by 2025, plan for full transition to renewable steam plant fuel after 2025, and continue to improve efficiency of campus energy systems.
4. Reduce building energy consumption to enable carbon neutrality by 2030.
5. Operations of new buildings initiated by 2030 will be carbon neutral.
6. Agricultural, forestry, and land use operations will be carbon neutral by 2030.
7. Virginia Tech to become a Zero-Waste Campus by 2030.
8. Establish the Sustainable Procurement Policy and Procedures by 2022.
9. Reduce single-occupancy-vehicle commuting to campus by 20 percent by 2025 and reduce transportation-related GHG emissions by 40 percent by 2030.

10. Integrate the Climate Action Commitment into Virginia Tech's educational mission through the **Climate Action Living Laboratory (CALL)** beginning in 2021.

11. Establish climate justice as a core value of the Virginia Tech Climate Action Commitment.
12. Diminish barriers to sustainable behaviors through institutional change, education and social marketing.
13. Implement the Virginia Tech Climate Action Commitment at a high level of university administration and governance; by integrating goals for facilities, education, and campus culture; and with stakeholder engagement for evaluation of goals and progress.
14. Develop innovative budgeting and financing mechanisms to generate funding and staffing to achieve Climate Action Commitment goals.
15. Develop pathways after 2030 to eliminate fossil fuels and carbon offsets by 2050.



Climate Action Living Laboratory (CALL)

- **Research opportunities** in world-class testbed environments like VT Electric Service
- Hands-on **learning opportunities** for students in classes and beyond (e.g., internships)
- Cutting-edge and holistic solutions to **advance progress in meeting our climate goals**

Strong partnerships between faculty/staff, students, the Division of Campus Planning, Infrastructure, and Facilities (CPIF), and other operational units



Advancing CAC goal #10: Accelerate Virginia Tech's standing as a global land grant university leading the way in climate action, capitalizing on our unique campus environments and surrounding communities as novel testbeds, while fostering deep transdisciplinary collaboration.



Incubating

Nurturing

Coordinating

Scaling

Built Environment

Net zero building; Sustainable transportation; Infrastructure; Materials; Site planning; Social equity & access

Involves: CEE; ME; VTTI; Arch; Design; UAP; CPIF; CLAHS; IIHCC

Energy Systems

Renewables; Efficiency; Storage; Vehicles; Next generation grid; Energy policy

Involves: COE; ECE (PEC, CPES); Chem; ICTAS; IIHCC

Land & Food Systems

Agrivoltaics; Reforestation; Soil carbon, Animal methane; Landscape planning; Food sovereignty and land rights

Involves: CNRE; CALS; FREC; APS; SPES; BSE; CLAHS; PDA

Monitoring, Assessment & Evaluation (e.g., Life Cycle Assessment; Systems Design; Data & Decisions DA)

Community Engagement & Social Justice (e.g., Climate Justice; Equity & Disparity DA; Policy DA)

Commercialization & Dissemination (e.g., Licensing, Social Entrepreneurship)

Public Policy & Implementation (e.g., Regulatory Integration; Policy DA)

Campus & Community as Testbeds

CALL Activities

Potential Core Topics, Cross-Cutting Themes & Testbed Foundations:

We will use DA 2.0 Phase I funding to conduct an assessment to properly develop the Phase II proposal. However, the breadth and strength of our team already suggests a set of core topics: built environment, energy systems, and land & food systems. These are transdisciplinary and interconnected areas of research with significant opportunities for growth. One or more of these topic clusters may be deemed viable for further investment as the CALL moves into Phase II. Our approach also emphasizes the transdisciplinary nature of climate action, and thus elevates a set of cross-cutting themes that we will center within each topic area and as we synthesize and coordinate across them. These themes reflect our desire to accelerate change by drawing on the knowledge, methods, and skills represented in different disciplinary paradigms. Integral to our plan is using the university and its surrounding communities as testbeds to pilot interventions.

CALL Activities

The Climate Action Living Laboratory (CALL) will:

- Elevate and coordinate climate-related research and other activities happening across Virginia Tech
- Provide a platform for the university's campuses, lands, and surrounding communities to serve as testbeds for cutting-edge climate research, education, and outreach.
- Be a hub for incubating, nurturing, coordinating and scaling the myriad existing and possible new activities happening across the university

The CALL is grounded in the unique opportunities we have to foster problem-focused and solutions-oriented inter- and transdisciplinarity action to address this existential challenge of our times in novel, responsible, and impactful ways, using our campuses and surrounding communities as testbeds.

CALL Phase I – Analysis & Team Building

If awarded DA 2.0 funding, the team will conduct a comprehensive analysis of our internal and external environments (SWOT and gap analysis) to better understand:

1. What are our key internal strengths in this domain, including faculty/teams conducting prominent climate-related research? Where do they overlap with emerging opportunities?
2. What strengths would we need to add to VT to better capitalize on emerging opportunities?
3. What good (and bad) practices can we learn from ‘living laboratory’ arrangements elsewhere?
4. What are the barriers to transdisciplinary collaboration and how can we overcome them?
5. Where does faculty expertise overlap with the needs of the Climate Action Commitment and what are the areas to focus on developing to meet our goals?
6. Who are our main competitors for large research grants, and in what specific areas?
7. What opportunities exist for large philanthropic investments?

Building on a rich variety of activities already underway at Virginia Tech, and a vibrant network of faculty/staff committed to accelerating action



Key Takeaways

- DA 2.0 proposal represents an opportunity to advance progress on goal 10 of the CAC, particularly on the research front
- Grounded in strong collaboration with CPIF (testbed partnerships)
- The DA 2.0 proposal is *not* the only way in which goal 10 will be advanced – Continue to seek other opportunities, particularly on the curricular side
 - **What ideas do you have on how we can advance?**