

2020 Vision – The University of Iowa's Sustainability Targets

Sustainability must and will become a central priority of all aspects of our university enterprise—our operations, our academic mission, and our responsibilities to the greater society.

President Sally Mason, Earth Day 2008

In her 2008 Earth Day speech, President Mason challenged the University community to integrate sustainability deeply into our learning, discovery, and outreach missions. Similar calls for an increased focus on sustainability in University operations and academic activities were issued by the UI Faculty Senate, the Board of Regents, and Governor Chet Culver. The University's new strategic plan, *Renewing the Iowa Promise: Great Opportunities – Bold Expectations*, identifies sustainability as both a foundational commitment and a key strategic initiative.

This document, **2020 Vision**: **The University of Iowa's Sustainability Targets**, builds on the important work that has taken place on campus since President Mason's 2008 speech and in response to the sustainability challenge. It is the product of planning and initiatives undertaken by hundreds of people, including faculty, staff and students, as well as UI administrators. It sets out plans that have been adopted to pursue and expand sustainability efforts in several key areas of operations, research, education, and outreach. This **2020 Vision** is ambitious and forward-looking, and accomplishing the goals identified in this document will require concerted attention and significant effort over several years. Nonetheless, while the projects and ideas identified in this document will be important foci of University sustainability efforts over the next several years, **2020 Vision** does not capture all that is being done, nor is it intended to preclude the development of new initiatives and new plans. To the contrary, by stating these medium-term goals clearly and forthrightly, we aim to set a floor, not a ceiling, on institutional efforts toward sustainability.

Our decade-long commitment is reflected in the following Sustainability Strategies and Goals:

1. Become a Net-negative Energy Consumer

The UI will employ energy conservation efforts, build LEED facilities, modernize aged building systems and nurture a culture of conservation to reach the goal of consuming less energy on campus in 2020 than consumed in 2010 despite projected growth.

Sampling of strategies to be pursued over the course of the decade:

- The UI will continue to update building design standards to lower the impact of growth.
- The UI will continue to pursue aggressive energy conservation opportunities.
- Campus divisions and departments will be incentivized to conserve energy.
- Building HVAC systems will be upgraded employing more energy efficient designs.
- Commissioning and Retro-commissioning efforts will become standard practices.
- A branded energy conservation marketing effort will be developed and implemented.

2. Green Our Energy Portfolio

The UI will pursue a renewable energy supply strategy that optimizes long-term supply and fuel price stability while preserving an ability to test and take advantage of other potential fuels. As we transition from our dependency on fossil fuels, we will increase the use of biomass, geothermal, solar, wind, landfill gas, gasification and other emerging energy alternatives to achieve the goal of 40% renewable energy consumption on the campus by 2020.

Sampling of strategies to be pursued over the course of the decade:

- Boiler #10 will be converted to combust biomass.
- The UI will develop a renewable energy supply strategy which optimizes long-term supply and fuel price stability while preserving an ability to test and take advantage of other opportunity fuels.
- Growth in main campus energy production will be based on natural gas in the near term in a manner enabling the long-term transition to the use of low Btu gas produced from renewable sources.
- All energy consumed on the Oakdale Campus will be produced on that campus from renewable sources, including landfill gas, gasification and direct combustion of biomass.
- Wind, photovoltaic and gasification will become increasing contributors to the fuel mix.

3. Decrease Our Production of Waste

The UI will foster a culture oriented to reducing waste, increasing recycling, facilitating composting of organic waste, and enhancing green purchasing practices to achieve our goal of a 60% waste diversion by 2020.

Sampling of strategies to be pursued over the course of the decade:

- A comprehensive recycling program will be developed and initiated.
- The UI will modify its buildings to facilitate recycling.
- A branded marketing effort will be developed and implemented.
- Green purchasing practices, designed to reduce waste, will be implemented.
- Waste minimization practices will be incentivized and facilitated at departmental levels.
- Campus food service and composting operations will be retooled to both minimize and capture food waste.

4. Reduce the Carbon Impact of Transportation

The UI will seek ways to reduce the vehicle miles traveled by single occupant vehicles, employ increasingly efficient fuels and technologies, improve the greenhouse gas efficiency of vehicles operated by employees and students, and seek net reductions and/or offsets in University-related air travel with the goal of achieving, by 2020, a 10% reduction in per capita emissions of fossil fuel-produced CO2 from University-related transportation and travel.

Sampling of Strategies to be pursued over the course of the decade:

- Carbon-efficient fuels and technologies will be increasingly employed.
- The UI will implement vehicle management practices for passenger and freight systems to improve the greenhouse gas efficiency of vehicles.
- Demand management programs will be expanded to reduce the vehicle miles traveled by single occupant vehicles used for commuting or intra-campus transportation.
- The UI will investigate a local offset program to address the greenhouse gas impacts of University-related air travel.

5. Increase Student Opportunities to Learn and Practice Principles of Sustainability

The UI will provide students with educational opportunities that elevate their knowledge of and problem-solving skills in environmental, social, and economic sustainability. These opportunities will include career-related certificate and/degree programs, internships, and sustainability-related research experiences. Sustainable practices will be incorporated into

student campus activities, living and learning centers, food service, and health and wellness. A student sustainability activity fund will be created to support these efforts. To build leadership for a sustainable world, interdisciplinary internships for students will be increased. To promote the understanding of sustainability principles through the study of natural systems, the UI will enhance natural history activities and sustainability programming.

6. Support and Grow Interdisciplinary Research in Sustainability-focused and Related Areas

The UI will pursue international prominence in water sustainability education and research by supporting interdisciplinary research, teaching, and service on issues of water availability, water quality, the economic and health impacts of floods, flood control, water conservation, rural economic development, and the linkages between emerging water resource issues and global climate change. The UI will work to increase awareness in Iowa about the shared value of Iowa's water resources and the impacts of land use in river watersheds. The water resource principles developed through sustainability research programs will be adapted where applicable to the UI campus and its operations.

7. Develop Partnerships to Advance Collaborative Initiatives, both Academic and Operational

The UI will continue to create and nurture partnerships with communities, businesses, government agencies and other educational institutions with the goal of understanding and meeting the ever increasing need for environmental, social and economic sustainability. In particular, the UI will work individually and collaboratively with Iowa businesses and community colleges to meet the demands of supporting the workforce and economic development needs of green industries in Iowa.

Announced by The University of Iowa President, Sally Mason, on Friday, Oct. 29, 2010, at the P. Sue Beckwith Boathouse