

Climate Action Planning at the University of New Hampshire

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Climate Action Goals

UNH is setting new goals of **reducing its greenhouse gas emissions 45% below its 2010 baseline by 2030 and achieving carbon neutrality by 2050.**

In the winter of 2019-2020, UNH will be releasing its **third climate action plan “WildCAP”** which will detail how the university will work towards these goals.

Guiding Concepts

Greenhouse gas reductions must be as important as cost reductions during institutional decision making.

Campus expansion in gross square footage **results in additional greenhouse gas emissions.**

New buildings constructed within the last 25 years typically **consume 33% more energy than old, renovated buildings and 38% more than old, non-renovated buildings** due to higher technological capabilities.¹

Investment in building energy efficiency contributes to **25+ years of greenhouse gas emissions reductions.**

Areas of Focus



Update **planning, design, and construction guidelines**

Incorporate the **cost of carbon into planning, budgeting, and operations**

Internal Carbon Pricing

Carbon Levies

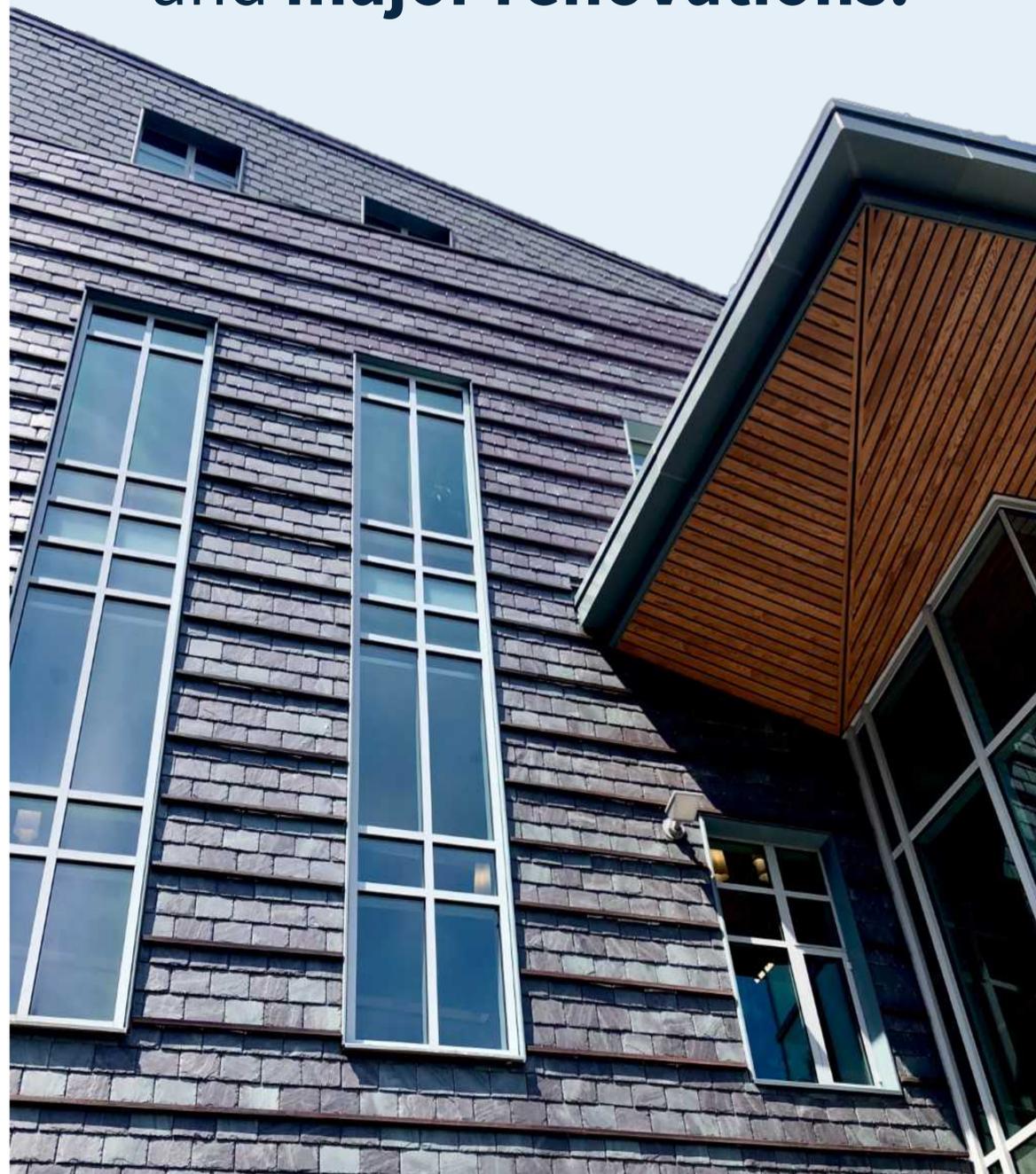
Create **behavior changes** within institutions by providing monetary incentives for units to reduce their facilities' emissions
Promote **sustainability engagement and education** of students, faculty, and staff

Generate a **sustainability fund** allocated for carbon reduction, offset, renewable energy, or high performance building projects

Proxy “Shadow” Pricing

Institutionalize environmentally responsible investment, especially in buildings, by shortening payback time of projects

Prioritize carbon reduction
in the planning, design, and
construction of **new buildings**
and **major renovations.**



Current Building Standards

LEED v3 Silver equivalent (inconsistently implemented)

Outperformance of 2009 IECC (State of New Hampshire building code) **by 24%**

Recommended Building Standards

“Tailored” LEED v4 Silver certification with an emphasis on the “energy and atmosphere” category

Energy cost savings 29-30% over ASHRAE 90.1-2010 baseline

10% on-site renewable energy for the building

Advanced energy metering for new construction and major renovation projects

Incorporation of **enhanced refrigerant management**

Waiver-based system for projects that cannot achieve LEED Silver Certification

Outperformance of 2009 IECC (State of New Hampshire building code) **by 40%**

Lifecycle cost and carbon accounting

Incorporation of **low temperature heating hot water** in new construction and major renovation projects

Incorporation of **passive solar heating and cooling**

Benefits from Recommended Building Standards

Reduce greenhouse gas emissions

Achieve benefits associated with LEED buildings

Keep pace with other leading higher education institutions

Diversify its building level energy systems

Overcome perceived obstacles associated with LEED certification

Improve implementation

Maintain ASHEE STARs Platinum rating



Sustainability Institute

Peter T. Paul College of Business and Economics
LEED Gold Certified