



**Oregon State**  
**University**

**Office of the Provost and Executive Vice President**  
624 Kerr Administration Building  
Oregon State University  
Corvallis, Oregon 97331

11 March 2024

**Invitation to Serve: Clean Energy and Related Solutions Task Force**

**Adam Ward**, Head and Professor, Biological and Ecological Engineering – **Co-chair**

**Bryson Robertson**, Professor, Civil and Construction Engineering and Director, Pacific Marine Energy Center – **Co-chair**

**Bahman Abbasi**, Associate Professor, Mechanical, Industrial, and Manufacturing Engineering

**Shawn Hazboun**, Assistant Professor, Sociology, School of Public Policy

**David Ji**, Professor, Chemistry

**Hong Liu**, Professor, Biological and Ecological Engineering

**Karina Nielsen**, Director, Oregon Sea Grant

**Dorthe Wildenschild**, Professor, Chemical, Biological, and Environmental Engineering and Executive Director, Clean Water Initiatives

Dear Colleagues:

One of the three goals in *Prosperity Widely Shared*, our new strategic plan, is to position OSU as a research university that is *especially distinctive* for its contributions to big discoveries that drive big solutions to the world's most vexing challenges, even as we continue conducting groundbreaking foundational research, scholarship, and creative activities. Under that goal, a key action over the 2024 to 2030 period is to build distinction in *four focus areas* where we believe we can establish lasting global competitive advantage: climate science and related solutions; clean energy and related solutions; robotics; and integrated health and biotechnology. These four areas are interconnected and will be supported by new foundational strengths build across the university in artificial intelligence, data science and research computing, and the integration with creative work and research in the arts and humanities.

To advance this work, we're establishing task forces to develop action plans for each of the four focus areas. Irem Tumer, vice president for research and innovation, and Alix Gitelman, vice provost for academic affairs and senior vice provost, will work together to oversee the work of the task forces. They'll take the lead in receiving, evaluating, and sharing task force recommendations that will inform the larger university community about necessary tangible actions across the institution.

The fourth of the four task forces we're charging is for **Clean Energy and Related Solutions**. I invite you to be a member to help develop and recommend an action plan for this area. I'm pleased that Adam Ward, Department Head in Biological and Ecological Engineering, and Bryson Robertson, Director of the Pacific Marine Energy Center, have agreed to co-chair this task force.

**Target Area Rationale:** In an era dominated by the urgent need for sustainable solutions, the case for clean energy sources and related technologies and practices has never been more compelling.

The challenges posed by climate change, coupled with the need for reliable and accessible energy sources as well as resilient food and water supplies, underscore the critical importance of transitioning towards cleaner and more efficient energy systems. There are also implications for economic growth, technological innovation, and social equity. In essence, clean energy solutions offer a pathway to a more sustainable, resilient, prosperous and equitable future for all.

With expertise in renewable energy research, OSU enables the production and storage of clean energy, and its commitment to community engagement ensures research translates into practical solutions, amplifying impact and changing lives of Oregonians and beyond. OSU's blend of expertise, collaboration, and community engagement makes it a potent force for advancing clean energy and sustainability practices. Clean energy links closely with the other three focus areas, as well as the foundational areas of AI and data science, and is also featured in the plans for the Huang Collaborative Innovation Complex.

**Approach:** Building international competitive advantage in each of the four focus areas will require a well-aligned mix of integrated actions across the mission elements of research, teaching, and public engagement. Of paramount importance are the strength of our faculty, with strong departments and schools as homes for those faculty; related high quality undergraduate and graduate degree offerings; programs and resources that facilitate interdisciplinary and transdisciplinary research and teaching; and strong research and innovation infrastructure. As we seek to recruit and support faculty and invest in other support for this focus area, a comprehensive approach is essential to achieving true and lasting advantage relative to OSU's competing peer institutions.

**Tasks:** The task force will develop an action plan in *two phases*.

**Phase I—Strategic Opportunities.** This initial part of the task force work will answer the following questions using results from interviews with ~40-50 faculty members:

- How can OSU leverage its world-class faculty and research facilities, including the supercomputer in the HCIC, to make the next generation of discoveries related to clean energy and the global energy system?
- How can OSU leverage its stellar record of community-engaged transdisciplinary scholarship to develop resilient solutions in clean energy, as well as better understand impacts on the economy and on society?
- What is the current faculty talent level and unique capabilities at OSU, and how can each contribute to accelerate breakthroughs and impact? Where do we have gaps in the faculty expertise needed to achieve our goals?
- What is the status of graduate and undergraduate degree programs related to this area and what are the opportunities to build additional strength?
- What can be learned from the research exemplar work by the Office of Research Advancement and associate deans for research, particularly with respect to existing or potential intersection with the other three target areas?

- What are key themes within this focus area of Clean Energy and related solutions?

**Phase II—Action Plan.** The second part of the task force work will focus on creating a prioritized list of themes and related investments distinguishing between short (2 years) and longer (3-5 years) time horizons. This work at a minimum should consider (1) the results of the **Phase I** interviews; (2) the research framework, exemplars, and the Hanover competitive intelligence report that was input to the new strategic plan; and (3) engagement with key internal and external stakeholders, expertise across the university, and consider other available recent university-wide data reports. This part of the charge may be updated given the outcomes of the **Phase I Reports** by the four task forces.

**Timeline:** The task force should submit the **Phase I Report** no later than 15 April 2024 and the **Phase II Report** no later than 1 June 2024 to the Provost.

Thank you for your willingness to serve on this task force and the work you will do in advancing our goals in this important domain.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward Feser". The signature is fluid and cursive, with a large initial "E".

Edward Feser  
Provost and Executive Vice President