UW-MADISON RESILIENCE COMMITMENT

YEAR ONE IMPACT REPORT - SPRING 2021





LETTER FROM CHANCELLOR BLANK

When I signed the Resilience Commitment in the fall of 2019, none of us had any idea that we would soon be dealing with a global pandemic that would cost thousands of lives, create an economic disaster and force the university to change nearly every aspect of our work. This year has taught us a lot about adapting to change and cultivating resilience in ourselves, our communities and our institutions – skills that translate well to our work on climate change.

The Resilience Commitment provides a pathway to meet the urgent threat of climate change with a strategy that acknowledges the complexity of the problem. Lowering carbon emissions and promoting recycling, though important, will not, on their own, get us where we need to be. We must also address social and racial inequities that lead to unequal access to health care and environmental injustice. The Resilience Commitment incorporates all of these interrelated issues and calls for the University of Wisconsin– Madison to build a collective vision for our institution that prioritizes environmental stewardship, creating and sharing knowledge, taking action, and educating students to be leaders in a post-pandemic world. We must do these things while also integrating our work with the environmental needs and efforts in our local community, including attention to equity.

The barriers to achieving this vision are substantial, but I am confident that we have the knowledge, capability and determination to make a difference. I look forward to the second year of our work together.



LETTER FROM THE OFFICE OF SUSTAINABILITY

The Office of Sustainability is honored to serve as the implementation liaison for the Second Nature Resilience Commitment at UW-Madison. This delegated responsibility provides a unique vantage point to see what this commitment means for the institution and our community.

To call this document a "first year report" is somewhat of a misnomer, as there have been decades of resilience-related work that has already been accomplished on campus. What we discovered this past year, and what many of you already know. is that UW-Madison is not an institution that is late to the game: rather, it is is far ahead of the curve. For decades. UW-Madison has guietly and steadfastly been working to tackle the multitude of problems that are encompassed by the concept of resilience. True to the Wisconsin Idea, the faculty, staff and students just plain got to work to help people and solve problems, and they continue to do so with humility and without fanfare.

We would like to thank and acknowledge the many people and organizations that supported the Resilience Commitment at our institution, including Chancellor Rebecca Blank, Vice Chancellor for Finance and Administration Laurent Heller, Provost Karl Scholz, Nelson Institute



True to the Wisconsin Idea, the faculty, staff and students just plain got to work to help people and solve problems, and they continue to do so with humility and without fanfare.

Dean Paul Robbins, and Global Health Institute Director Jonathan Patz. Many others have contributed and are listed on our website.

We are not embarking on a new journey as we begin our second year, but we are bringing additional expertise, coordination and a renewed sense of urgency to an expedition that is well underway. We are looking forward to what we can accomplish together.

With much gratitude, Missy Nergard

UPDATE FROM THE RESILIENCE MANAGER

Resilience refers to our shared ability to anticipate, adapt to, and flourish in the face of change. This report shares highlights from our progress toward meeting the Second Nature Resilience Commitment with an overview of our activities related to the first objective of the Resilience Commitment, which is campus and community alignment. Below, we share examples about how our campus is working together towards climate action in the five Resilience Commitment dimensions during this most challenging time. Subsequent reports will feature a Resilience Assessment (in year two) and Climate Action and Adaptation Plan (in year three).

During this first year, many people took action behind the scenes to help build institutional capacity and share information with campus and community stakeholders. While we have many success stories to share, we also acknowledge that we have a long way to go to address the multiple inter-connected crises in our path. The causes of these issues are related and so, too, are the solutions. As we enter the second year of our work, look for more opportunities to have your voice heard and share your solutions.

Our climate future must reflect equity and justice side by side with our pursuit of clean energy, regenerative ecosystems, resilient infrastructure and a circular economy.

Josh Arnold, JD, MBA, LEED AP Manager, Resilience Commitment



Your Voice Matters Contact Us to Get Involved: Email: <u>resilience@sustainability.wisc.edu/</u> Website: <u>https://sustainability.wisc.edu/</u> <u>strategic-initiatives/resilience-commit-</u> <u>ment/</u>

DIMENSIONS OF RESILIENCE





SOCIAL EQUITY & GOVERNANCE



HEALTH & WELLNESS



SERVICES



INFRASTRUCTURE





CURRICULUM





CAMPUS AND COMMUNITY SPOTLIGHTS

CLIMATE FAST FORWARD

Conference Brings Together 300 Leaders to Develop Climate Action and Resilience Solutions for Wisconsin



The Wisconsin Academy of Sciences, Arts and Letters' Climate Fast Forward conference brought together 300 of the state's best strategic thinkers on climate change for a working conference designed to "fast forward" solutions for carbon reduction and climate resilience in Wisconsin and throughout the world. The conference was a fitting setting for UW– Madison Chancellor Rebecca Blank to announce that UW–Madison is joining the Second Nature Resilience Commitment. Watch opening remarks by Academy director Jane Elder, Madison Mayor Satya Rhodes-Conway, and University of Wisconsin–Madison Chancellor Rebecca Blank: <u>www.facebook.com/wisconsinacademy/videos/1440439006105976/</u>

Read the Climate Fast Forward conference report here: <u>www.wisconsinacademy.</u> <u>org/node/8374</u>



SOCIAL EQUITY & GOVERNANCE

Sustainability Interns Host Webinar Series Featuring Social Justice Topics and Speakers

Police violence during the summer of 2020 precipitated widespread protests and triggered vigorous and difficult discussions about racial equity and justice, policing methods and funding, and the ongoing history of racism in the United States. The Amplifying BIPOC Voices in Sustainability webinar series, created by undergraduate interns at the Office of Sustainability, was developed to acknowledge systematic exclusion of Black. Indigenous and people of color (BIPOC) voices in the sustainability movement, including on our campus. These virtual events included different themes each month. A recent panel focused on food systems and food security, featuring panelists from the university, local farmers markets, and local community organizations.

Watch Amplifying BIPOC Voices here: http://go.wisc.edu/5laicb



Health professionals on campus and throughout Wisconsin are battling the pandemic while taking action in recognition that the global climate crisis is another public health emergency — an emergency with no vaccine.

HEALTH & WELLNESS

Health Practitioners, Educators and Students Declare Climate Change a Public Health Emergency, Unite to Decarbonize Health Care

Karin Zuegge, MD, UW Health Medical Director of Sustainability (pictured above), led a multidisciplinary green team to reduce waste in clinical practice.

ECONOMIC

Contributing to the Governor's Task Force on Climate Change



Watch the public meetings and read the final report here: <u>climatechange.wi.gov/</u> <u>Pages/Home.aspx</u>

ECOSYSTEM SERVICES

Expanded Public-Private Partnership Sets Course to Improve Conditions and Usability of Dane County Lakes



The Yahara CLEAN Compact, a public-private partnership convened by the Clean Lakes Alliance, expanded its partnership of collaborating organizations (including UW-Madison) to improve the condition and usability of lakes and beaches. Yahara CLEAN Compact members promote a culture of sustainability in recognition of how our natural environment contributes to the region's economic vitality, recreational offerings, and local quality of life. For more information, please visit the Yahara CLEAN website located here: <u>www.cleanlakesalliance.org/yahara-clean/</u>

INFRASTRUCTURE

Willow Creek Revitalization Supports Human and Ecological Health



Willow Creek is the entrance point to the Yahara lakes from a nearly 2,000-acre urban watershed. A new green infrastructure project stopped more than 400 tons of sediment (including dangerous algal blooming phosphorus) from entering the Yahara watershed, thereby protecting human and ecological health. The project was jointly funded between UW-Madison and the City of Madison. More about Willow Creek and other campus green infrastructure projects and practices are included at the Department of Campus Planning and Landscape Architecture's Green Infrastructure website located here: <u>cpla.fpm.wisc.edu/land-</u> <u>scape-architecture/green-infrastructure/</u>



CURRICULUM

La Follette Faculty and Students Conduct Analysis of 100% Renewable Energy Options

Living labs, also referred to as experiential learning, is an approach of using campus operations as an educational opportunity for students. This past year, the Office of Sustainability partnered with Assistant Professor Morgan Edwards and her Public Affairs 881: Cost-Benefit Analysis course at the La Follette School of Public Affairs. A student team evaluated costs and benefits of different options for pursuing 100% renewable energy goals. This hands-on, real-world research will inform the Office of Sustainability about available options for improving campus sustainability and resilience. The final report from the class analyzed six scenarios the university could take to achieve 100% renewable energy, which will inform the university's climate action plan.



RESEARCH

Applying Advanced Climate Models to Future-Proof Building Specifications

Today's building specifications are designed for local weather conditions based on historical data. As future weather conditions vary significantly from historic trends due to human-induced climate change, building specifications must be recalibrated away from the weather of the past and towards the weather of the future. Graduate student Gesangyangji (pictured above) is using advanced computer models to study the implications of climate-responsive building design conditions on electricity demand. Faculty advisors include Tracey Holloway, Daniel Vimont, and David Lorenz.





In 2020, the Nelson Institute celebrated the 50th anniversary of Earth Day



Courses tagged with a provisional course attribute for sustainability



Bike parking stalls at UW-Madison, which was one of only eight universities awarded a Platinum designation by the Bicycle Friendly America Program



Peer-to-Peer University Learning Conversations

UW-MADISON RECEIVED A SILVER RATING IN ITS FIRST STARS SUSTAINABILITY ASSESSMENT



Departments have added faculty to address sustainability issues like climate change, access and equity, and socioeconomic disparities



PRODUCED \$459 MILLION IN SUSTAINABILITY-RELATED RESEARCH (FY2020)



UW-MADISON HAS REDUCED ITS SCOPE 1 AND 2 GREENHOUSE GAS EMISSIONS BY OVER 40% SINCE 2007



UW-MADISON HAS REDUCED ITS ENERGY USE BY 19% SINCE 2007



Office of Sustainability UNIVERSITY OF WISCONSIN-MADISON

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