Our Green Future
5 Year Update

Community Forum
10/24/22
COMMUNITY FORUM AGENDA

LEARN

- Sustainability In Context
- History of Sustainability at Dartmouth
- OGF Sustainability Development Process

ASK

- Small Group Discussions
- Guiding Questions
- Request Feedback

ENGAGE

- Get Engaged in the Planning Process
- Next Steps
Call To Action & Work To Date
Urgency of our global situation

Rate of Temperature Change in the United States, 1901–2021

Rate of temperature change (°F per century):

Source: NOAA (2022) Climate at a glance.
Intense storms have increased

The Northeast experienced a 71% increase in the amount of precipitation falling in very heavy events (the heaviest 1%) from 1958 to 2012.

Average Annual Temperature Increases

The Northeast is projected to experience an increase in the average annual temperature (°F) for 2041 to 2070 compared to 1971 to 1999 under a high emissions scenario.

Study warns that as winter shrinks, big chunks of New Hampshire’s identity will melt away

Local and Campus Impacts

Source: Lowes.com

Credit: Valley News, Jennifer Hauck
TOTAL ENERGY USE VS. CAMPUS GROWTH

TOTAL CAMPUS ENERGY USE (MMBTU)

- 950 K
- 900 K
- 850 K
- 800 K
- 750 K
- 700 K
- 650 K
- 600 K
- 550 K

FISCAL YEAR


TOTAL BUILDING SQUARE FOOTAGE

- 5.5 MILLION
- 5.3 MILLION
- 5.1 MILLION
- 4.9 MILLION
- 4.7 MILLION
- 4.5 MILLION
- 4.3 MILLION
- 4.1 MILLION
- 3.9 MILLION
- 3.7 MILLION
- 3.5 MILLION
Annual CO₂ emissions from fossil fuels, by world region

Source: Global Carbon Project

Note: This measures CO₂ emissions from fossil fuels and cement production only – land use change is not included. ‘Statistical differences’ (included in the GCP dataset) are not included here.
Some perspective would be useful here. Climate change will be quite bad if unabated, but this is still the best time to be born in human history across most metrics (life expectancy, literacy/education, extreme poverty, etc.): ourworldindata.org/extreme-poverty
In 2017, the Our Green Future Report recommended principles, standards, and commitments in the areas of:

1. energy
2. waste and materials
3. water
4. food
5. transportation
6. landscape and ecology
President Hanlon adopted a subset of recommendations as formal goals/actions:

- Reduce greenhouse gas emissions by 50% by 2025, 80% by 2050
- Transition to renewable sources by 2025
- Improve heating distribution efficiency by 20 percent
- Waste study
- Food education
- Form the Sustainability Corps
Work to Date

- Energy transformation
- GHG progress
- Waste progress
- Food Working Group
- Sustainability Corps
- Experiential learning
- Community building
- Student engagement
Assets

- Irving Institute for Energy & Society
- Health and Climate Group
- Equity and Procurement Group
- Climate change an urgent issue for many
- Arctic Studies Institute
- Sustainability Office
- Senior leadership support
- Dedicated internal operations team

Officials on the tour get a look at the underground hot-water distribution system outside the new Irving Institute building. (Photo by Robert Gill)
Our Call To Action
Deliverables will include:

- New recommendations to President Hanlon by March 2023
- Clear articulation of Dartmouth’s opportunity for excellence in climate and sustainability
- Roadmap for implementation and clear assignment of responsibility
Planning Process
## Our Green Future Process

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Meeting Process

Each meeting builds on the one before.

IDEATION ROADSHOW | Community Feedback and Idea Generation

MEETING 1 | baseline data and ideation review

MEETING 2 | update or new goal development

SUMMIT | WG updates + strategies refined

MEETING 3 | goals refined + strategy development

MEETING 4 | actions + plan outlined

WRAP UP | refinement

October 2022

March 2023
Core Values

Throughout the planning process we will follow these Core Values:

• Commitment to full participation - *be present*
• Support open & equitable discussion - *listen*
• Share collective wisdom for inclusive solutions
• Accept shared responsibility
• Have fun with this!
# Roles and Responsibilities

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<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
<th>Meeting Expectations</th>
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<tbody>
<tr>
<td><strong>Planning Team</strong></td>
<td>• Project management, strategic meeting preparation and meeting facilitation</td>
<td>• Provide neutral guidance and structure to ensure productive meetings.</td>
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<td>(Sustainability Office, Presidents Office &amp; Trust)</td>
<td>• Administrative support</td>
<td>• Support in scheduling meetings</td>
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<td><strong>Working Group Members</strong></td>
<td>• Attend committee meetings, provide input, review plan, light research/data gathering, and represent your organization and community on the topic</td>
<td>• Attend WG kick-off meeting, four-five 90-minute WG meetings, summit, and material review.</td>
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<td><strong>Working Group Chair</strong></td>
<td>• To oversee progress toward stated sustainability goals, collection of new data and the setting of new goals as we reach the goals stated in this document.</td>
<td>• Attend WG kick-off meeting, four-five 90-minute WG meetings, summit, and leadership touch point meetings.</td>
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<td>• Light homework between</td>
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### GUIDING QUESTIONS

<table>
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<tr>
<th>Category</th>
<th>Question</th>
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<td><strong>Equity:</strong></td>
<td>How will current operations, and current and future climate change impacts the local community?</td>
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<td><strong>Resilience:</strong></td>
<td>What are the Dartmouth’s risks from current and future climate impacts, and how these risks could affect the organization’s assets and operations.</td>
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<td><strong>Education:</strong></td>
<td>How will you educate faculty, staff, students and community members about the plan?</td>
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<td><strong>Communication:</strong></td>
<td>How will the plan development and implementation be widely communicated?</td>
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<td><strong>Operationalize:</strong></td>
<td>How will the plan be operationalized into Dartmouth’s business model?</td>
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## Focus Areas

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<tr>
<th>Community</th>
<th>Energy</th>
<th>Food</th>
<th>Landscape &amp; Ecology</th>
<th>Transportation</th>
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<td>Upper Valley community.</td>
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<td>Transform processes to enable a better</td>
<td>Transform processes to enable a better future energy system at Dartmouth.</td>
<td>Dartmouth food system that moves towards greater resiliency, health and sustainability.</td>
<td>Long-term stewardship and sustainability for all of Dartmouth’s land holdings.</td>
<td>Sustainable and efficient transportation system at Dartmouth, prioritizing carbon, equity, cost and efficiency.</td>
<td>Reduce the impacts of materials purchased and disposed of, outline an approach to the problem of waste and develop clear goals to reduce the negative impacts of Dartmouth’s materials handling and waste.</td>
<td>Dartmouth’s interaction with water (potable, storm water and subsurface water) that reduces Dartmouth’s negative impacts on the water system and makes the best possible use of available water resources, supporting the community and the ecosystem.</td>
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Each working group will have a unique starting point for this process, from long established goals and history of work-to-date to a newly established focus area.
# Decision Making Process

## Working Group Members + Community Feedback

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Small Group Discussions
1. What questions do you have about this project?
2. What opportunities should the planning committee consider going forward and why?
3. What potential risks should the planning committee consider going forward and why?
Small Group Discussions
Report Out
Report Out

1. QUESTIONS

2. OPPORTUNITIES

3. RISKS
NEXT STEPS:
Next Steps

1. Your insights will be shared with Dartmouth’s Working Groups

2. We’ll be sending out updates to our Planning Process to all participants of our ideation sessions
   Add You Email to Next Page

3. We hope to reconvene the Dartmouth community in the spring to share progress.
Thank you