

CHARTER COMMITTEE ANNUAL REPORT TO THE SHARED GOVERNANCE COUNCIL  
Committee: Sustainability

Report Year: 2019-20

Committee Chair(s) Matthieu Biger, Staff and Erin Irish, Faculty

Committee Members Laura Ponto, Michelle Fravel, Heather Sander, Jenna Hammerich, Melissa Meisterheim, Sam Schauer, Isabella Blackman, Emily Manders, Julia Krist, Megan Lindmark

Administrative Liaisons:  
Stratis Giannakouros, Donald Guckert

Committee Charge

- 1) The Committee shall be governed by the terms of the General Charter.
- 2) In addition, the Committee shall:
  - a. Recommend and advise on matters pertaining to sustainability practices and formulation of University policies;
  - b. Advise on the integration of sustainability with existing campus programs in education, research, operations, and community outreach;
  - c. Assist in engaging the campus in an ongoing dialogue about sustainability and instilling a culture of sustainable long-range planning and forward-thinking design through their respective constituencies;
  - d. Advise on the development and implementation of campus sustainability action plans.

Current Year Meeting Dates Met monthly August 2019-June 2020

Please indicate the typical frequency of meetings (e.g., first Tuesday of month at 4 pm). If there are subcommittees, please indicate the frequency of those meetings, too.

The charter committee met monthly. This year it formed a subcommittee: Earth Day Organizing committee, which met as needed from December, 2019 to March, 2020

## Current Year Activities

In 2019-2020 the Sustainability Charter Committee (SCC) accomplished three major objectives, each reflective of one or more of its charges. First, after endorsing the Climate Change Crisis Resolution<sup>i</sup>, the SCC shepherded its passage by shared governance bodies. The SCC is serving as the reporting hub for the various ad hoc task forces<sup>ii</sup> organized by Rod Lehnertz last fall that addressed sustainability on campus. A third effort was the organization and successful raising of funds for Earth Day events<sup>iii</sup> that were to include a climate change literacy teach-in and dance performances, unfortunately postponed in response to the COVID-19 pandemic. The SCC also aided in publication of [\*"Old Gold: Remembering Iowa's First Earth Day, 50 Years Later."\*](#)

Additional activities included establishing a website for the SCC, separate from those of OSE and the one that describes composition and charge of this charter committee. Several reports informed deliberations on 2020 and 2030 goals: Rod Lehnertz, Don Guckert, and Ben Fish gave periodic updates on implementation of the P3 with projections regarding future fuel usage. Glen Rogers provided updates on sustainability efforts at UIHC, while Beth Mackenzie reported on waste reduction and recycling efforts on campus. Debbie Zumbach outlined reduced energy use in Parking and Transportation as well as Purchasing. Tony Senio reported on sustainability-related projects in Athletics, including the restoration of prairie to Ashton Cross Country Field. Additional activities included a report from Elliot Stalter, who conducted a study on bird mortality from collision with campus building windows illuminated at night and sought advice on measures to reduce such mortality. A one-page summary of metrics of achievement of 2020 goals was prepared and released on Earth Day, 2020, which was reported in IOWANow.

## Topics your committee anticipates addressing during the coming year

The SCC will continue to serve as a reporting hub for the committees organized in fall 2019 to address the climate change crisis, including finalizing the 2020 goal reports<sup>iv</sup> and developing metrics for 2030 goals<sup>v</sup> in coordination with OSE.

The [SCC website](#) needs to be fully linked to the OSE site, the Presidential Charter Committee, and possibly the directory at uiowa.edu. The SCC will continue refining the goals in waste management and recycling to better suit current realities and metrics (see 2030); making use of the energy management subcommittee to mindfully track energy conservation management on campus; engaging actively with any P3 conversations and decisions; monitoring the placement and development of the student garden on the main campus; promoting the development of prairie restoration on university grounds.

We would like to see ever-improved internal/campus and external/community communication of things sustainable; both on SCC, OSE, and on UI Strategic Communications channels.

Other issues of concern

- In the course of committee meeting discussions, the SCC has recognized an unmet need in the area of advice on integrating sustainability with community outreach (charge b.): **oversight of advertising at UI events on issues that pertain to sustainability**. The SCC is uniquely suited to taking on the role of oversight and recommended to President Harreld in a letter sent on April 29, 2020 that the committee be given the opportunity to review such advertisements. The SCC proposes to work with advertisers to assure that UI sustainability values are reflected in the final product.
- A second issue of concern was the lack of attention to sustainability in strategic plans being finalized at all levels of UI organization.
- Another area of concern is landscaping practices. The SCC proposes to continue identifying areas on campus where sustainable landscaping can be employed and where research can be incorporated and advocating for the cessation of spraying of any chemicals around all medical facilities.

What should we tell applicants for this committee regarding expectations of members (anticipated workload, existence of subcommittees, etc.)?

Whether staff member, student, or faculty member, there is as much work in sustainability available as any member is willing to take on. A wide array of expertise is useful. This is not a committee that hears reports about what administration or others are doing. It is a committee that encourages each of its members to identify opportunities in their work areas (physical and academic opportunities) to develop more sustainable campus environments and more sustainable practices. Committee members, with the OSE, actively support the best ideas and actions of its members.

The Faculty Senate Office collects agendas and minutes from the charter committees to send to the university archives. Please let us know the best way to get that information from you (e.g., direct us to a website, put us on the committee's distribution list, etc.).

Agendas and minutes are housed at [sustainabilitycommittee.uiowa.edu/meeting-agendas-and-minutes](https://sustainabilitycommittee.uiowa.edu/meeting-agendas-and-minutes).

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<sup>i</sup> Appendix I

<sup>ii</sup> Appendix II

<sup>iii</sup> Appendix III

<sup>iv</sup> Appendix IV

<sup>v</sup> Appendix V

4 November 2019

**A RESOLUTION EXPRESSING THE FACULTY SENATE'S COMMITMENT TO  
SUSTAINABILITY AND ENVIRONMENTAL STEWARDSHIP AT THE UNIVERSITY OF  
IOWA**

**WHEREAS**, on 12 December 2015, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached an agreement (the “Paris Agreement” to combat climate change and accelerate and intensify the actions and investments needed for a sustainable low carbon future<sup>1</sup>;

**WHEREAS**, The Paris Agreement reaffirms the goal of limiting global temperature increase to well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees<sup>2</sup>;

**WHEREAS**, The Paris Agreement opened for signature on 22 April 2016 and entered into force on 4 November 2016, thirty days after the “double threshold” (ratification by 55 countries that account for at least 55% of global emissions had been met <sup>3</sup>;

**WHEREAS**, on 8 October 2018, the United Nations Intergovernmental Panel on Climate Change (IPCC) released a special report stating that the goal of limiting global warming to 1.5 degrees Celsius requires “rapid, far-reaching and unprecedented changes in all aspects of society”<sup>4</sup>;

**WHEREAS**, on 23 November 2018, the United States Global Change Research Program (USGCRP) released Volume II of the Fourth National Climate Assessment (“NCA4, Vol. II” on the current climate change effects, risks, and adaptations occurring in the United States<sup>5</sup>;

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<sup>1</sup> United Nations Framework Convention on Climate Change, *What is the Paris Agreement?* (2019, <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> United Nations Intergovernmental Panel on Climate Change, *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C Approved by Governments* (Oct. 8, 2018, <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>).

<sup>5</sup> U.S. Dep’t of Commerce, National Oceanic and Atmospheric Administration, New Federal Climate Assessment for U.S. Released (Nov. 23, 2018, <https://www.noaa.gov/news/new-federal-climate-assessment-for-us-released>).

**WHEREAS**, NCA4, Vol. II underscores the need for “substantial and sustained global efforts to reduce greenhouse gas emissions”<sup>6</sup>;

**WHEREAS**, NCA4, Vol. II states that continued changes to Earth’s climate will cause major disruptions in some ecosystems and increasingly challenge the quality and quantity of fresh water, crop yields, livestock health, price stability, and rural livelihoods<sup>7</sup>;

**WHEREAS**, a report from the United Nations Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES finds that climate change is one of the main reasons why approximately one million animal and plant species are now threatened with extinction, many within decades<sup>8</sup>;

**WHEREAS**, higher education is well-positioned to confront the threat posed by climate change through evidence-based research, experimentation, technological advancement, and innovation;

**NOW, THEREFORE, BE IT RESOLVED**, That the Faculty Senate of the University of Iowa affirms the urgent need to take meaningful and responsible action to address the issue of our changing climate.

**BE IT FURTHER RESOLVED**, That the Faculty Senate of the University of Iowa commits to partnering with central administrative officials, shared governance leaders, and campus-based sustainability experts on an immediate and ongoing basis to develop and implement viable methods to reduce greenhouse gas emissions and mitigate the causes and effects of measured changes to the global climate.

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> United Nations, *UN Report: Nature’s Dangerous Decline ‘Unprecedented’; Species Extinction Rates ‘Accelerating’* (May 6, 2019), <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>

So that the efforts of the teams remain productive and well-coordinated, the **UI Sustainability Charter Committee** was asked to serve as a collection and review point. Each committee will provide updates, proposed actions and results to the Sustainability Charter Committee, who will assemble the progress reports and produce summaries of that progress. Our target for a combined, all committee, summary report will be April 22, 2020 (Earth Day), with the format of that report determined by the Sustainability Charter Committee, in coordination with the Office of Strategic Communications.

### Proposed Team memberships:

#### 2020 Sustainability Plan progress report

Erin Irish (faculty) *Biology (CLAS)*  
 Teri Schnelle (staff) *Assoc Dir Assessment and Strategic Initiatives*  
 Blake Rupe (staff) *OSE*  
 Ben Fish (staff) *Assoc Dir Utility Operations*  
 Matthieu Biger (staff) – *SCC - CS/Math (CLAS)*

#### UI Investment and Purchasing practices/requirements

Terry Johnson (staff) *CFO and Treasurer*  
 Debby Zumbach (staff) *AVP and Director, Purchasing and Business Svcs*  
 Joseph Haggerty (student) *UISG- Environmental Policy and Planning*  
[Mihaela Bojin](#) (staff) *Senior Licensing Associate UI Rsch Fdn | Staff Council*

#### Students' Call for Action Items

Stratis Giannakouros (staff) *OSE*  
 Sandy Daack-Hirsch (faculty) *Nursing*  
 Christian Bako (student) *GPSG – bioremediation*  
 Ty Priest (faculty) – *Energy and Environmental Historian (CLAS)*  
 Matthieu Biger (staff) – *SCC - CS/Math (CLAS)*

#### P3 Climate/Sustainability Team formation

Rod Lehnertz (staff) *Senior VP - Finance and Operations*  
 Christian Bako (student) *GPSG – bioremediation*  
 Emily Manders (student) *UISG; UIEC Environmental Policy and Planning*  
 Blake Rupe (Staff) *OSE*  
 Sara Maples (staff) – *Research Support and Sustainability (Tippie)*

#### "Systems Thinking" Coursework

Kevin Kregal (faculty/staff) *Exec VP & sen asso provost for faculty*  
 Dexter Golinghorst (student) *GPSG President - Master's in Public Health*  
 Noel Mills (student) *UISG - Environmental Policy & Planning*  
 Scott Spak (faculty) *URP, CEE, Environmental Policy Program*  
 Angela Ward (staff) *SC - Academic Advisor (CLAS)*  
 Emily Manders (student) *UIEC Environmental Policy and Planning*  
 Joseph Haggerty (student) *UISG- Environmental Policy and Planning*  
 Stratis Giannakouros (staff) *OSE*  
 Amina Grant (student) *GPSG – PhD Sust. Water Development*

#### Sustainability, Scientists & Scholars Database

Blake Rupe (staff) *OSE*  
 Joseph Haggerty (student)  
 Kimberly Keister (staff) *SC – ITS*

#### Exploration of Additional Sustainability Efforts

Blake Rupe *OSE*  
 Rachel Marek (staff) *Assistant Research Scientist (CEE)*  
 Elizabeth Mackenzie (staff) *OSE/FM*  
 Noel Mills (student) *UISG - Environmental Policy & Planning*  
 Thomas Pak (student)  
 Claire Jacobmeyer (student)  
 Amina Grant (student) *GPSG – PhD Sust. Water Development*

#### 2030 UI Sustainability Plan

Stratis Giannakouros (staff) *OSE*  
 Michelle Scherer (faculty) – *CEE | CGREE | IIHR...*  
 Jerry Schnoor (faculty) – *CEE | CGREE | IIHR...*  
 Charles Stanier (faculty) – *ChBioEngr | CGREE | IIHR...*  
 Elizabeth Mackenzie (staff) *OSE/FM*  
 Noel Mills (student) *UISG - Environmental Policy & Planning*  
 Blake Rupe (staff) *OSE*  
 Thomas Pak (student) *GPSG - Neuroscience*  
 Ty Priest (faculty) – *Energy and Environmental Historian (CLAS)*  
 Erin Irish (faculty) *Biology (CLAS)*  
 Ben Fish (staff) *Assoc Dir Utility Operations*  
 Sara Maples (staff) – *Research Support and Sustainability (Tippie)*

# Climate Change Literacy Teach-In – Earth Day 2020 – POSTPONED



The **Sustainability Charter Committee** is organizing a **Climate Change Literacy Teach-In**, to be held on **Earth Day, April 22**, on campus. Professor [Jerry Schnoor](#), Civil and Environmental Engineering, will provide a keynote address.

## Earth Day Climate Change Literacy Teach-in Schedule

Senate Chamber, Old Capitol

9:30	Jerry Schnoor	<a href="#">50 Years Since Earth Day: A Climate Emergency</a>
10:10	Michael Welsh	Announcing Climate Change Competition Open To Students, Staff And Faculty
10: 20-11:20	Barbara Eckstein	UN 75th-Anniversary Global Conversations about the Future: Climate Change
	Peter Thorne	Climate Change Impacts on Public Health
	Jeff Dorale	Lessons from a Geologist
11:20-12:20	David Osterberg	I Get \$1000 Off My State Income Tax If I Install Solar Panels. Really?
	Laurie Neuerburg	Climate Science & Policy: Navigating the Flood of Information
	Brett Cloyd	
	Michele Scherer	What Do Climate Change and a Bathtub Have in Common?
	Dave Cwiertny	
12:20-1:20	Allexis Mahanna	LENA Project: Sustainability & Kids
	Autumn Moen	

	Charlie Stanier	Climate Science – Learn How To Better Explain the Greenhouse Effect
	Matt Hill	Lessons From The Past: An Archeologist's View of Humans in a Changing World
1:20-2:20	Chris Jones	The Perfect Storm: Climate Change Meets Iowa Stream Nitrate
	Alyssa Clayden	How Climate Change Is Impacting International Migration
	John Logsdon	Biodiversity: What We Know & Why It Matters
2:20-3:20	Connie Mutel	Landscape Changes and Climate Change
	Erin Irish	The Big Co2 Sequestration: 100 Million Years of Rot-Free Wood Formation
	CSTS/Riley Troyer	Theories of Science Communication: How Failure Leads to Misconceptions and Poor Policy
3:20-4:20	Silvia Secchi	The Paris Climate Accord: An Update
	Caitlin Owens	Climate Change And Mental Health: Strategies for Self-Care
	Brittany Greenbaum	
	AICHE	Climate Change Game Shows

In conjunction with teach-in and collaboration with [The Center for New Music](#), the [Sustainability Charter Committee](#) announces the following events:

### Nimbus Dance

Samuel Pott, Artistic Director  
and the  
Center for New Music Ensemble  
performing music by Qasim Naqvi in

[Patch of Turf](#) & [Falling Sky](#) ([see video](#))

in two performances in Stark Opera Studio  
on April 22, 2020 at 4:30pm and 7:30pm.

and

### THAW | PHASE

a live performance created and performed by MFA in Dance  
Graduate Students

Angelica DeLashmette-Hurst, Juliet Remmers, and Mariko Ishikawa

in a performance in the Atrium outside the Stark Opera Studio  
on April 22, 2020 at 6:00pm.

with **Professor Jerry Schnoor** "book-ending" Earth day by addressing the Stark audience following the evening performance.





# UI Sustainability Charter Committee Report on Progress towards the 2020 Goals: Top Metrics

April 22, 2020

*Since 2010 (unless otherwise noted below):*

## 1. Become a Net-negative Energy Consumer

- Total energy use slightly lower, despite 15 new buildings and major additions to campus
- ~20% growth in campus space with almost no increase of UI's building energy carbon footprint due to energy conservation efforts
- \$20 million spent on 35 building projects for energy conservation (HVAC improvements, occupancy sensor and indoor air quality controls, and LED lighting upgrades)

## 2. Green Our Energy Portfolio

- 40% of UI energy consumption from renewable energy sources
- 75% reduction in annual coal consumption
- 33% renewable energy in purchased fuels portfolio
- 50% of UI purchased power from wind energy

## 3. Decrease Our Production of Waste

- 43% of UI waste diverted from the landfill
- 70% more waste diverted from the landfill than in 2010
- 18% decrease in total waste produced on UI campus

## 4. Reduce the Carbon Impact of Transportation

- 100% of CAMBUS transit bus fleet powered by clean-diesel technology
- ~20 million single occupant vehicle miles reduced through the U-PASS Program
- 8% increase in U-PASS membership since 2016
- 75% of public parking facilities with electric vehicle charging stations

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

- 387 students granted the Sustainability Certificate, 4th most awarded certificate
- 7 students currently enrolled in the new Sustainability Science major, launched in fall 2019
- The UI Sustainability Science major is:
  - one of only five offered in the Big Ten
  - only one in the Iowa Regents University group
- Over \$44,000 of sustainability-related work supported through the UISG and GPSG Green Initiatives Fund- a funding opportunity for sustainability initiatives created in 2014

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

- Over \$135 million in funding for sustainability research awarded to UI campus
- \$269,500 granted for Undergraduate Sustainability Research Fellowships
- 118 students awarded Sustainability Research Fellowships
- \$18 million in external funding awarded to members of the Water Sustainability Research Cluster
- 1,489 sustainability research publications by UI faculty and research professionals

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

- 188,800 hours contributed by faculty and students and 51 Iowa communities supported via the Iowa Initiative for Sustainable Communities
- \$97 million in funding secured by the Iowa Flood Center for investments in flood risk mitigation efforts in Iowa watersheds
- \$1,200 spent on local food and products via the UISG farmers market voucher program
- UI Housing & Dining works with over 20 local Iowa farmers, orchardists, growers, and vendors to purchase local foods and dairy to provide fresher, better-tasting foods and limit our environmental impact. Annual sales >\$900K.

## UI 2030 Sustainability Goals Framework

Revised April 30, 2020

On November 9, 2019, the President's Office charged the UI campus community with developing a new set of campus-wide sustainability goals to be achieved by 2030. In response, faculty, staff and students from across campus came together to design this framework for institutional goal setting. Moving forward, the 2030 Sustainability Goals Task Force will be working with the UI Sustainability Charter Committee to engage with the broader campus and partners to craft specific, measurable goals for each of the following six framework objectives by September 20, 2020. The goals will be vetted through campus-wide shared governance bodies and will be finalized no later than December 1, 2020.

### **1. Reduce greenhouse gas emissions by 50% compared to 2010 baseline and continue to pursue a renewable energy supply strategy**

The UI will continue to pursue greenhouse gas emissions (GHG) reductions and a renewable energy supply strategy aligned with science-based targets. The campus will have a comprehensive decarbonization plan employing best practices and aggressive energy conservation efforts.

### **2. Institutionalize and embed sustainability into campus culture**

The UI will establish sustainability goals that promote a culture of sustainability and reduce negative environmental and social impacts of campus operations. Each unit on campus will develop a plan to meet the campus sustainability goals.

### **3. Expand sustainability research, scholarship and solutions opportunities**

The UI will develop goals to build the capacity for students and researchers across campus to work on sustainability grand challenges of the 21<sup>st</sup> century. The goals will encourage use-inspired, interdisciplinary research.

### **4. Use our campus as a Living Laboratory for sustainability education and exploration**

The UI will develop goals to increase opportunities for students and researchers to use the UI campus as an educational and research laboratory for improvement of campus sustainability and ecosystems.

### **5. Prepare students to live and work in the 21<sup>st</sup> century through sustainability education**

The UI will develop goals to raise sustainability literacy as a universal outcome and to develop the capacity for students to graduate with an appreciation for and ability to apply sustainable practices.

### **6. Facilitate knowledge exchange among the campus community and the State of Iowa, Nation and World**

The UI will develop goals to grow sustainability outreach and engagement; these will feature partnerships and community-engaged education and research.

## UI Campus-wide Shared Governance Bodies

Undergraduate Student Government  
Staff Council

Graduate and Professional Student Government  
Faculty Senate

## 2030 Sustainability Goals Committee Members:

David Bennett

Nick Benson

Ben Fish

Andrew Forbes

Stratis Giannakouros (chair)

Matthew Hill

Erin Irish

Julia Krist

Beth MacKenzie

Emily Manders

Sara Maples

Noel Mills

Thomas Pak

Ty Priest

Blake Rupe

Michelle Scherer

Jerry Schnoor

Charles Stanier

Hunter Staszak

Rakesh Sondekoppam Vijayashankar

Connor Wooff