

The Comprehensive Sustainability Plan

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The University of Vermont

Your input

Weaknesses and Opportunities

What is UVM uniquely positioned to do well?

What am I not thinking of?

Threats

How might this effort fail?



Comprehensive Sustainability Plan Objective and Key Results

Objective

Develop a plan to guide sustainability at the University of Vermont with short- and long-term goals.

The CSP will outline short- and long-term goals that are achievable and within the financial capacity of the institution.

*The development of UVM's comprehensive plan will allow UVM to step forward, amplify the work we already do and announce renewed commitment to a **healthy environment and healthy societies**.*



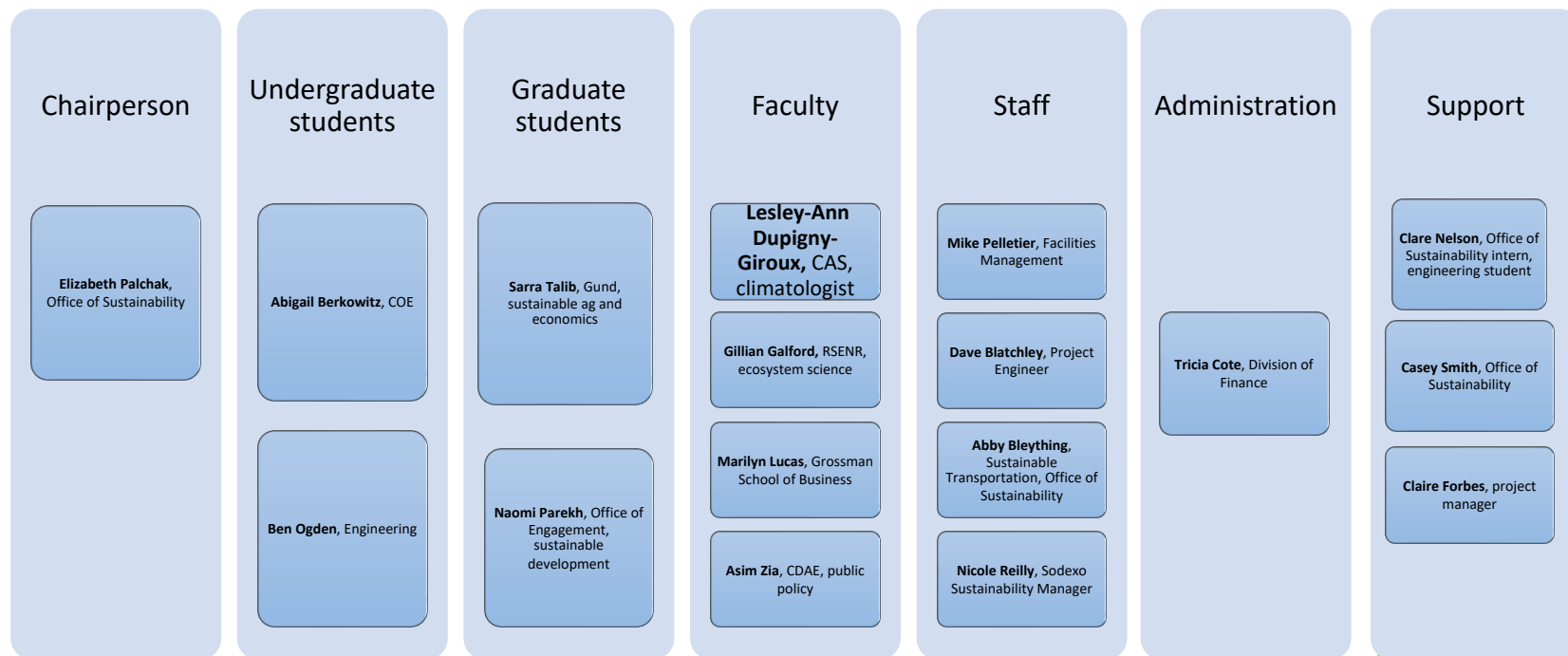
Comprehensive Sustainability Plan Objective and Key Results

Key Results

- Identification of three themes to communicate goals of the plan to stakeholders
- Identification of six to seven areas of focus (e.g., waste, energy, buildings, etc.)
- Creation of feasible and measurable goals for each area of focus
- Completion by fall semester 2022



CSP Work Group



Comprehensive Sustainability Plan Timeline

Mar

- Identify focus areas and preliminary themes

Apr

- Solicit broad campus community input and targeted input from external stakeholders

May-Jun

- Identify achievable goals for each focus area

July-Aug

- Write draft plan

Sep

- Integrate feedback

Oct

- Final plan ready for release



Supporting Resources

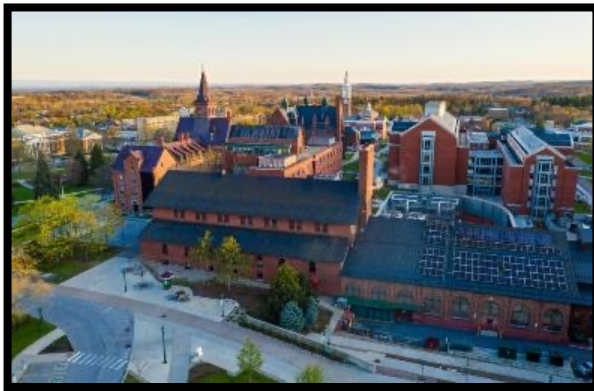
[Vermont Climate Action Plan](#)

[Amplifying our Impact: Strategic Vision for UVM](#)

[UVM Facilities Sustainability Plan](#)

[Vermont Climate Assessment](#)

[AASHE STARS Technical Manual](#)



climatechange.vermont.gov

All other photos courtesy of UVM Communications.

University of Virginia

Timeframe: 2020-2030

Focus areas: Carbon; waste; nitrogen; sustainable food; water

Themes: build accountability; advance equitable places; enhance sustainability teaching; enhance sustainability research; grounds-engaged learning



University of Virginia

Work Group Committee on Sustainability

Letter from President

Three overarching goals adopted by the BOT

- Carbon neutral by 2030 and fossil free by 2050
- “30 by 30”
 - Reduce water and nitrogen emissions
 - Reduce waste
 - Increase sustainable food
- Partner with the community to accelerate the work



University of Virginia

Organizing themes

- Governance and collaboration
- Engage
- Steward – specific, measurable goals
- Discover – aspirational, less specific i.e. “enhance, promote, foster...”

Structure

- Introduction paragraph for each organizing theme
- Goal
- 1-3 strategic actions

STEWARDSHIP: LIVING OUR VALUES

Leadership in sustainability exemplifies living our values and presents an opportunity for UVA to be great, do good, and amplify its impact beyond its geographical boundaries through teaching, research, operations, sharing best practices, reducing adverse impacts on human and ecological health, and improving the lives of all.

GOAL:

UVA will be carbon neutral by 2030 and fossil fuel free by 2050.

STRATEGIC ACTION: Develop 2030, 2040, and 2050 Climate Action Plans. Ensure that all decisions made at UVA concerning its energy sources and generation, infrastructure, buildings, fleet, and transportation are guided with this ultimate objective in mind. Areas of focus will be addressing UVA's fuel mix, increasing renewable energy, reducing the impact of growth, energy efficiency, conservation, and transportation.



Bates College

Letter from President

Why We Care

Background on Carbon Neutrality

- Energy Efficiency
- Transition to renewable energy
- Empowering sustainability culture

Why We Care (mission statement)





A recent *Princeton Review* survey found that 78% of incoming students consider an institution's level of commitment to sustainability as a factor in making their college decisions.

Why We Care

At Bates, our mission statement speaks of a commitment to responsible stewardship of the wider world. We believe that we have a moral imperative to have a net positive impact in this arena and that we can and should do so through our academics, community, and our environmental footprint. At Bates, every individual has a role to play in making our community more sustainable.

The Intergovernmental Panel on Climate Change (IPCC) gives the world just a decade to reduce its global greenhouse gas emissions by a staggering 50% or face a future where we are unable to keep global warming in check. We are already seeing the effects of unchecked climate change in the form of increased drought, dangerous heat waves, forest fires, heightened severity of hurricanes, sea level rise, political destabilization from climate refugees, and the beginnings of ecosystem collapse.

In addition to the ethical imperative to become more environmentally benign, Bates and schools around the country are also getting strong business signals to become more sustainable. A recent *Princeton Review* survey found that 78% of incoming students consider an institution's level of commitment to sustainability as a factor in making their college decisions. From an admissions perspective, the upside to an ambitious climate commitment is enormous. At Bates, almost 75% of our revenue comes from tuition, so maintaining the size and interest of the applicant pool is vital to our future.

"Renewable energy is a passion of mine," said Brent Feldman '17 as he installed a solar photovoltaic array at the Bates Coastal Center, aka Shortridge, in Phippsburg. The Shortridge rooftop array was Bates' first institutional PV installation. Bates recently entered into a 5 MW solar project that will represent 75% of the college's current electricity use and plans to target more solar opportunities on campus.

■ BATES Sustainability Roadmap



Bates College

Introduction paragraph to “major areas”

- Energy and Climate
- Academics
- Operations
- Culture
- Governance and Tracking Progress

Structure

- Major area
- Sub areas (i.e. buildings, new buildings, transportation)
- 3-5 goals and aspiration statements

1) Energy and Climate

Combine very low energy-use buildings with renewable energy sources to become Climate Positive by 2030.

Buildings

Create buildings that improve the overall quality of life. Increase the energy efficiency of our built infrastructure, including adopting Energy Use Intensity targets (how much energy a building uses per square foot), and updating our standards for all new construction and renovation projects. Avoid materials that contribute to human illness or exacerbate climate change.

New Buildings

- New campus buildings should meet at minimum the American Institute of Architects (AIA) 2030 Challenge standard, which sets a fossil fuel energy reduction goal of 80% below the average building consumption for that category of building.
- As a stretch goal, we adopt the Passive House design standard, which has a dual goal of very low Energy Use Intensity (EUI) for the building, as well as targeting wasted energy via air leaks. Passive House buildings can be built at cost parity to ordinary buildings above a size threshold of around 20,000 square feet, and see significant (80-90%) reductions in fuel costs.
- New buildings at Bates College will be constructed to be solar ready, and electric vehicle charging station ready. These costs are usually modest in constructing a new building, but to retrofit after the fact can be quite invasive and expensive.
- Evaluate construction materials that sequester, rather than release, carbon dioxide in their manufacture. Explore the use of structural materials like mass timber as a replacement for steel and concrete.
- As our buildings are meant to house and shelter our students, staff, and faculty, it is also important that they are safe and healthy spaces. It is important to promote climate and people-friendly building products, for the health of our community and our environment. We will work with our contractors to exclude Red List materials, which are classified as hazardous to human health and the larger ecosystem, as well as encouraging use of refrigerants with low greenhouse gas warming potential.

SMART DESIGN

At Bates, all renovations and new construction, like the recent Bonney Science Center, are built to a high level of efficiency with a focus on energy performance. We work with architects who specialize in sustainable design to suit specific sustainability features for each new building project.



University of Vermont

DRAFT Themes

- Resilience
- Education
- Health and Wellbeing
- Equity



University of Vermont

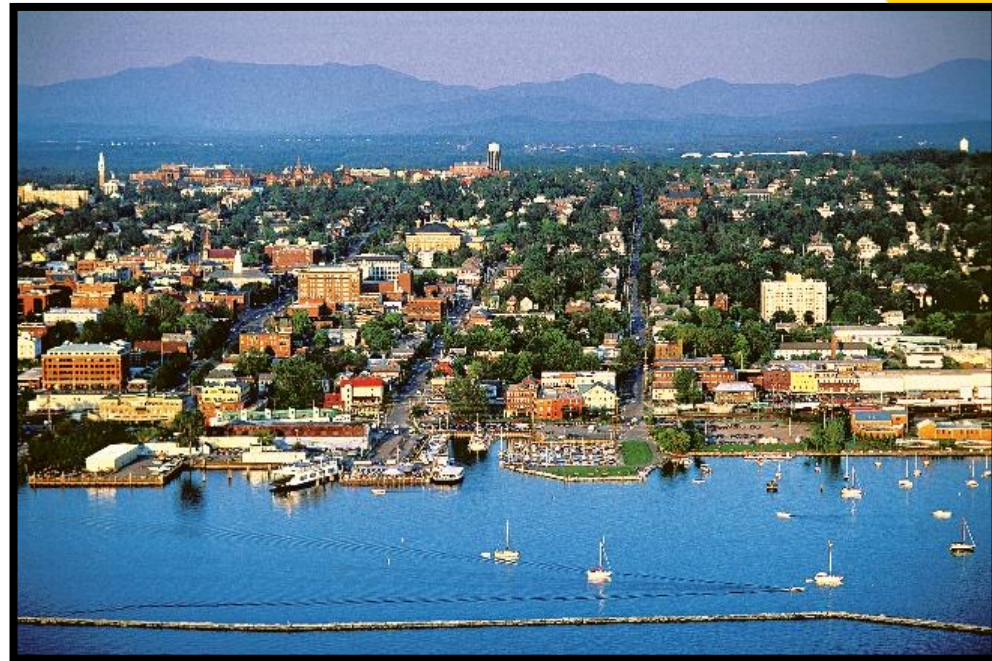
DRAFT Focus Areas

- Decarbonization or Climate and Energy
 - Clean Energy
 - Buildings
 - Transportation or Campus Mobility
- Operations
 - Food
 - Recycling/Waste
 - Water or Water Use
 - **Purchasing**
 - **Landscape (could include stormwater management)**
- Research and Learning
 - Community engagement
 - Sustainability Research
- Governance and People
 - *Investments*
 - Workforce development
 - Social Equity or Diversity, Equity, and Inclusion



Next steps

- **Presentations to all governance groups**
- **Wide survey distribution to UVM community**
- **Faculty and expert input**
- **Development of preliminary goals**
- **Advisory Council review**
- **Development of Key Performance Indicators**



Your input

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Comprehensive Sustainability Plan Survey

go.uvm.edu/csp

