

Energy and Sustainability Committee Meeting Minutes
September 27, 2021
2:00pm

Zoom: <https://virginiatech.zoom.us/j/81254587276>

Present: Mary-Ann Ibeziako (presiding), Jon Clark Teglas for Chris Kiwus, Nick Woods for Kenn Miller, Liza Morris (partial attendance), Rosalba Ledezma for Liza Morris, Kim Briele, Matt Hagy, Rob Lowe, Elena Lind, Matthew Eick, Todd Schenk, Jamie Stein, Alan Grant, Lucas Goodman (partial attendance), Abigail Belvin (partial attendance), Annie Dubner for Lucas Goodman

Absent: Alan Grant, Frances Keene, Dana Hawley, LaTawnya Burleson, Vineela Eppe

Guests: Wendy Halsey, Patrick Hilt, Rosalba Ledezma, Alexa Briehl, Teresa Sweeney, Nathan King, Emily Vollmer, Gregory Evanylo, Sean McGinnis, Mike Dunn, Steve Durfee, Lowell Jesse, Simona Fried, Eli Meyer, Nick Quint, Jack Leff, Michael Bell, Yugasha Bakshi, Josh Pearl

Mary-Ann Ibeziako called the meeting to order at 2:00pm. A quorum was present.

1. Adoption of Agenda

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

2. Approval of or Announcement of approval and posting of minutes of April 26, 2021

Mary-Ann Ibeziako noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (<http://www.governance.vt.edu>).

3. Presentation

Mary-Ann Ibeziako (Chair, AVP Infrastructure & Sustainability & Chief Sustainability Officer), Nathan King (Sustainability Manager), Emily Vollmer (Sustainability Coordinator), and Jack Leff (GPSS President, Graduate Assistant), gave a presentation that covered all agenda items including old and new business sections for the committee (attached).

4. Open Discussion

Mary-Ann Ibeziako (presiding) requested members send potential topics of interest they would like to see covered this academic year to her via email with a Cc to Kristina Cook.

Todd Shenk spoke to the group. His understanding is that the President's Commission on Governance is thinking of reorganizing and elevating this committee to be at the level of a commission. It is not guaranteed to happen but is the current proposal being considered. There are some pieces missing such as a cross-cutting climate person who would have an ex-officio role that could chair.

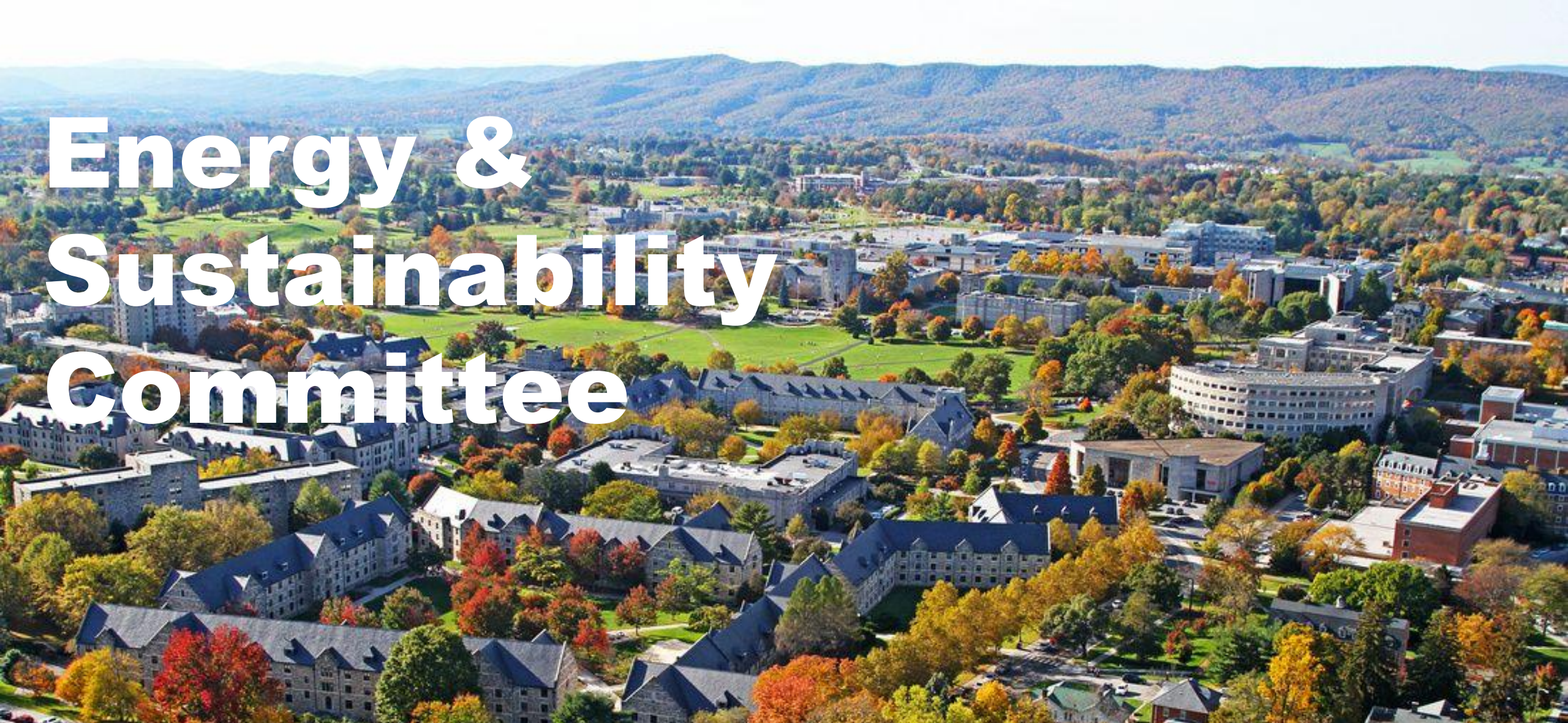
Jon Clark seconded Todd's comments and shared that it will be very important to track the governance process and the transformation of that. He also shared that it's never too early to start having these conversations with your constituent groups because committee members are representing different groups and coming here to be the liaison with those entities. We don't have something in writing yet but having open discussions to set the stage for what is to come is important so that we are prepared. There is a sense that no matter how the governance structure evolves, there will be movement on our front. Any advocacy that committee members can do within their groups individually will be helpful.

Jack shared that he is on the President's Commission on Governance which is voting on the transformation. It seems very likely that the Commission on University Support will be dissolved and this committee will be upgraded to a full commission. This means we will have to rewrite our constitution and submit it. As we get

elevated, we can take the opportunity to become CASE and develop our own subcommittees or working groups.

5. Adjournment-

There being no further business, a motion was made to adjourn the meeting at 3:02pm



Energy & Sustainability Committee

Sept 27, 2021 – 2pm





AGENDA

- Welcome and Introductions
- Review April Meeting Highlights
- Review E&SC Charge and University Governance
- Approval of the Proposed Agenda
- Old Business
 - VT CAC Implementation Process Update
 - Student Green RFP Program
 - Student Sustainability Forum
- New Business
 - Set the Agenda For Upcoming Academic Year
 - Goal 13 – Change E&SC name, charge, and membership
 - Monitoring Sustainability Goals & Tracking CAC Progress
- Open Discussion
- Next Meeting

April 2021 Meeting Highlights

- The 2020 Climate Action Commitment had just been approved
 - Begin work on implementation and guidelines
 - Webpage:
<https://www.facilities.vt.edu/sustainability/climate-action-commitment.html>
- STARS Report had just been approved by AASHE – Gold Rating
 - Highest in VA and in the ACC
 - <https://reports.aashe.org/institutions/virginia-tech-va/report/2021-02-18/>
- Earth Week Update
 - Largest Earth Week ever with over 40 events and 30 partners
- Multi-Modal Transit Facility
 - Discussed design and construction

E&SC Charge

“To review and provide advice to the University Administration on broad policy issues relating to the university’s pursuit of environmental quality through action, education, and engagement to address current needs without compromising the capacity and needs of future generations.”

Reports to: Commission on University Support



University Governance Structure

Board of Visitors
(BOV)

University Council

Commission on
University Support (CUS)

E&SC



AGENDA

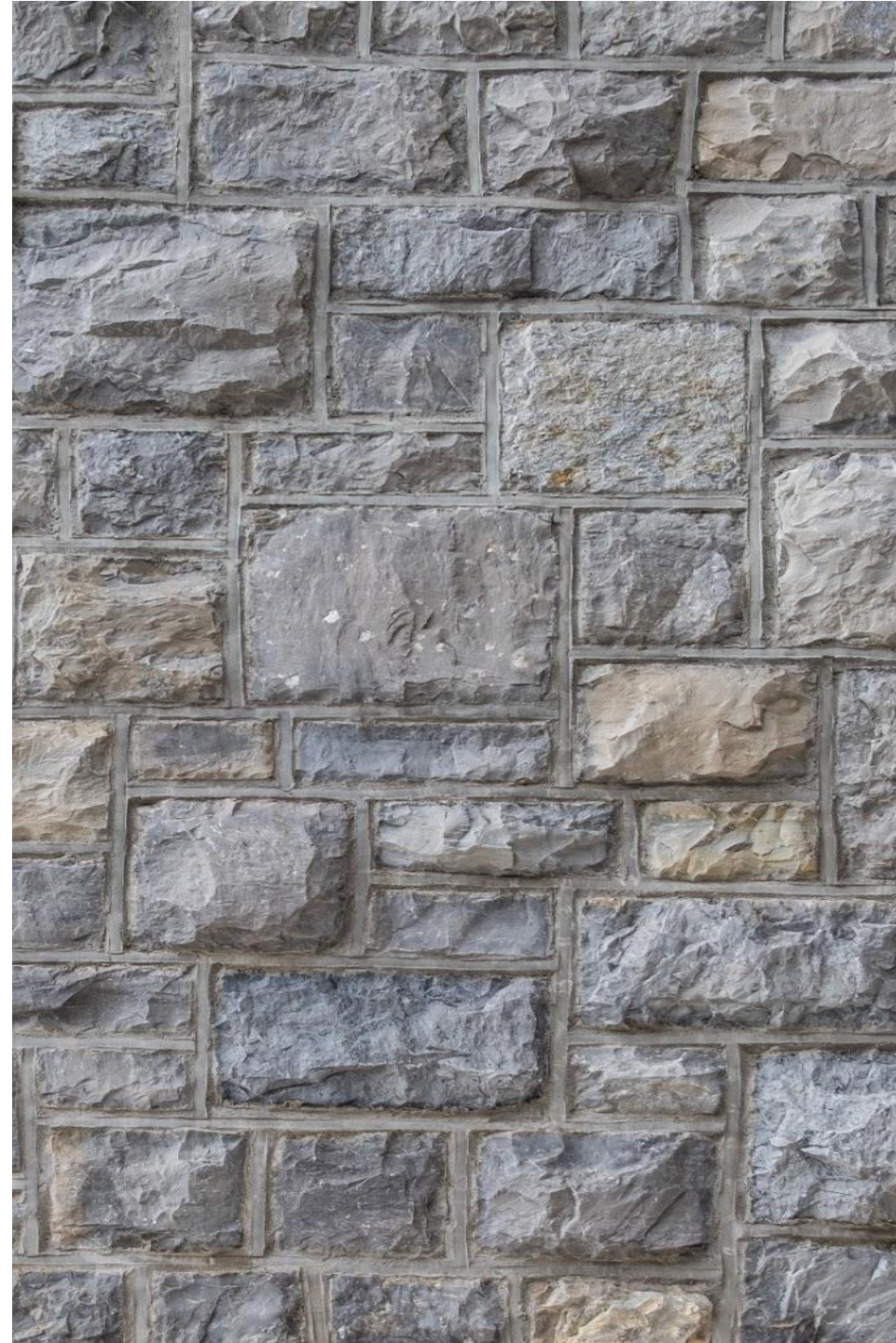
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Climate Action, Sustainability, and Energy

Progress Update



DIVISION OF CAMPUS PLANNING,
INFRASTRUCTURE, AND FACILITIES
VIRGINIA TECH.

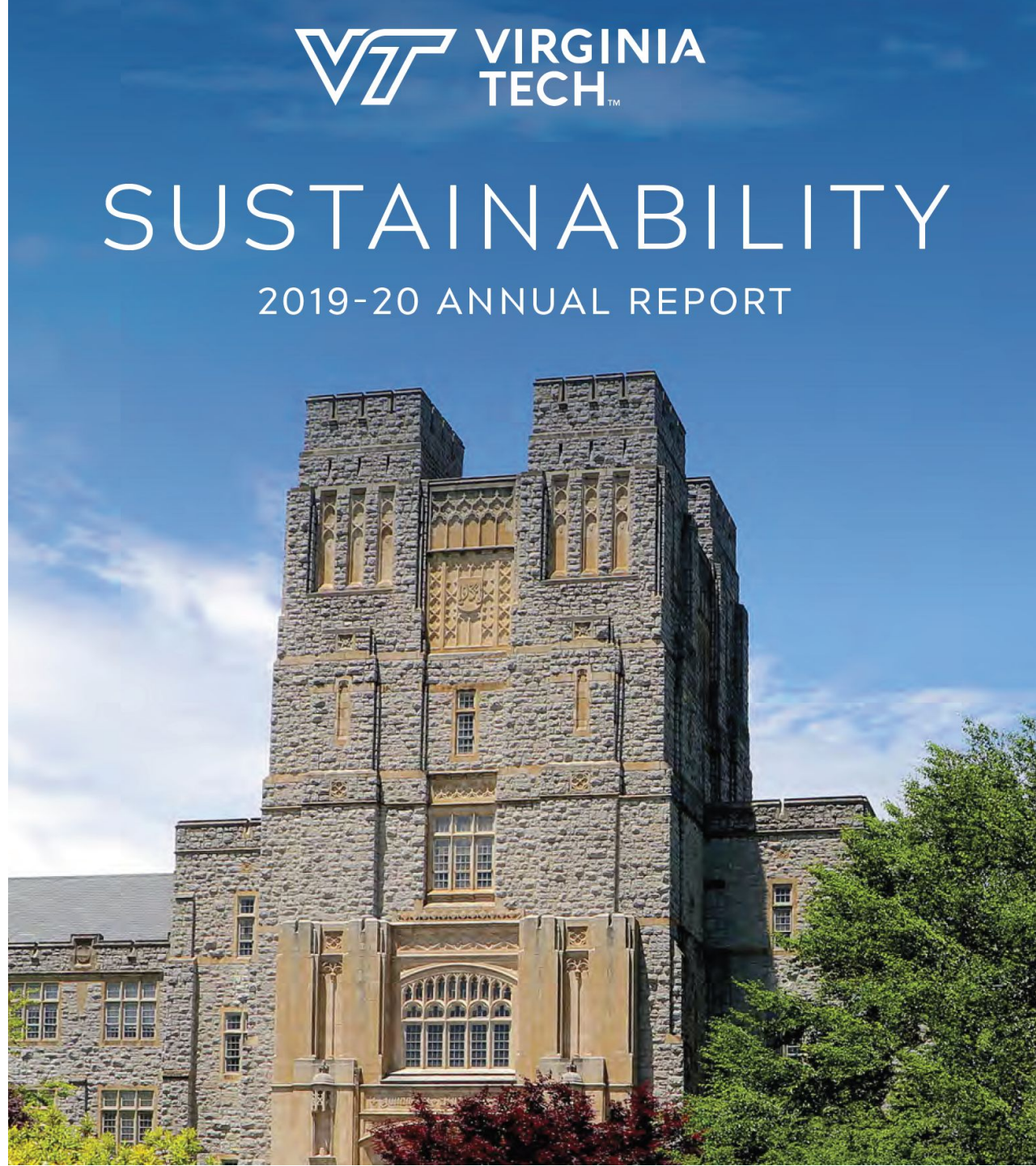


Sustainability Annual Report Highlights

- Primary vehicle for reporting progress on Climate Action Commitment and sustainability goals
- 11 consecutive years of annual reports available on our website
 - <https://fal.cn/annualreports>
- Developed in partnership with 50 student, campus, and community organizations
- Full 2020-21 SAR coming in November 2021

SUSTAINABILITY

2019-20 ANNUAL REPORT



Awards and Recognition

- STARS – Gold Rating
 - Highest in Virginia
 - Highest in ACC
- Tree Campus Higher Ed – 13th year
- Princeton Review Guide to Green Colleges – 11th year
- Time Higher Education (THE) Impact Rankings
 - Global Top 200
 - SDG 6: Clean Water and Sanitation (#101-200)
 - SDG 11: Sustainable Cities and Communities (#101-200)
 - Global Top 25
 - SDG 12: Responsible Consumption and Production (#23)

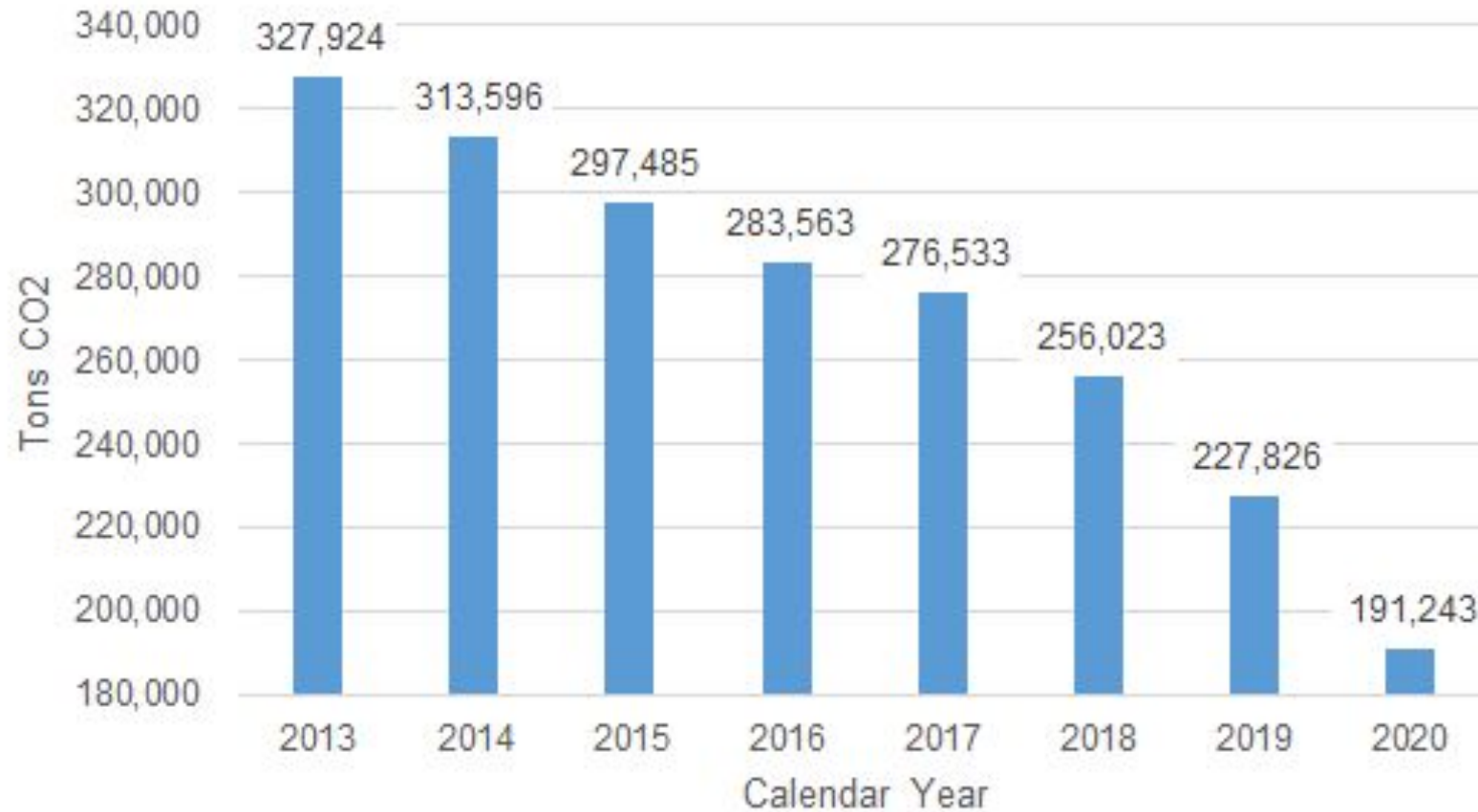




Sustainability Programs and Highlights

- Award-Winning Student Internship Program
- Green Office Certification
 - 9 certified offices across multiple Virginia Tech campuses
 - 30 Green Representatives identified
- New – Green Lab Certification
- Green Grads – 110+ participants
- One of the largest Earth Weeks in Virginia Tech history with over 40 events

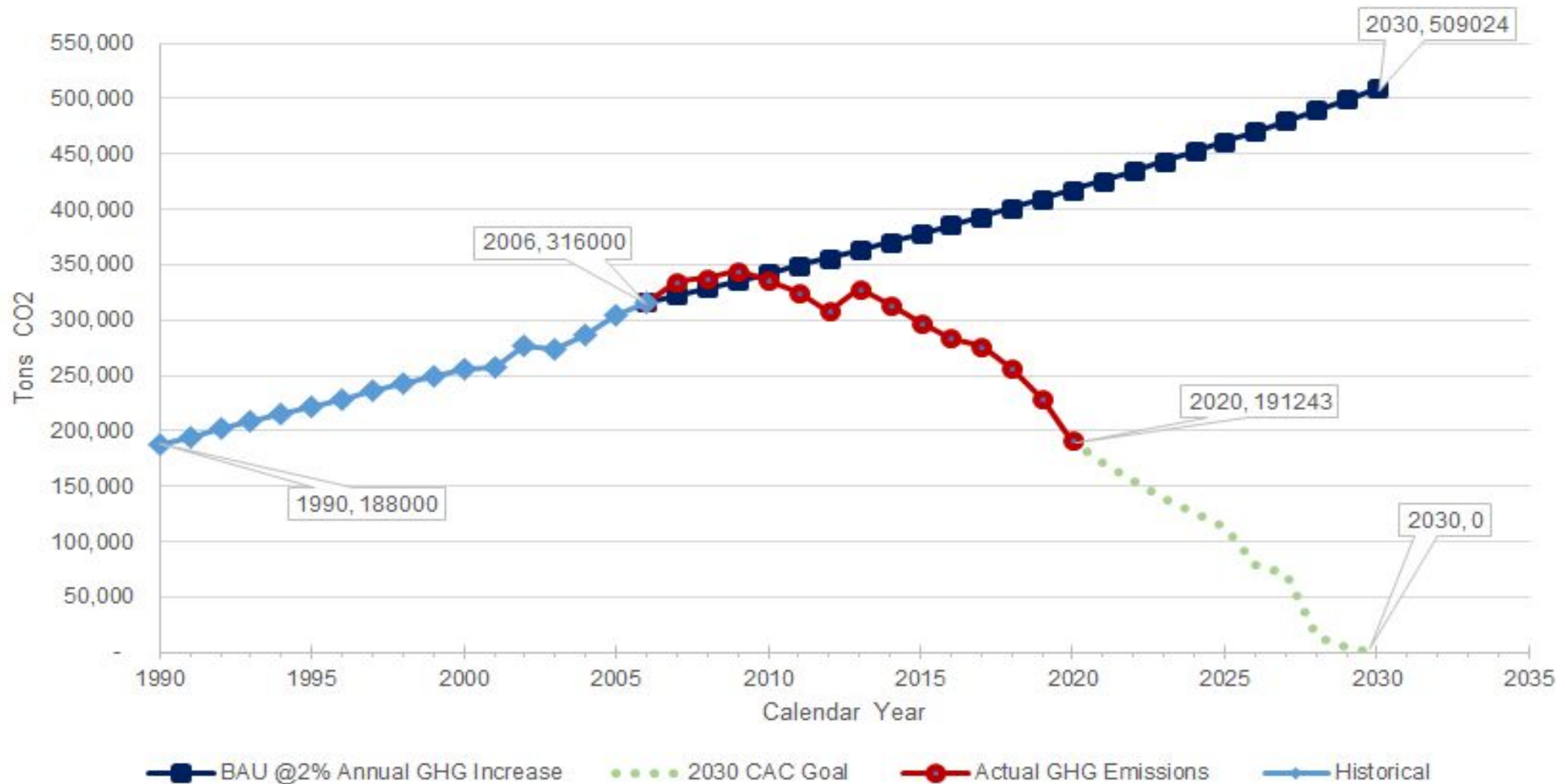
Annual CO2 Emissions



CY2020 shows a 14 percent decrease in total emissions compared to CY2019.



Carbon Footprint and Climate Action Commitment Goals





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
- Achieve a zero-waste campus by 2030
- Reduce transportation related GHG emissions by 40% by 2030
- Reduce building energy consumption
- Establish a Climate Action Living Laboratory to enhance educational opportunities



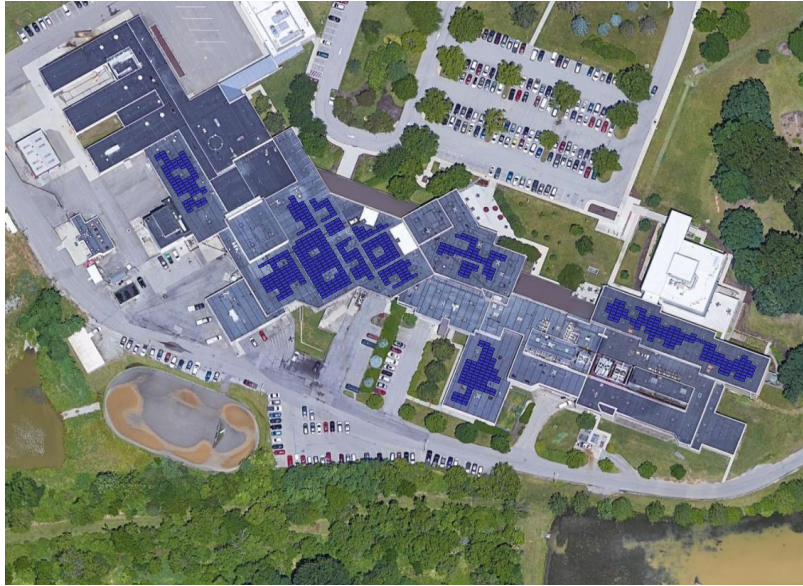
Climate Action Commitment Progress to Date

Shortly after the BOV approved the 2020 Climate Action Commitment, a Working Group was formed to develop implementation guidelines. This group met weekly for most of the summer, ending in early August.

The new [implementation guidelines](#) are delivering detailed pathways for achieving each of the 15 tenets in the 2020 commitment.

Achieve 100% Renewable Electricity by 2030

Vet Med
312 kW
426,266 kWh/yr



McComas Hall
281 kW
385,413 kWh/yr



Sterrett Facility
Complex
484 kW
664,629 kWh/yr



VT Electric Service
330 kW
396,657 kWh/yr



Achieve a Zero Waste Campus by 2030

- Cross-campus working group established to respond to EO-77 submitted initial implementation plan
- Student Green RFP approved to pilot compostable straws and utensils as replacements for single use plastic
- \$50,000 approved for Waste Management Consultative Services
- Calendar Year 2020 Recycling Rate = 38.1%
- Calendar Year 2020 Waste Diversion Rate = 85.2%



Reduce Transportation Related GHG Emissions by 40% by 2030



Three level 2 charging stations from ChargePoint are in the Squires lot.



The bike share system relaunched in June with 150 e-bikes across hubs at Virginia Tech and in Blacksburg, Christiansburg, and Montgomery County. This represents a doubling of the fleet size, with six new hubs on campus to accommodate the additional bikes. Users should find the system more convenient to use, helping to encourage non-SOV modes. We will continuously log the miles to estimate the equivalent GHG displaced.

Total Emissions

Campus commuting
total 17,820 mtCO₂e

BT Bus System =
3,029 mtCO₂e

Fleet and aviation
fuels and business air
travel total 13,809
mtCO₂e

*data from 2019
GHG Inventory &
Assessment Report



Reduce Building Energy Consumption

- Key activities:
 - Campus wide lighting audit complete; campus wide LED conversion underway
 - 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

Establish a Climate Action Living Laboratory to Enhance Educational Opportunities

Learning Factory Solar Array

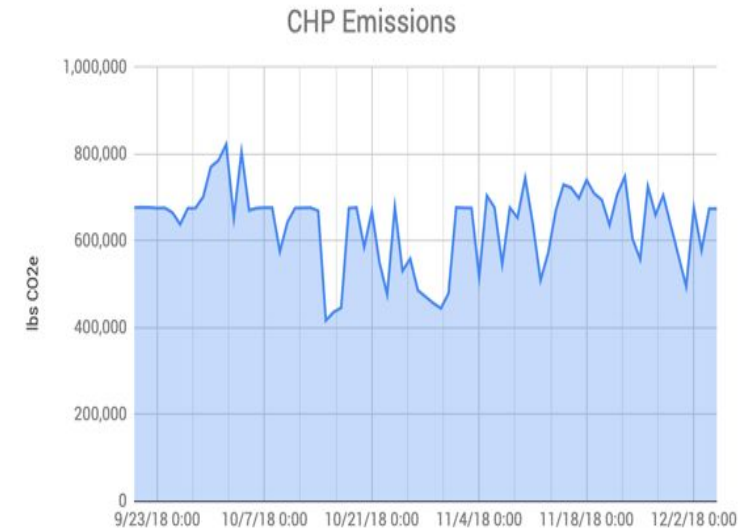


9 panel array on top of Durham Hall which was completed as part of an ISE senior design project.

The Learning Factory has a net zero carbon footprint!

LF Solar Output

Classroom Exercises: Carbon Emissions



Virginia Tech's new PI Server will provide real-time high resolution interval data of:

1. Power Plant and VTES
2. On Campus Renewables
3. AEP Grid Connection
<https://fal.cn/DSASubsidary>

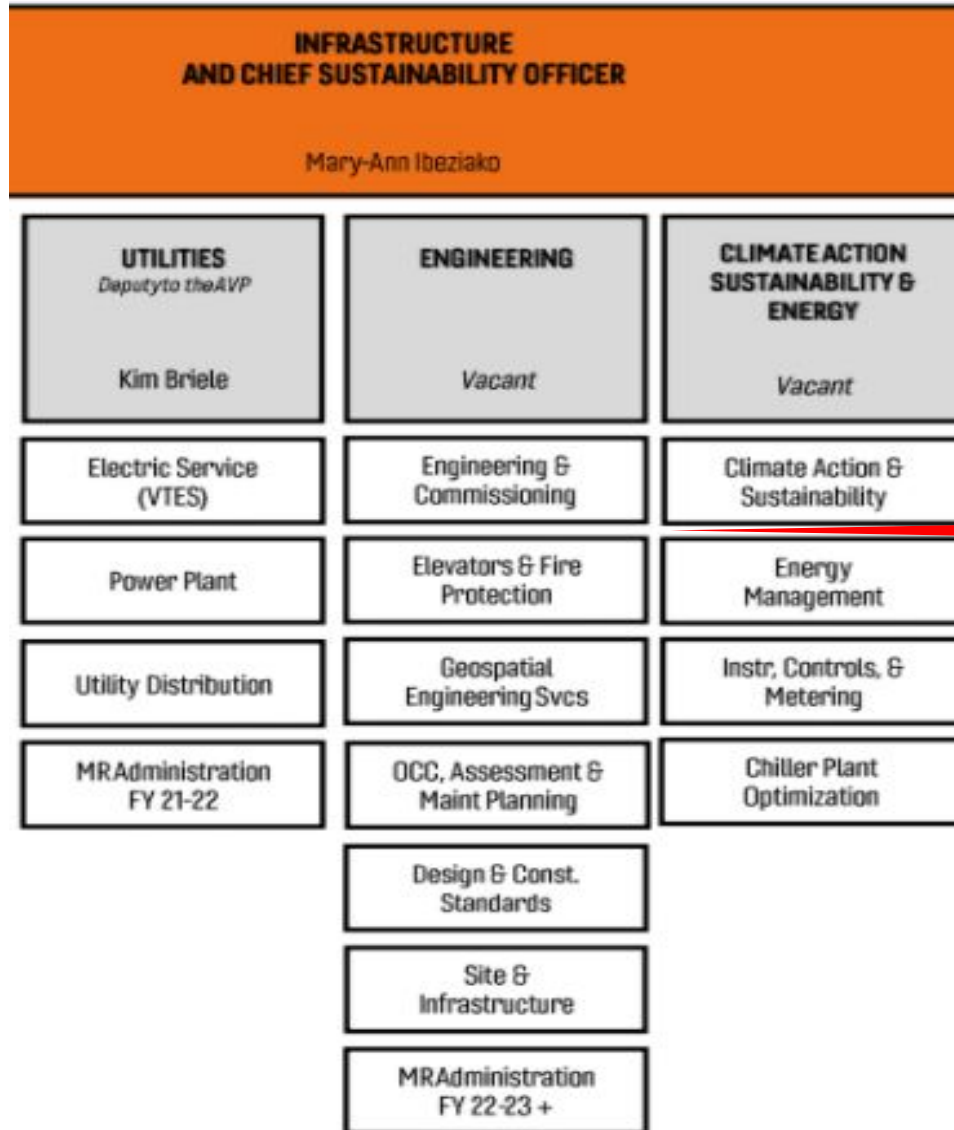
2020 Climate Action Goals and Progress: Engagement Process Through Fall Semester

- Gaining broad institutional support through Climate Action Commitment "road shows" with approximately 30 meetings planned with key stakeholders
- Partnering with the Provost's Office, college deans, and select department heads to advance Climate Action Living Laboratory (CALL)
- 65 potential CALL core faculty invited to a workshop on Sept 17 to achieve CALL objectives:
 - Improve climate change/climate action curriculum,
 - Integrate campus physical Climate Action Commitment projects into the educational mission, and
 - Utilize faculty/student expertise to help develop strategies for Climate Action Commitment physical and non-physical goals.

2020 Climate Action Goals and Progress: Organizational Changes

- Division of Campus Planning, Infrastructure, and Facilities reorganization:
- New roles:
 - Assistant Vice President for Infrastructure and Sustainability and Chief Sustainability Officer: MARY-ANN IBEZIAKO
 - Director of Climate Action, Sustainability, and Energy: NEW POSITION, SEARCH UNDERWAY
 - Senior Fellow for Climate Action (interim): JOHN RANDOLPH
 - Assistant Vice President for Operations (oversees Grounds, Waste/Recycling Urban Forestry, and Renovations): WENDY HALSEY

Climate Action, Sustainability, and Energy (CASE) Team



- Nathan King – Campus Sustainability Manager
- Emily Vollmer – Sustainability Coordinator
- Jack Leff – Graduate Assistant
- Michael Bell – Graduate Assistant
- Yugasha Bakshi – Graduate Assistant
- 20 Student Interns
- Hundreds of student volunteers through various clubs and programs



Thanks!

Questions?





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The Student Green RFP Program

- Since AY 2010–2011, 110+ proposals approved & funding over \$1.5 million
- We just received Coke pouring rights funding for 8 projects that totals \$40,000 and will be adding to implementation
- With over 30 projects approved this spring/summer due to the backlog from 2019–20, this has been our largest implementation effort in program history
- Current status: 2 complete, 19 in progress, and 1 delayed
- The E&SC acts as a 3rd party to prioritize select student proposals
 - Working group formed in January



The Student Green RFP Program

- 2021–22 Green RFP program launched **Sept 20**
- Accepting proposals from students and student orgs through Nov 19
- Green RFP webpage:
<https://www.facilities.vt.edu/sustainability/sustainability-programs/green-rfp-program.html>
- Proposals that support the [Virginia Tech Climate Action Commitment](#), produce realizable savings, and require one-time (as opposed to ongoing) funding are given preference. The goal of the program is to have approved proposals funded and implemented within the same academic year.



Student Sustainability Forum

- Monthly meetings of students across campus with interests in sustainability or the environment
- First meeting Tuesday, September 7, 4:00–5:00 PM
 - Topics: Meet and Greet, CAC Summary/Update, Goals for the Year
- Future meeting topics:
 - Guest speakers (TOB, Venture Out, CNRE, VT Engage)
 - Collaborative event planning
 - Green RFP workshops
- Transition to the Earth Week Planning Forum (Jan–Apr)
 - Opens up to other campus and community members





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CAC Goal 13 – Change E&SC Name, Charge, Membership

- Name change to: Climate Action, Sustainability, and Energy Committee (CASE Committee)
- Revise the **reporting lines** of the CASE committee to include, in addition to CUS, relevant commissions for student life, academics, faculty and staff.
- Modify the current charge of the E&SC for the CASE Committee. Consider the following:

“To review and provide guidance to all facets of University Administration on implementation opportunities and issues relating to the university's Climate Action Commitment and the pursuit of environmental quality and social sustainability, through policy, infrastructural and operational changes, education, and broad engagement.”



CAC Goal 13 – Change E&SC Name, Charge, Membership

- Modify the **membership** of the new CASE committee to include additional representation of the VP for Campus Planning, Infrastructure & Facilities (VPCPIF), the Provost's Office, Student Affairs, student environmental organizations, and local community partners.
- **Current E&SC membership:** Six Ex-Officio; Two from Facilities Services; One from Environmental Health & Safety; Four from Faculty Senate; Two from Staff Senate; One College Dean; Two graduate students (GSA); Two undergrad students (SGA)
- **Suggested additional members:** Ex-Officio (Chief Climate Action & Sustainability Officer (CCASO), Chair; Sustainability Manager, Dining Residence Life; Asst. VP for Utilities; Executive Vice Provost; Director, Parking & Transportation; Sustainability Manager, Town of Blacksburg); student representing environmental group (by SGA); student representing frontline communities (by Vice Provost for Inclusion/Diversity)



Monitoring Sustainability and CAC Implementation

- Recommendation: Create a taskforce to look at CASE subcommittees (SC) that may include:
CAC Implementation SC, GHG Inventory SC, Climate Action Living Laboratory (CALL) SC, Climate Justice SC, Engagement & Sustainable Choices SC, Education & Student Involvement SC, Town–Gown Sustainability SC

Subcommittees may include participation beyond formal CASE membership

Open Discussion



October 25, 2:00pm via Zoom

