

## **Energy and Sustainability Committee Meeting Minutes**

**November 15, 2021**

**2:00pm**

**Zoom:** <https://virginiatech.zoom.us/j/82639969400?from=addon>

**Present:** Nathan King for Mary-Ann Ibeziako (presiding) Jon Clark Teglas for Chris Kiwus, Ken Miller, Rosalba Ledezma for Liza Morris, Kim Briele, Matt Hagy, Rob Lowe, Elena Lind, Todd Schenk, Jamie Stein, LaTawnya Burleson, Lucas Goodman

**Absent:** Frances Keene, Liza Morris, Alan Grant, Dana Hawley, Abigail Belvin

**Guests:** John Randolph, Wendy Halsey, Jeri Baker, Patrick Hilt, Teresa Sweeney, Mike Dunn, Blake Bensman, Emily Vollmer, Gregory Evanylo, Sean McGinnis, Matt Earnest, Steve Durfee, Lowell Jesse, Simona Fried, Eli Meyer, Nick Quint, Jack Leff, Michael Bell, Yugasha Bakshi

Nathan King 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 October 25, 2021**

Nathan King 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**

Nathan King (Campus Sustainability Manager) for Mary-Ann Ibeziako (Chair, AVP Infrastructure & Sustainability & Chief Sustainability Officer), John Randolph (Professor Emeritus and Climate Fellow), Steve Durfee (Campus Energy 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**

First reading of E&SC Resolution 2021-22A:

Nick Quint commented that last month we talked about adding the Senior Director of Transportation Services as an ex officio member and that he didn't see that on the resolution here.

A motion was made and seconded to add the Senior Director of Transportation Services as an ex officio member. The motion carried.

Todd Shenk commented that at the Faculty Senate meeting last week there was no reference of E&SC becoming a commission but rather a committee that would report directly up to the University Council (UC). Jack Leff will reach out to President's Commission on Governance (PCG) to see what they are thinking and report findings at second reading. Sean McGinnis asked if the proposed new membership is considered small, medium, or large. Jack let him know it's about average so should not be difficult to reach quorum.

With no further comment the committee moved past the first reading and Jack will work with Kristina Cook to get an updated draft out to the Senates and to loop in the PCG.

E&SC Task Forces:

LaTawnya Burleson volunteered for the Sustainability Awards Task Force.

John Randolph volunteered for the Subcommittees from the CAC and Lessons Learned Task Force.

Nathan King volunteered for the CAC Implementation Task Force.

#### Energy Management Update:

Rob Lowe updated us that fluorescent bulbs do not go to the landfill. They are collected by Health and Safety and recycled at significant cost; each 4-foot tube costs the university 40 cents to recycle. Converting to LEDs will drive those costs down. However, the conversion process itself generates a lot of waste that Virginia Tech ends up handling.

#### Sustainability Annual Report:

The link on the website is not working for the 2021 report. Emily Vollmer will investigate. In the meantime, people can email Emily directly and she will send the report to them.

### **5. Adjournment-**

There being no further business, a motion was made to adjourn the meeting at 2:43pm



Energy & Sustainability Committee

**November 15, 2021 – 2:00 PM**







# AGENDA

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- Welcome and Opening Remarks
- Approval of Proposed Agenda
- Meeting Minutes – Electronic Vote Results
- Old Business
  - Upcoming Academic Year
    - First Reading of E&SC Resolution 2021-22A
    - Task Forces
  - Climate Action Commitment Implementation Update
    - Discuss Strategies for Moving Forward
- New Business
  - Energy Management Update
  - Sustainability Annual Report
- Open Discussion

# Upcoming Academic Year - First Reading of E&SC Resolution 2021-22A

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**University Shared Governance**

# Upcoming Academic Year - Task Forces

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## CAC Implementation Task Forces

- E&SC Name Change, Charge, Changes to Membership
  - Todd Schenk and Jack Leff
  - need 2-3 more volunteers
- CAC Goal Task Forces
  - GHG Inventory
  - Climate Action Living Laboratory (CALL)
  - Climate Justice
  - Engagement and Sustainable Choices
  - Education and Student Involvement
  - Town-Gown Sustainability
  - Sustainable Procurement
  - Sustainable Campus Culture
  - Carbon Neutral Commuting
  - Carbon Neutral Fleet
  - Carbon Offset

# Upcoming Academic Year - Task Forces

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- Review and Revision of Policy 5505
  - Todd Shenk, Nathan King, and Jack Leff
- Sustainability Awards
  - Emily Vollmer
  - Need 1-2 more volunteers
- Subcommittees from the CAC & Lessons Learned
  - Need 2 volunteers

# Climate Action Commitment Implementation Update

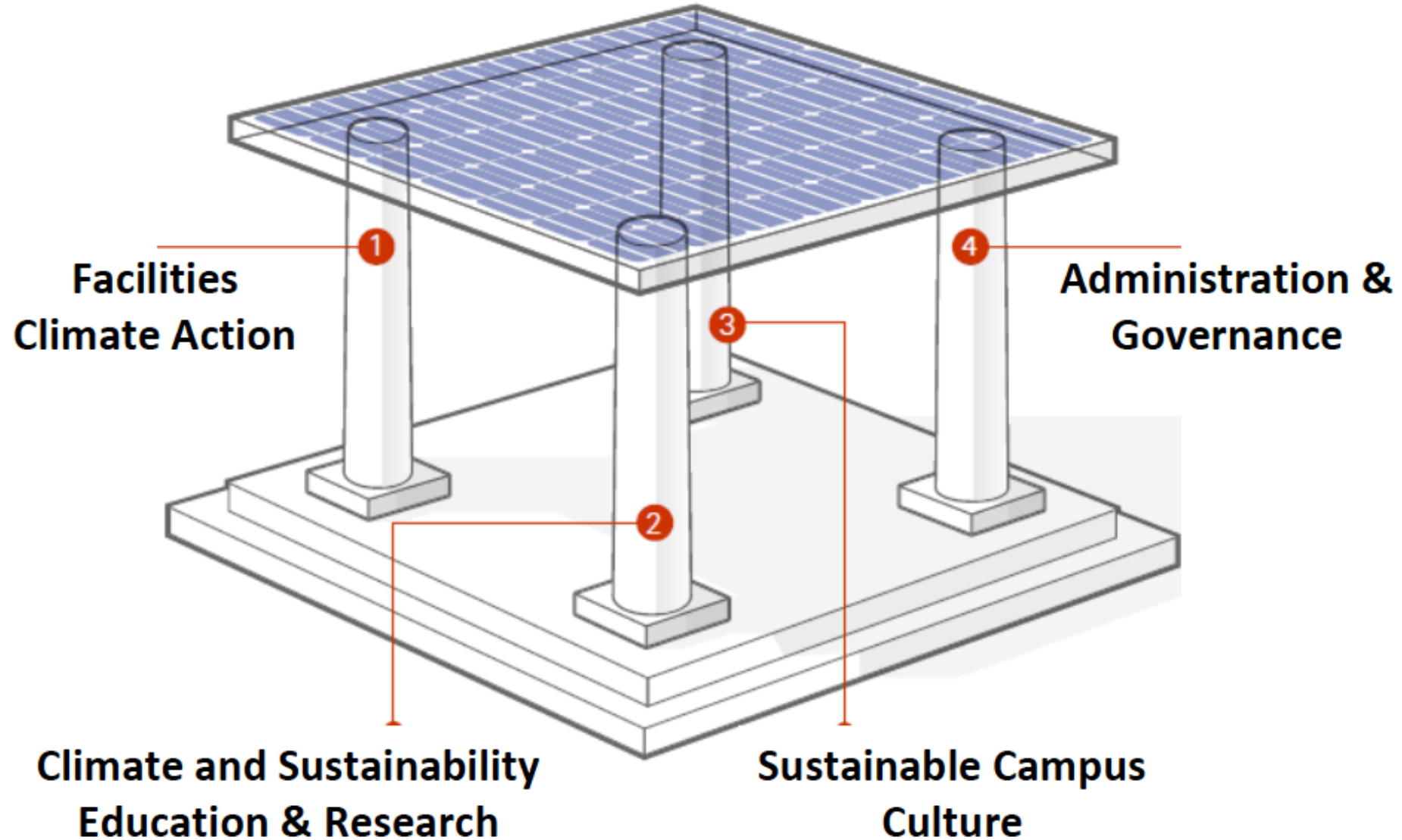
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- Project initiatives continue:
  - Steam/power plant generator, NG boiler #12, chiller upgrades
  - Energy management projects (Steve will describe)
- CAC Roadshow
  - September 17 Faculty Retreat
  - 4-page generic primer document for Roadshow:
    - “VT CAC: Moving from pledges to accomplishments, together”
  - November 1 SVP-CBO Leadership Team
    - Format: get personal by identifying potential roles of individual leaders
    - Planning follow-up meetings with SVP-CBO leaders
  - President’s Cabinet/Council (may be in January)
  - Meetings with Provost Team, Student Affairs, others before end of semester



# Four Pillars of Climate Action Commitment Implementation

## Four Pillars of VT CAC Implementation



## Relevant goals/pillars for SVP&CBO administrative units

- **SVP-CBO (Pinkney)**
  - Pillars 1, 2, 3, 4, Goals 1-15
  - Provide leadership and institute climate action/sustainability goals as part of the overall performance evaluation of the campus operations
- **CPIF (Kiwus)**
  - Pillars 1, 2, 3, 4, Goals 1-10, 12-15
  - Energy system efficiency, green building design, building energy management, land operations, waste & recycling, transportation infrastructure, renewable energy deployment, VTES, Smart Grid, campus sustainability programs, partnership with academia
- **Finance (Miller)**
  - Pillars 1, 2, 3, 4, Goals 1-10, 13-15
  - Innovative financing for energy system and building efficiency and renewable electricity, sustainable procurement guidelines, alternative revenue streams, partnership with academia
- **Business Services (Belshe)**
  - Pillar 1 and 3, Goal 9
  - Transportation Master Plan, fleet efficiency conversion, alternative transportation services to reduce commuting emissions, environmental health & safety, emergency services (climate adaptation), partnership with academia
- **Policy & Governance (O'Rourke)**
  - Pillar 4, Goal 13
  - Reviewing and updating existing policies and governance structure for climate action/sustainability

## Relevant goals/pillars for SVP&CBO administrative units ( Continued)

- **Administrative Operations (Casamento)**
  - Pillar 1, Goal 13
  - Realizing institutional and operational excellence, business processes to eliminate waste and reduce GHG emissions, e.g., digital-zero-paper campus
- **HR (Garey)**
  - Pillar 3, Goal 12
  - Telecommuting policies to reduce commuting emissions, new employee on-boarding includes VT commitment to sustainable campus culture
- **IT (Midkiff)**
  - Pillar 1, Goals 3, 8
  - Data center energy efficiency, campus digital processes to reduce footprint, virtualization, IT procurement guidelines, partnership with academia
- **Equity & Accessibility (Oaks)**
  - Pillar 3, Goal 11
  - Social equity of climate action (impacts on vulnerable students, employees)



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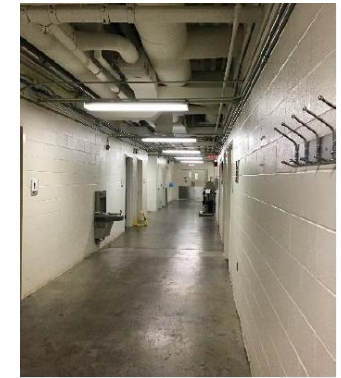


# Virginia Tech Main Campus LED Lighting Conversion

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## Three Phases of LED conversion

- **Phase 1** completed ~28% of campus sqft already converted to LED via Energy Action Plan (EAP) and other funding mechanisms\*
- **Phase 2** underway- Completed Investment Grade Lighting Audit (IGLA) of 70 E&G and Auxiliary buildings, ~3.6 million sqft
- Developing a scope of work around EAP \$680k funding source. FY22 Q3&4 project for 11 buildings
- Requesting ~\$4 million to complete remaining phase 2 IGLA buildings by end of FY24
- Brings campus total to ~60% LED



# Phase 2 LED Conversion- Fast Facts

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- **Quantity of Fixtures:** 42,450
- **Project Cost:** \$4,596,361
- **Annual Energy Cost Avoidance:** \$651,040
- **Payback Period (energy):** 7 years
- **Power/Energy Reduction:** 2,182 kW / 6,853,056 kWh/yr
- **Environmental Impacts:**
  - 4,717 tons/yr CO2 avoidance
  - 300,000 lamps diverted from a landfill over life of LEDs!



# Phase 3 LED Conversion

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- **Phase 3-** Perform IGLA for remaining ~40% or 4.5 million sqft of campus buildings in 2022 (CRC, Foundation, others)
- Potential \$6 million project assuming all spaces need LED conversion
  - Next IGLA will flush out actual need
  - Consider completion by end of FY26
- **CAC Financial Plan** estimates \$18 million investment across FY22-31
  - Creating an aggressive vision to complete campus in nearly half the time at nearly half the cost estimate
  - Impactful climate action will require setting aggressive objectives towards ambitious goals!





# 2020 – 2021 Sustainability Annual Report (SAR)

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Approved by BOV on 11/8

Prepared by Office of Sustainability

Summarizes sustainability efforts in past AY

- Awards and Recognition
- CAC Implementation
- Additional Resources

Most recent and all past reports available on our website:

<https://www.facilities.vt.edu/sustainability/sustainability-reports/virginia-tech-sustainability-annual-reports.html>





# Open Discussion

- **E&SC Resolution 2021-22A**
- **E&SC Task Forces**
- **CAC Implementation**
- **Energy Management LED conversion update**
- **Sustainability Annual Report**

**Next Meeting:**      **December 20, 2021**  
**2:00 p.m. via Zoom**

