University Council Minutes
October 5, 2020
3:30 PM
Videoconference

Present: Timothy Sands (presiding), Farida Jalalzai for Laura Belmonte, Cyril Clarke, Lance Collins, Karen DePauw, Bryan Garey, Guru Ghosh, Daniel Givens, Susan Sumner for Alan Grant, Jon Clark Teglas for Chris Kiwus, Lee Learman, Scott Midkiff, Ken Miller, Sally Morton, April Myers, Kelly Oaks, Kim O'Rourke, Julie Farmer for Charles Phlegar, Dwayne Pinkney, Julia Ross, Frank Shushok, Robert Sumichrast, Don Taylor, Tyler Walters, Lisa Wilkes, Paul Winistorfer, John Benner, Jeffrey Alwang for Rajaram Bhagavathula, Nick Copeland, Victoria Dashevsky, Paul Deck, Holli Drewry, Madlyn Frisard, Bob Hicok, Christa Miller, Serena Young, Diane Agud, Susan Anderson, James Hawdon, Robin Queen, Kevin Davy, Jia-Qiang He, Laszlo Horvath, Kathy Lu, Andre Meulenaer, Patricia Raun, David Tegarden, Megan Wawro, Judy Alford, Velva Groover, Bruce Harper, Jenny McCoy, Brandy Morse, Sue Teel, Janice Austin, Amanda Coleman, Karen Eley Sanders, Conaway Haskins, Inga Haugen, Sally Shupe, Awad Abdelhalim, Lia Kelinsky-Jones, Jack Leff, Eric Kaufman, Anvitha Anumolu for Camellia Pastore, Tamarah Smith, & Sabrina Sturgeon

Absent: Richard Blythe, Michael Friedlander, Steve McKnight, Menah Pratt-Clarke, Mason Agah, Eloise Coupey, Cayce Myers, David Bieri (with notice), Teresa Lyons, Chapman Pendery, & Adil Sageer

Guests: Kenlee Andreu, Lori Buchanan, Denny Cochrane, Tara Frank, Debbie Greer, Ariana Guevara, Rachel Holloway, Sharon Kurek, Marsha McKay, Ellen Plummer, John Randolph, Patricia Simpson, & Stacey Wilkerson

Dr. Sands called the meeting to order at 3:30 p.m. 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 21, 2020

Dr. Sands 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. New Business

Commission on Faculty Affairs
Resolution CFA 2020-21A
Resolution to Revise Faculty Handbook Promotion and Tenure Guidelines

Professor Bob Hicok presented the resolution for first reading. Professor Hicok indicated that this was the chapter three revision of the Faculty Handbook that was halted last year. There were a few concerns from last year that went unaddressed due to COVID-19 and have since been answered. Professor Hicok plans to ask for a deferral at the October 19 University Council meeting, which will push the second reading to December 7, 2020 (because there is only one UC meeting in November). This will allow time for Council members to read the resolution and discuss with the constituencies they represent.

4. Announcement of Approval and Posting of Commission Minutes

These minutes have been voted on electronically and will be posted on the University web (http://www.governance.vt.edu). Note that the purpose of voting on Commission minutes is to accept them for

filing. University Council Bylaws require that policy items be brought forward in resolution form for University Council action.

- Commission on Student Affairs
  April 16, 2020
  September 10, 2020

5. Presentation

Dwayne Pinkney, Senior Vice President and Chief Business Officer; John Randolph, Virginia Tech 2020 Climate Action Commitment Working Group Chair; and Denny Cochran, Energy and Sustainability Committee Chair gave a presentation on the Virginia Tech 2020 Climate Action Commitment Revision (attached). The resolution for adoption of the revised Climate Action Commitment will be brought to University Council for first reading on October 19.

6. Presentation

Bryan Garey, Vice President for Human Resources; Marsha McKay, Director of Talent Development; and Patricia Simpson, Senior Project Manager Process Improvement Specialist gave a presentation on the new PageUp Learning Management System (attached).

7. Adjournment-

There being no further business, a motion was made to adjourn the meeting at 4:23 p.m.

2020 Virginia Tech Climate Action Commitment

Climate Action Commitment Working Group

Presentation to University Council
October 5, 2020

VIRGINIA TECH

John Randolph (chair)
Todd Schenk (vice-chair)
Tim Baird
Shannon Bell
Erin Hopkins
Chen-Ching Liu
Kray Luxbacher
Sean McGinnis
Annie Pearce
Peter Sforza
Brooke Baugher
Jayme Bibbins
Brandon Burkey
Owen Callahan
Brogan Dineen
Drew Harris
Natalie Koppier
Jack Leff
Phil Miskovic
Blake Bensman
Rob Glenn
Brandon Hendricks
Christopher Kiwus
Carol Davis
Shayla Utzinger

The 2020 VT CAC Working Group Final Report

The 2020 VT CAC Working Group Final Report

Key Points

1. **Intro:** serious times, serious future, VT as model for society
2. **Working Group:** engaged, comprehensive, consensus process
3. **Much to build on:** Progress since 2009
4. **…but, limited, others passing us by…**all top tier universities focusing on climate
5. **CAC Goals & pathways:** #1-9: physical changes, #10-14 non-physical changes
6. **Comprehensive nature of CAC:** physical plant + education + culture + justice
7. **VT controls most physical changes:** VTES, energy systems, buildings
8. **Implementation:** operation and governance at high level of university
9. **How we compare to others:** VT 2020 CAC enhances VT leadership and reputation
10. **What's it going to cost?**
    a. **Many initiatives that are no-cost/low-cost/already budgeted or part of necessary upgrades**
    b. **Some have positive return or attract external funding or innovative financing (e.g., thru VTES or solar PPA)**
    c. **But given budget uncertainties, flexibility needed in implementation/timing for some initiatives**

The 2020 VT CAC Working Group Process

Key Points about Working Group process

1. Working Group operated by **consensus**
2. WG met at least weekly live < March 5, via Zoom > March 15
3. **12 subcommittees** involved 125 members including 35 staff
4. Subcommittees met weekly Feb-May and each wrote final reports (in Volume II)
5. **Community engagement** including
   a. Website, email
   b. 10 creative U-tube videos
   c. On-line surveys (>220 responses)
   d. 12 public Zoom convening sessions (226 participants)

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Virginia Tech Climate Action Progress 2009-2020

The 2009 VT CAC & Sustainability Plan was a cutting-edge effort for its time, but a decade later it fails to prescribe what climate scientists recognize as necessary actions and also falls short of many peer universities' recent initiatives.

In many respects, we have forged ahead <u>beyond</u> the 2009 CAC.

- **STARS Gold score, Numerous awards** and recognitions since 2010,
- Greenhouse gas (**GHG) emissions reduced 24% from 2006 to 2019**, despite 22% growth of campus from
- **Alternative transportation upgrades, waste management program,**
- **Virginia Tech Electric Service (VTES), Facilities Department, Office of Sustainability, Sustainable Procurement Policy**; **Design and Construction Building Standards**
- **Enviable array of sustainability-related academic programs**

But in other areas, we are falling behind.

- The 2009 VT CAC was a leading effort for its time, but is now **limited in both scope and ambition**.
- It **did not include several sources** of campus GHG
- It **did not even mention renewable energy**
- Goal of **80% reduction** in GHG from 1990 levels by 2050, is **not aggressive enough**

Virginia Tech 2020 Climate Action Commitment

Vision of the Virginia Tech 2020 Climate Action Commitment:

> ***In the spirit of Ut Prosim, Virginia Tech will be a leader in climate action in service to our community, the Commonwealth, and the world.***

Mission of the Virginia Tech 2020 Climate Action Commitment**:**

President Tim Sands: "climate change presents one of the world's most pressing problems…and Virginia Tech has a duty to respond."

> ***The mission of the Virginia Tech 2020 Climate Action Commitment is to achieve carbon neutrality by changing our physical infrastructure, collective and individual behaviors, and educational mission; to engage everyone in creating a culture of sustainability; and to achieve these objectives through just and equitable means.***

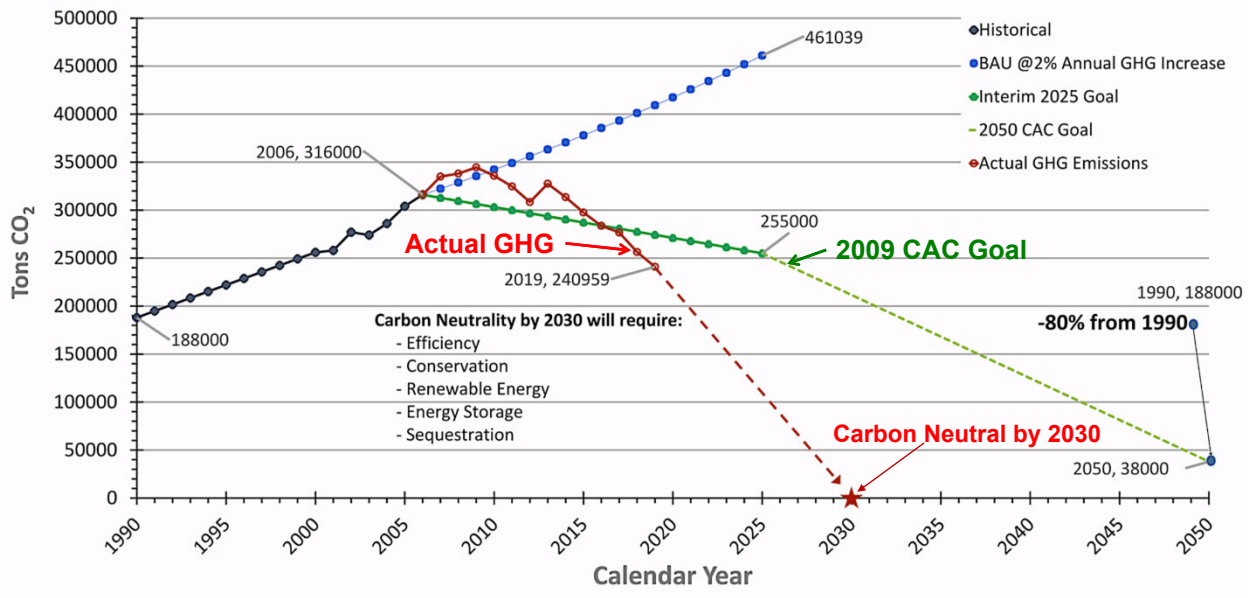
The VT 2020 CAC:
15 Goals, Pathways to meet them, Implications, Implementation, Immediate Initiatives

- #1-9 address physical climate action,
- #10-14 address non-physical climate action
- #15 targets 2050

2020 Virginia Tech Climate Action Commitment Goals 1-9

1. **Carbon neutral Virginia Tech campus by 2030**
2. **100% renewable electricity by 2030**
3. **Eliminate coal by 2025** and improve efficiency of campus energy systems
4. **Reduce building energy** consumption to enable carbon neutrality by 2030
5. Operations of **new buildings** initiated after 2030 will be carbon neutral
6. **Agricultural, forestry, land use operations** will be carbon neutral by 2030
7. Virginia Tech to become a **Zero-Waste Campus by 2030**
8. Establish **sustainable procurement policies** and procedures by 2022
9. Reduce single-occupancy commutes to campus by 20% by 2025, and reduce **transportation**-related GHG emissions by 40% by 2030

Goal #1: Virginia Tech GHG Emissions Progress and Needed Reduction to Carbon Neutral by 2030

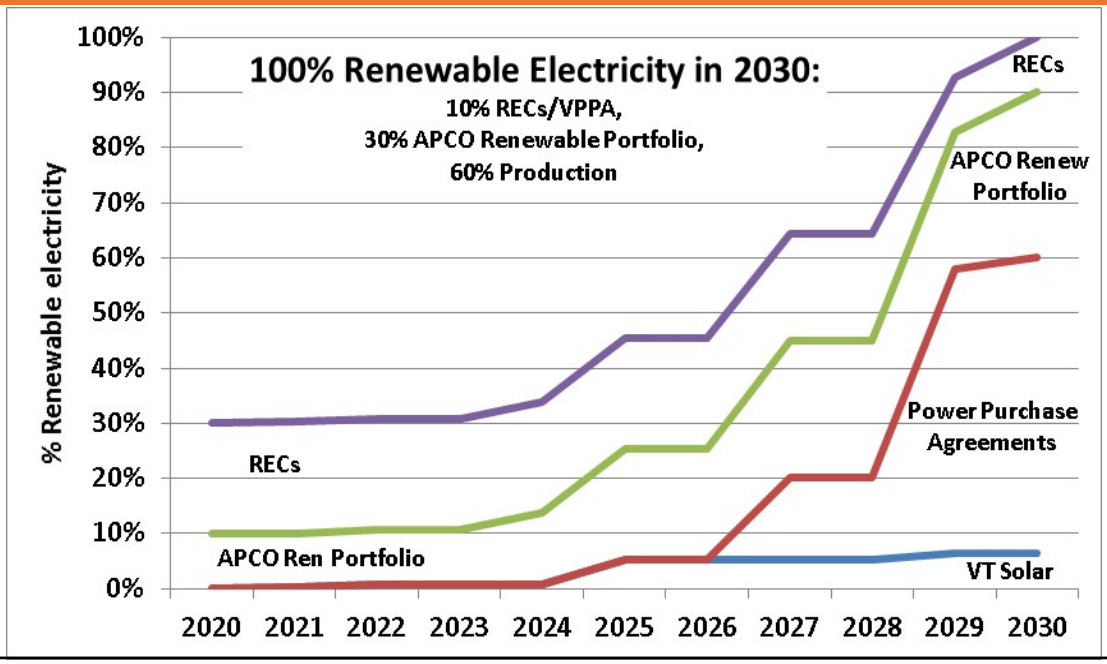


Goal 2: 100% Renewable Electricity by 2030

POTENTIAL PATHWAYS TO GOAL:

- **2020: achieve 30% renewable electricity** via purchase 20% renewable energy certificates (RECs) from APCO + APCO 10% renewable portfolio
- **2020-2030: Achieve 100% renewable electricity by 2030** via combination of
  - VT owned or 3rd party owned PPA on VT rooftops/land (15 MW),
  - APCO/3rd party owned SWVA PPA capacity (130 MW), total=145 MW,
  - to serve campus (95 MW) and town customers (50 MW) for 60% of needs
  - plus 30% APCO renewable portfolio and 10% RECs to cover steam plant natural gas cogeneration

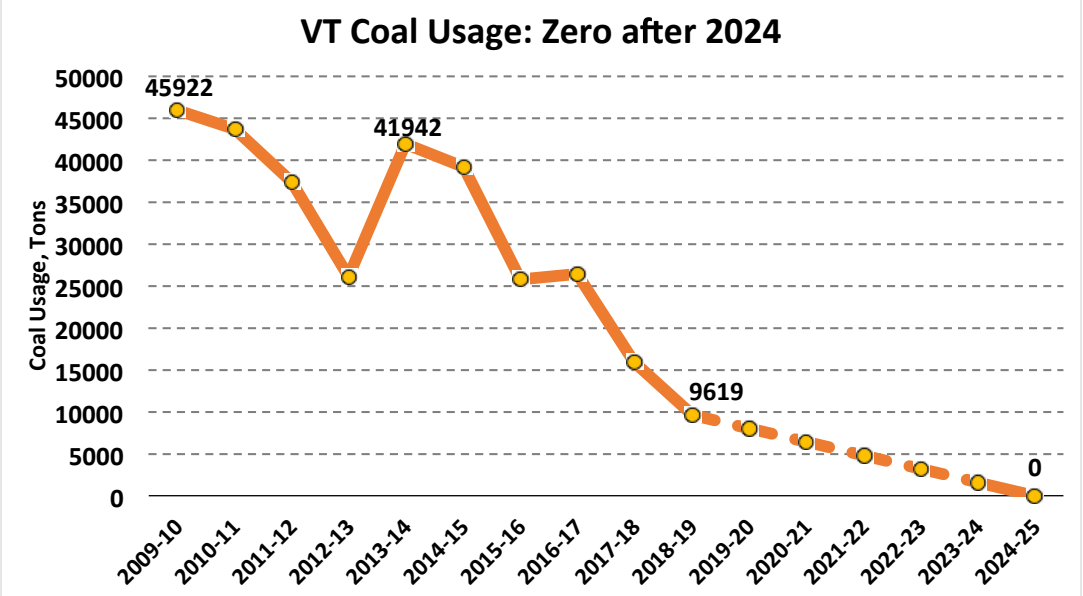
Goal 2: 100% Renewable Electricity by 2030



Sterrett Rooftop Solar Project Plan: 340 kW

- **Current plan for 2.3MW solar on VT rooftops shows positive financial savings**

Goal 3: Eliminate Coal after 2024 and Improve Efficiency of Campus Energy Systems

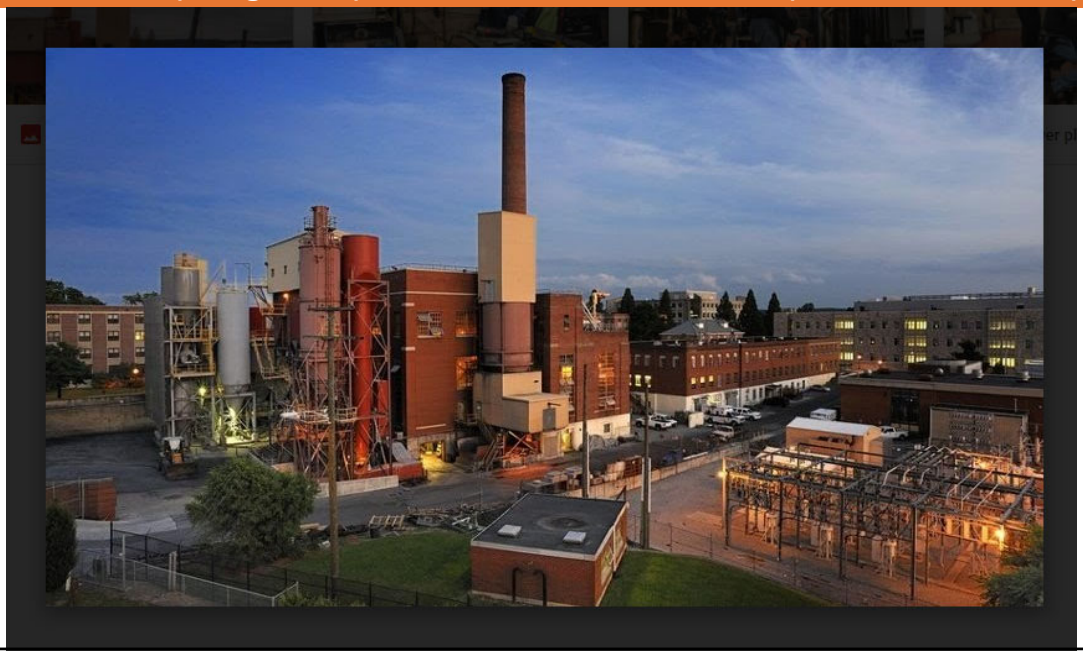


Goal 3: Eliminate Coal after 2024 and Improve Efficiency of Campus Energy Systems

Potential pathway:

- Gas boiler #12 will provide **natural gas thermal capacity to be coal free**.
- New **natural gas service contract** provides cost and reliability benefits
- To eliminate coal, develop plan for **LNG backup fuel**
- **Improve chiller efficiency** with completion of Chiller Plant Phase II project by 2023, Energy Management Plan for stand-alone chillers, central chillers for new growth.

Virginia Tech Central Steam Plant, Virginia Tech Electric Service Blacksburg Substation (foreground) and the North Chiller Plant (behind substation)



Goal 4: Reduce Building Energy Consumption to Enable Carbon Neutrality By 2030

4.1 By the end of 2022 reduce total electricity consumption (kWh) by 10% and electricity intensity (kWh/gross square foot (gsf)) by 20% below 2006 levels.

4.2 In 2021-30, deploy 10-year energy management retrofit to reduce total energy use in all buildings by 10% and energy use intensity (EUI=Btu+kWh/GSF) by 20% below 2020

Goal 5: Operations of New Buildings Initiated after 2030 Will Be Carbon Neutral

5.1 Continue to upgrade new building efficiency conforming to latest adopted LEED-Silver or higher standards and ASHRAE 90.1 energy performance standards + 10%

5.2 By 2022, reduce total energy use intensity (EUI) in newly initiated buildings by 20% compared to 2020 existing buildings.

5.3 By 2026, build a signature zero-net-energy (ZNE) building on campus as a showcase and learning model for the Climate Action Living Laboratory

5.4 By 2028, newly initiated buildings' efficiency improvements will reduce total energy use intensity (EUI) in new buildings by 40% compared to 2020 existing buildings

Goal 5: New Buildings LEED-Silver (or higher) and ASHRAE 90.1 +10%

Two recent LEED-Gold Buildings:
Goodwin Hall (left), Human and Agricultural Biosciences Building 1 (right)


Goodwin Hall

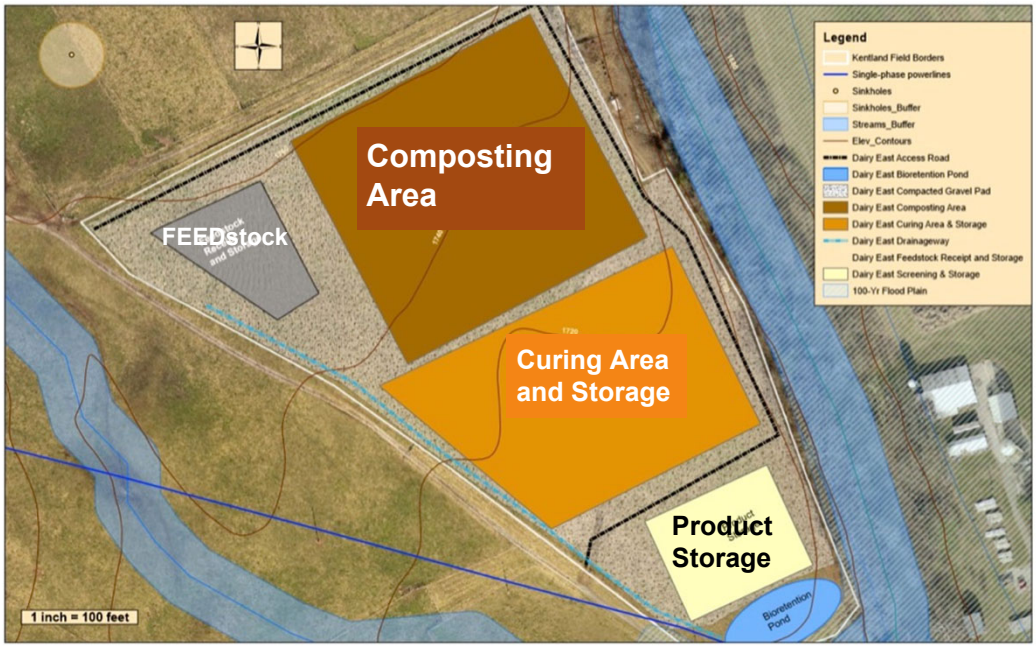

Human and Agricultural Biosciences Building 1

Goal 6: Carbon Neutral Agricultural, Forestry, and Land Use Operations by 2030

Potential pathway:

- Develop the **University Compost Facility at Kentland**
- **Adopt Campus Tree Policy** to increase canopy cover from 16% to 25%
- **Reduce agricultural and forestry net GHG emissions**
- **Use VT agricultural lands to develop solar farms** including co-use solar and farmland agrivoltaics for Living Laboratory instruction and research.

University Compost Facility at Kentland Concept Plan



Goal 7: Zero-Waste Campus by 2030

7.1 Increase landfill waste diversion rate to 85% by 2025

7.2 Increase waste recycling rate to 55% by 2025

7.3 Reduce waste to landfill per faculty/staff/student enrolled by 25% by 2025

Goal 7: Zero Waste Campus by 2030

By 2025, reduce landfill waste/capita by 25%, increase recycle rate to 55%

Goal 8: Implement and Evaluate the Procurement Department's Sustainable Procurement Policy 2020-2022

Pathway to goal

- On a pilot basis, the **Procurement Department will implement and evaluate** the 2020 Sustainable Procurement Policy for two years
- By 2022, based on the evaluation, the Procurement Department in collaboration with the Energy & Sustainability Committee will assess the pilot project and **formulate the Sustainable Procurement Policy v.2.**

Goal 9: Reduce Transportation-Related GHG Emissions by 40% by 2030

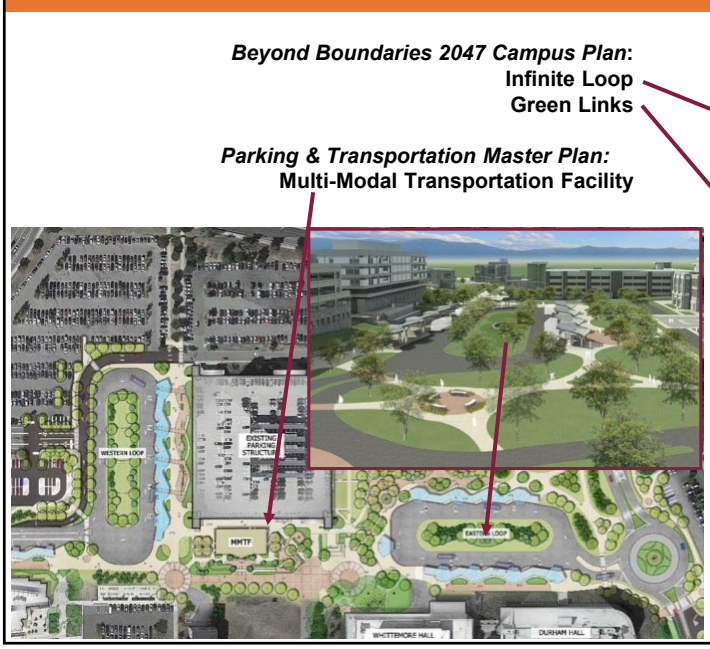
9.1 Reduce Single-Occupancy Vehicle (SOV) Commuting To Campus By 20% By 2025

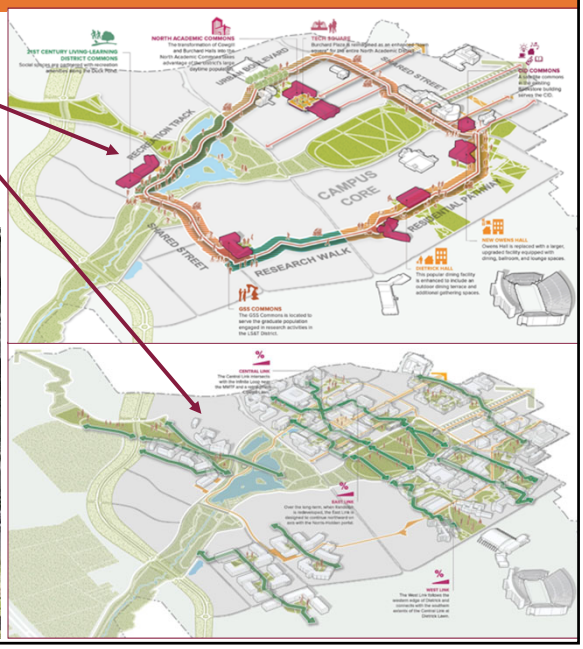
Goal 9: Advance Alternative, Safe & Efficient Commuting

Goal 9: Implement transportation infrastructure plans

***Beyond Boundaries 2047 Campus Plan*:**
Infinite Loop
Green Links

Parking & Transportation Master Plan:
Multi-Modal Transportation Facility





2020 Virginia Tech Climate Action Commitment Goals 10-15

10. Integrate the Virginia Tech 2020 Climate Action Commitment into the university's educational mission through a new **Climate Action Living Laboratory** in 2021

11. Establish **climate justice** as one of the core values of the VT Climate Action Commitment

10. Diminish barriers to **sustainable behaviors** and through institutional change, education, and social marketing

10. Implement the VT Climate Action Commitment
…at a high level of university administration and governance;
…by integrating CAC goals for facilities, education, and campus culture;
…with ongoing 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

Goal 10: Integrate the CAC into Virginia Tech's Educational Mission through the Climate Action Living Laboratory (CALL)

Potential Pathways

- **Use the campus physical-plant and people-related climate actions as basis for instruction, research, and outreach.**
- **Build on existing programs** such as Sustainability Internship, Green RfP, and department experiential learning using campus facilities and grounds as laboratory
- **Engage students, faculty, departments, colleges, and provost office as well as Facilities and Auxiliaries** to enhance educational opportunities of the Climate Action Commitment initiatives.
- **Generate external funds** for related instruction & research opportunities through contracts, grants, and fundraising.
- Specific examples for instruction, research, outreach identified in other CAC goals:
  - Campus Energy Data Dashboard
  - VT Smart Grid partnership of VTES and Power & Energy Center
  - Showcase solar rooftop and agrivoltaic projects and signature zero-net-energy building
  - Sustainable agriculture and composting facility
  - Outreach/extension programming in climate-change vulnerable communities: coalfields, coastal Virginia
  - Social science research/instruction on sustainable behavior, mobility, circular economy, climate justice, others.

Goal 11: Establish Climate Justice as a Core Value of the Climate Action Commitment

Potential Pathway

- Ensure that the **social impacts** of Virginia Tech's climate mitigation choices (e.g. energy, land use, and waste) are identified and addressed to the greatest extent possible.
- By 2021 establish a **Climate Justice Subcommittee** to the revised Energy, Climate, and Sustainability Committee with representation from students, faculty, and community members.
- Ensure that VT climate action implementation **plans recognize and assist vulnerable or frontline groups adversely affected by those plans**, including low-wage VT employees, tuition-paying students, VTES town ratepayers, coalfield communities, and others.
- **Provide education, research, and outreach programs to assist vulnerable and historically marginalized groups** mitigate and adapt to climate change and help them thrive in the new energy economy. These efforts should target all Virginia Tribes, African Americans in the New River Valley, coalfield communities in southwest Virginia, and coastal Virginia communities, among others.

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Goal 12: Diminish Barriers to Sustainable Behaviors through Institutional Change, Education and Social Marketing

Potential Pathway

- **Identify structural, social and institutional barriers** to sustainable behaviors
- **Implement infrastructural changes**—from waste management to transportation to building operation—to make sustainable choices easier
- Develop **educational programs** to foster pro-environmental behavior change
- **Design and implement choice architecture or "nudges"** to promote sustainable behavior, while allowing for individual choice.

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Goal 13: Implement the VT Climate Action Commitment at a high level of university; by integrating CAC goals for facilities, education, and campus culture; with ongoing stakeholder engagement

Potential Pathway

- **Governance:**
  - Restructure the university Energy and Sustainability Committee (E&SC), renaming it the **Climate Action, Sustainability, Energy (CASE) Committee**
- **Implementation/operations:**
  - Appoint a new university **Chief Climate Action and Sustainability Officer** (CCASO) to direct a reconstituted **University Office of Climate Action and Sustainability** (OCAS) to oversee CAC implementation and other campus sustainability initiatives.
- **Learning:**
  - Establish the **Climate Action Living Laboratory (CALL)** to enhance offerings and build bridges between facilities and academic departments (Goal 10)

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Goal 14: Develop innovative budgeting and financing mechanisms to generate funding and staffing to achieve Climate Action Commitment goals

Potential Pathway

- Strategically invest university E&G and Auxiliary funds to implement the **10-year Energy Management Plan** targeting academic and auxiliary buildings at a level of $5 million/year
- Major investment is needed to implement the **pathways for renewable electricity** both on VT buildings/lands and in the SWVA region, including options:
  - **VT owned** and developed projects on VT buildings/land, and
  - **Utility or 3rd party owned** and developed projects on VT buildings/land and in SWVA with VT power purchase agreement (PPA).
- **VT Foundation** can be a valuable partner starting with investment in cost-effective energy efficiency measures in Foundation-owned properties leased to VT operations
- **VTES** power utility has opportunities for investment in renewables in partnership with APCO
- Additional funding sources include:
  - Federal and state research and education funding for Climate Action Living Laboratory
  - Development donor funds
  - State funding for energy efficiency and renewables
  - Foundations and philanthropic organizations for climate action initiatives

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Goal 15: Develop Pathways after 2030 to eliminate offsets and fossil fuels by 2050

Potential Pathway

- It is difficult to anticipate how technology, the economy, and public policy will evolve in the next 10-30 years.
  - **2025: 5-year CAC revision** review explore options for 2030-2040 timeframe
  - **2030: 5-year CAC revision** review explore options for 2040-2050 timeframe
- **Eliminating offsets and fossil fuels** would require significant changes in Virginia Tech's physical plant.
  - We are dependent on natural gas in the steam plant and eliminating natural gas will require replacement by a non-carbon fuel (e.g. biogas, hydrogen, biochar) or
  - a new heating system based not on steam but on hot water perhaps generated by renewable electricity and geothermal ground-source heat pump systems.

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The 2020 VT CAC WG Peer Comparison

Our extensive review of peer institutions showed that we are among the leaders but are lagging behind many that have made recent actions and commitments.

But our VT 2020 CAC sets the stage for Virginia Tech to shine as an exemplar and leader in university climate action. Beyond our climate neutrality and zero-waste campus goals, **several areas of the 2020 CAC can place Virginia Tech above other universities:**

- The detail and **specificity of the pathways** developed to achieve the CAC goals
- Our own **unique utility VTES** leading our way to 100% renewable electricity, while most other universities are totally dependent on private utilities and companies
- Using our considerable **land resources** not only to manage our agricultural impacts, but also to sequester carbon and develop renewable energy
- Incorporating in our carbon neutral goal **scope 3 GHG emissions relating to behavior** (e.g., commuting, waste/recycling, water/wastewater, business travel), while most others include just scope 1 & 2
- Integrating our physical climate action into the **university's educational mission** through the Climate Action Living Laboratory (CALL).
- **Elevating climate action and sustainability** in university administration and governance
- Specifically addressing **community engagement, sustainable behaviors, and social equity and justice** as core elements of our climate action.

What will Climate Action Commitment cost?

- **Renewable Electricity:** cost competitive with what we now/will pay for power
- **Campus energy systems:** ready to eliminate coal now
- **Building efficiency:**
  - Existing: 10-year energy plan $5-10 million/year, 12% ROI;
  - New: 2020 CAC sets same LEED/ASHRAE standards as 2009 CAC
- **Agriculture, Forestry, Waste Management, Transportation**: need compost facility, waste consultant, planned mobility infrastructure, when funds are available
- **Carbon offsets:** not required until 2030
- **Climate Change Living Laboratory:** Integrate VT climate action and education can be moved forward with existing resources
- **Climate Justice, Sustainable Behaviors, Budget & Finance:** can be moved forward with existing resources
- **Climate Action Leadership:** perhaps provide interim leadership, defer university level position

VT 2020 Climate Action Commitment Resolution

- Approved by Energy & Sustainability Committee (E&SC) August 26
- 1st reading by Commission on University Support (CUS) September 17
- Endorsed by all 4 constituencies: Faculty and Staff Senates, SGA and GSA
- 2nd reading by CUS October 15
- 1st reading by University Council October 19
- 2nd reading by UC November 2
- Consideration by Board of Visitors November 16

PageUp Learning Management System (LMS)

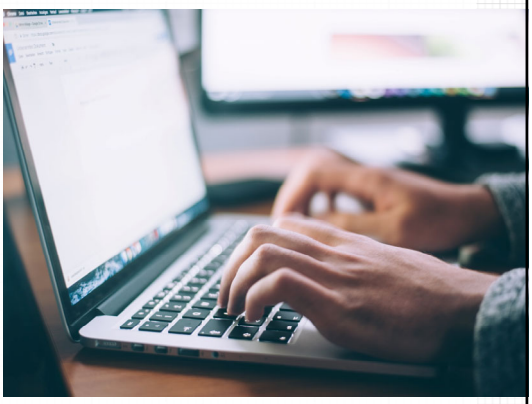
Bryan Garey, VP Human Resources
Marsha McKay, Director of Talent Development
Tricia Simpson, Sr. Project Manager, Process Improvement Specialist
October 5, 2020

HUMAN RESOURCES VIRGINIA TECH

1

Agenda

- Features and Functions
- Content Launch
- New Landing Page
- Launch Schedule
- Emails
- Training
- Communications



HUMAN RESOURCES VIRGINIA TECH

2

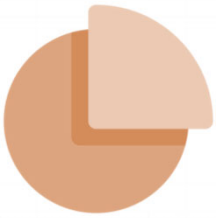
PageUp LMS: Features and Functions

Houses diverse learning formats

- Visually appealing library
- SCORM-compliant
- Face-to-face training and events
- On-the-job development activities
- Recommended readings

Scalable automation of role-based learning

- Assign and automate specific role-based activities
- Streamline learning processes
- Great for onboarding



Full audit and tracking capability

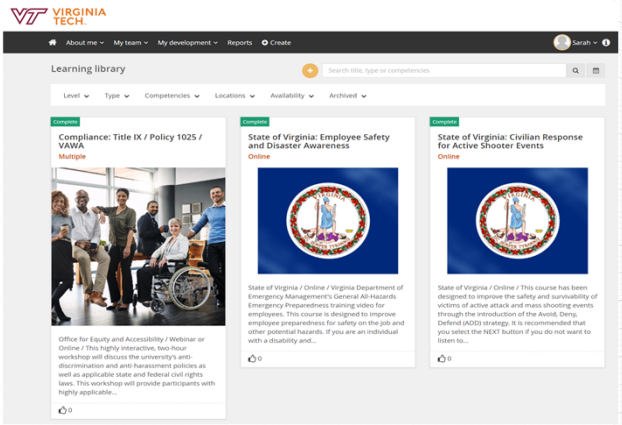
- Analytics suite
- Customized reporting
- Keep track of compliance completion to mitigate risk

HUMAN RESOURCES VIRGINIA TECH

3

Content at Initial Launch

Common Compliance Training



Historical Transcripts

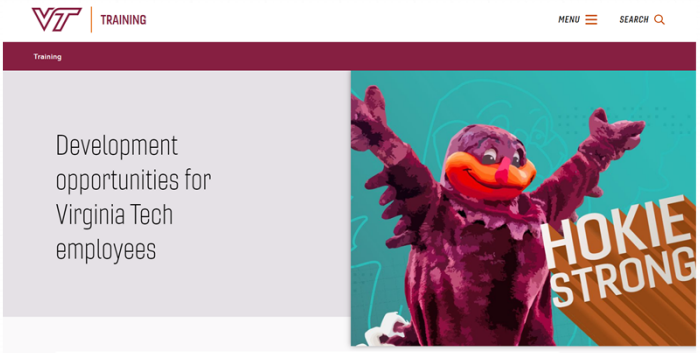
(from July 1, 2016 and 100 percent complete)

- NLI
- PDN Canvas
- LinkedIn Learning (includes Lynda)
- CourseWhere (inactive Office Software Skills and Diversity Development Institute courses only)

HUMAN RESOURCES VIRGINIA TECH

4

New Landing Page for training.vt.edu



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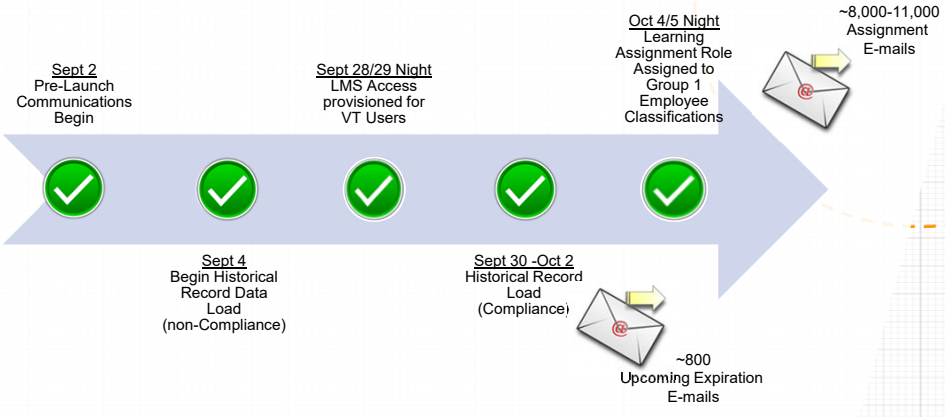
Go-Live Timeline & Status



6

Emails

- Users may receive emails as compliance course records are loaded due to:
  - Upcoming Expirations
  - Course Assignments

- Several courses required for a large percentage of the Virginia Tech population

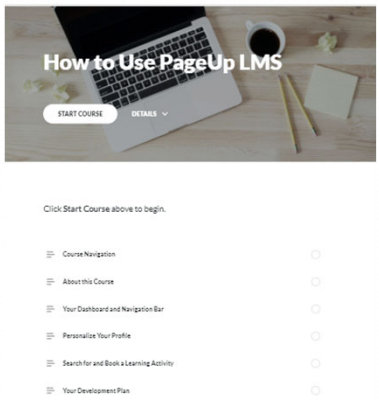
PageUp LMS provides improved capability to view status and access required courses!

7

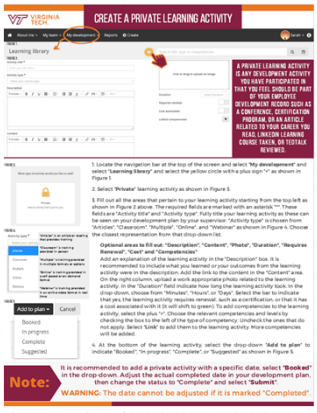
HUMAN RESOURCES
VIRGINIA TECH

Training

- Online training available



- Training Aids available on website



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HUMAN RESOURCES
VIRGINIA TECH

Communications

Date	Communication Focus	
Sept. 3	Reintroduce system and launch; build excitement	✓
Sept. 4 and ongoing	Announce phasing out specific trainings in current systems	✓
Sept. 9	Highlight classes available in PageUp LMS at launch	✓
Sept. 15	Announce new training.vt.edu site	✓
Sept. 23	Highlight system functionality (ex. courses, create your own training records, notifications about courses); how compliance courses will be rolled out (assignments by group)	✓
Sept. 8 - 24	Pre-Launch Roadshow Presentations and/or Demonstrations	16 complete 5 scheduled 21 Total
Sept. 29 (launch day)	System is live; reiterate key messages about launch; how employees will access training and notified when trainings are assigned	✓
Post launch	Communications about specific compliance training courses	
Post launch	Ongoing articles about system features (ex: what is the IDP and how do you use it)	

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HUMAN RESOURCES
VIRGINIA TECH