



UNIVERSITY OF IOWA

2020 Sustainability Goals

FINAL REPORT - MAY 2021

IOWA

2020 Sustainability Goals Final Report

A MESSAGE FROM THE PRESIDENTIAL SUSTAINABILITY CHARTER COMMITTEE

In her 2008 Earth Day speech, University of Iowa (UI) President Sally Mason challenged the University community to integrate sustainability deeply into our learning, discovery, and outreach missions. Similar calls for an increased focus on sustainability were issued by the UI Faculty Senate and the Board of Regents.

In 2010, UI pursued that call-to-action by developing a forward-looking [2020 Vision: The University of Iowa's Sustainability Targets](#). The decade-long timeline for achieving sustainability goals was an alternative to the much longer view (2050) that several peer institutions were committing to through the [American College & University President's Climate Commitment](#). UI's position was to set a timeline long enough to achieve ambitious goals, but short enough to be completed under the commitment of those who established the goals.

It set forth plans to pursue and expand sustainability efforts in several areas of operations, research, education, and outreach. The targeted metrics to support these goals were ambitious and challenging. When they were developed, the goals were based on what was known then and what was anticipated to happen. There have been some surprises along the way; however, each of the metrics shows significant progress.

This report offers a summary of the achievements made towards these goals over the last ten years, however, we want to acknowledge that this report represents just a small portion of all the progress that has been made by our campus community to advance sustainability at Iowa.



"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

"Sustainability is the most important issue of the 21st century."
- President Bruce Harreld

Goal #1

Achieve net-negative energy growth

The UI will employ energy conservation efforts, build energy-efficient 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.



Goal exceeded

1.1%

**LOWER THAN 2010
LEVELS**

Total energy use is lower today than in 2010, despite 15 new buildings and major additions to campus.

15

NEW FACILITIES ADDED

The UI campus has continued to expand since 2010 with no increase of UI's building energy carbon footprint due to [energy efficient building designs](#) and energy conservation efforts.

MODERNIZE

**EXISTING BUILDING
SYSTEMS**

Since 2010, the UI has converted existing building systems to be more [energy-efficient](#). Completed building projects include HVAC improvements, occupancy sensor and indoor air quality controls, and LED lighting upgrades.



Goal exceeded

42%

OF ENERGY FROM RENEWABLE SOURCES

Through [innovative biomass programs](#), partnerships with organizations to develop renewable fuels, and purchasing electricity from renewable sources, the UI has exceeded its goal of sourcing 40% of its energy portfolio from renewable sources.

RENEWABLES

DIVERSIFYING THE UI'S ENERGY PORTFOLIO

The UI has been involved in innovative programs to expand the use of renewable fuels to meet energy needs. The UI has a pioneering biomass program, exploring fuels such as energy pellets, oat hulls, and Miscanthus grass. Boiler 10 at the power plant has been converted to biomass fuels. The UI will continue its work in expanding renewable fuel use to reach [Zero Coal by 2025](#), a goal set by President Bruce Harreld in 2017.

Goal #2

Green our energy portfolio

The UI will pursue a renewable energy supply strategy that optimizes long-term supply and fuel price stability. As we transition from our dependency on fossil fuels, we will increase the use of emerging energy alternatives to achieve the goal of 40% renewable energy consumption on the campus by 2020.



Goal #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.



Goal in progress

36%

DIVERSION RATE

The UI increased waste diversion from its 2010 baseline of 23% to 36% in 2020, but did not meet the 2020 goal of 60%. While diversion rate is an important measure for waste initiatives, it has limitations and does not reflect all of the [progress UI made in waste reduction](#).

14X

MORE ORGANICS

The UI campus diverts 14 times more organic waste for composting and biodigestion than it did in 2010. This prevents approximately one million pounds of organic materials from being landfilled annually.

\$1.6 MILLION

SALES

In 2020, UI Surplus made a total of 3,245 sales worth \$1.6 million. It is estimated that Surplus sales keep hundreds of thousands of pounds of valuable items in use, but since exact weight is not available, it is not included in the UI's waste diversion rate.



Goal exceeded

36%

CARBON DIOXIDE REDUCTION

Between 2005 and 2019, miles traveled for University business in vehicles leased or rented from Fleet Services has grown by 7% while non-renewable carbon dioxide per capita decreased by 36%.

42

HYBRID AND ELECTRIC VEHICLES

The UI fleet now includes 42 hybrid or electric vehicles, which accounts for approximately 6.6% of the fleet.

3.7 MILLION

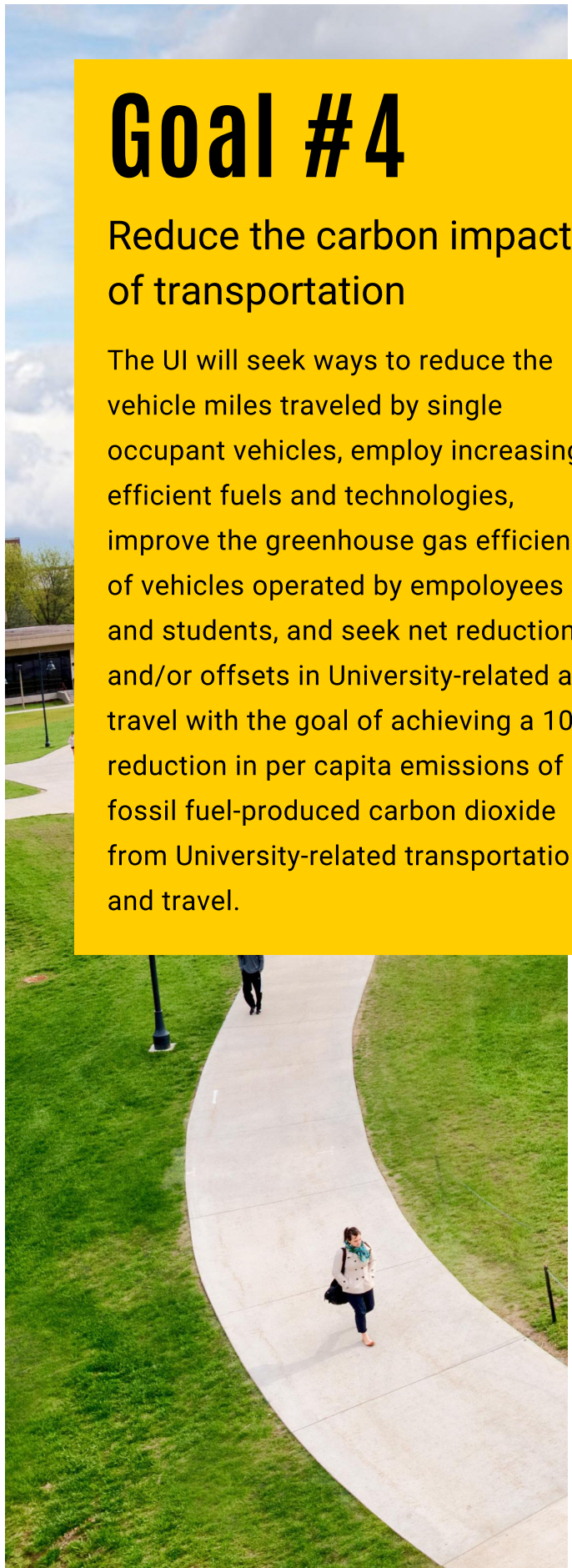
RIDES

CAMBUS provides an average of 3.7 million rides annually. On average, [19,000 rides](#) are provided each academic weekday. As of January 2020, the entire bus fleet now utilizes clean-diesel technology and bio-diesel blends which reduce emissions.

Goal #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 a 10% reduction in per capita emissions of fossil fuel-produced carbon dioxide from University-related transportation and travel.



Goal #5

Increase student opportunities to learn and practice the 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/or 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.

 **Goal achieved**

466

SUSTAINABILITY CERTIFICATES EARNED

In 2009, the [UI Sustainability Certificate](#) was established. It was the 3rd most awarded certificate earned by UI students during the Summer 2019 to Spring 2020 sessions. In total, 466 students have earned the certificate since it began.

73

SUSTAINABILITY DEGREES, MINORS, & CERTIFICATES

The UI currently offers [73 academic programs](#) in sustainability-related fields, including a [Sustainability Science major](#), which was launched in 2019. As of January, 2021 there were 27 students seeking the Sustainability Science B.S. degree.

\$48,500+

STUDENT FUNDING

Over \$48,500 has been allocated to student sustainability projects through the [Green Initiatives Fund](#) which was created in 2014 and is supported by the Undergraduate Student Government and the Graduate and Professional Student Government.



Goal achieved

\$135 MILLION+

RESEARCH FUNDING

UI researchers have received over \$135 million in funding for sustainability research since 2010.

146

RESEARCH FELLOWS

Since 2010, the UI has awarded 146 sustainability research fellowships to undergraduate students through the [Iowa Center for Research by Undergraduates \(ICRU\)](#).

\$20 MILLION

RESEARCH CLUSTER

The UI received almost \$20 million in external funding to support the [Water Sustainability Research Initiative](#).

1901

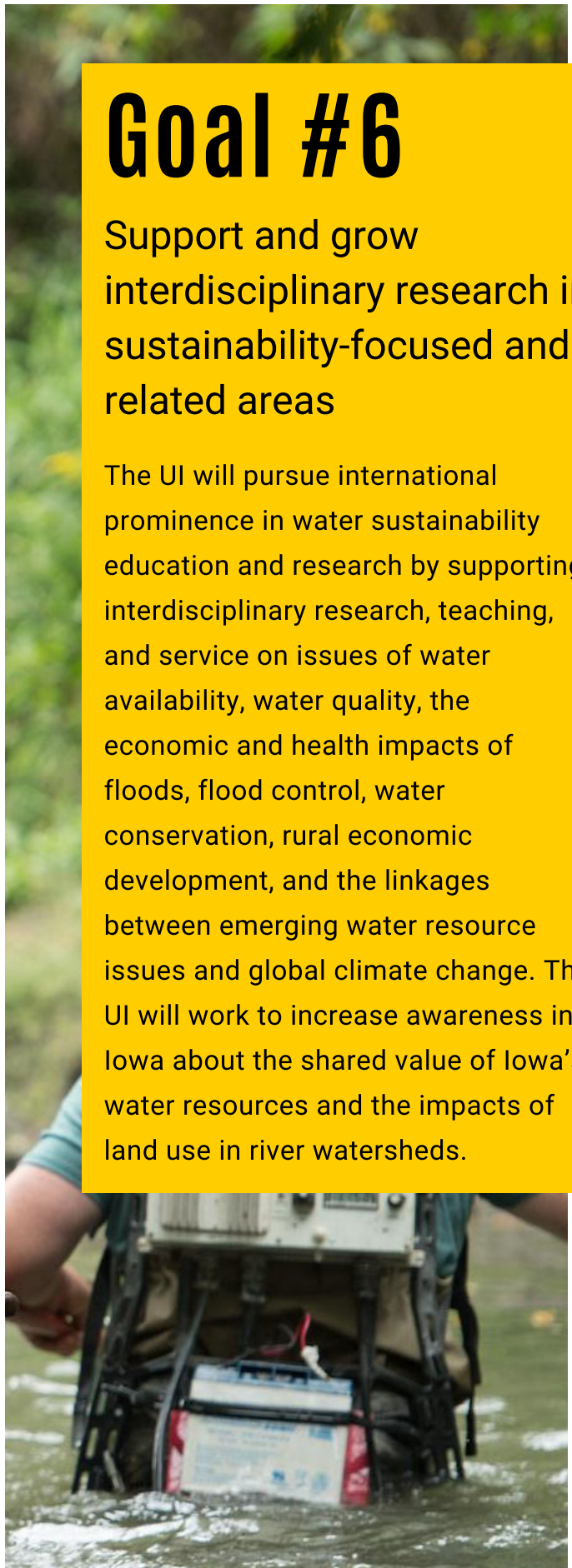
PUBLICATIONS

UI faculty and research professionals have contributed to over 1,901 sustainability research publications since 2010. Four hundred twelve of those publications were published and released in 2020!

Goal #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.



Goal #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.



Goal achieved

213,600+

HOURS

UI faculty and students have contributed over 213,600 hours of work to Iowa communities supported by the [Iowa Initiative for Sustainable Communities](#).

101+

SCHOLARS

The UI has built a network of over [101 sustainability experts](#) developing transdisciplinary collaborations from the natural and social sciences, to medicine, engineering, mathematics, humanities and arts.

\$97 MILLION

INVESTMENT

The [Iowa Flood Center](#) secured \$97 million in funding for investments in flood risk mitigation efforts in Iowa watersheds through the [Iowa Watershed Approach](#).

\$2.2 MILLION

LOCAL FOOD

[UI Dining](#) works with over 20 local Iowa farmers, orchardists, growers, and vendors to spend \$2,206,108+ on local food and beverages since 2017. In 2020, the UI also became the first Big Ten school to earn the [Fair Trade University designation](#).

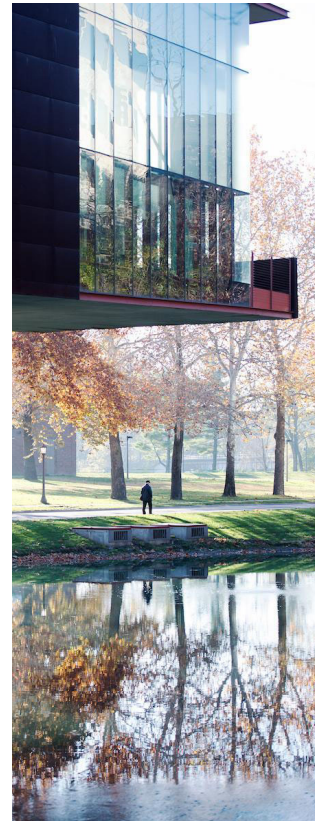


COVID-19 Impacts

2020 A YEAR OF CHANGE

In March, 2020, significant changes were made to campus operations in response to the COVID-19 pandemic. At the time of this report, many COVID-19 policies and initiatives are still in place and it is difficult to measure the impact these changes have had on the UI's 2020 Sustainability Goals. Some factors that may have impacted 2020 data include:

- Decrease in the number of students, faculty, and staff physically on campus and/or commuting to and from campus;
- Changes to HVAC filtration systems in campus buildings;
- Replacement of reusable products with single-use disposable items, especially in dining and health care facilities;
- Suspension of student recycling in residence halls;
- Disruptions in supply chains and contract services;
- Cancellation of in-person events and programs;
- Changes to budget priorities.



Visions For The Future

IMAGINING IOWA IN 2030

While 2020 has come to an end and the UI has made significant progress toward its sustainability goals over the last ten years, more work remains to continue the advancement of sustainability at Iowa. A few notable initiatives that are currently under development include the creation of a sustainability general education requirement for students enrolled in the College of Liberal Arts and Sciences, adoption of [Principles for Responsible Management Education](#) by Tippie College of Business, and establishment of the [Prairie Reconstruction Living Laboratory](#).

Stakeholders from across campus are also setting their sights on 2030 and developing the next set of sustainability goals that will guide the University of Iowa into a new decade of sustainability innovation and leadership. [A framework for the 2030 sustainability goals](#) was released in April, 2019 and the final set of goals is scheduled to be released in the fall of 2021.

ACKNOWLEDGMENTS

CONTRIBUTORS TO THIS REPORT



Thank you to each contributor for your time and effort in providing data or other assistance for this report. The 2020 goals were truly a campus effort.

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UNIVERSITY OF IOWA ACKNOWLEDGMENT OF LAND AND SOVEREIGNTY

The University of Iowa is located on the homelands of the Ojibwe/Anishinaabe (Chippewa), Báxoje (Iowa), Kiikaapoi (Kickapoo), Omāeqnomenēwak (Menominee), Myaamiaki (Miami), Nutachi (Missouri), Umo^{ho} (Omaha), Wahzhazhe (Osage), Jiwere (Otoe), Odawaa (Ottawa), Póⁿka (Ponca), Bodéwadmi/Neshnabé (Potawatomi), Meskwaki/Nemahahaki/Sakiwaki (Sac and Fox), Dakota/Lakota/Nakoda (Sioux), Sahnish/Nuxbaaga/Nuweta (Three Affiliated Tribes) and Ho-Chunk (Winnebago) Nations. The following tribal nations, Umo^{ho} (Omaha Tribe of Nebraska and Iowa), Póⁿka (Ponca Tribe of Nebraska), Meskwaki (Sac and Fox of the Mississippi in Iowa), and Ho-Chunk (Winnebago Tribe of Nebraska) Nations continue to thrive in the State of Iowa and we continue to acknowledge them. As an academic institution, it is our responsibility to acknowledge the sovereignty and the traditional territories of these tribal nations, and the treaties that were used to remove these tribal nations, and the histories of dispossession that have allowed for the growth of this institution since 1847. Consistent with the University's commitment to Diversity, Equity and Inclusion, understanding the historical and current experiences of Native peoples will help inform the work we do; collectively as a university to engage in building relationships through academic scholarship, collaborative partnerships, community service, enrollment and retention efforts acknowledging our past, our present and future Native Nations.