

## Vision and Mission

The University has embraced “Ensuring a Sustainable Future” as a foundational principle by weaving it throughout its Strategic Plan. Sustainability is the responsibility of all members of our University community and is essential to implementing the University’s priorities. Sustainability encompasses the many dimensions of the United Nations Sustainable Development Goals, as well as those of other grand challenge frameworks such as Project Drawdown’s comprehensive plan to reverse global warming, and the National Academy of Engineering’s 14 Grand Challenges for Engineering in the 21<sup>st</sup> Century. The College of Engineering (COE) is committed to advancing the understanding and resolution of sustainability challenges on campus, in our communities, and around the world.

### **Sustainability in the College of Engineering**

In 2018, Dean Schwartz established the Sustainability Council for the College of Engineering, with a vision for integrating sustainability into the teaching, research, and outreach activities of the College.

1. **Through our teaching**, we enhance the understanding of sustainability and sustainable engineering practices, producing knowledgeable graduates prepared to apply these practices at work and at home. We do this by offering students an extraordinary education that is supported by curricular and co-curricular innovation.
2. **Through our research**, we create knowledge to support sustainable engineering practices with consideration of their impact on industry, society, and the environment. We do this by reinvigorating the strong culture of discovery that exists among our faculty and, more broadly, enriching the community in the College of Engineering by actively supporting diversity, honor, integrity, and sustainability within it.
3. **Through our outreach**, we work to collaboratively provide leadership in understanding and implementing sustainable engineering practices, and demonstrate within the College of Engineering how these practices can enable organizational success. We do this by reaching out through diverse media to learners, educators, industry, and alumni, with the approval and support of the College.
4. **Through our expertise**, we support the Office of the Physical Plant and other operational units of the university with our engineering knowledge to improve the sustainability of operations, advance research, and give our students experiential education.

# Purpose

The purpose of the College of Engineering Sustainability Council is to provide strategic guidance and support to effectively integrate sustainability into the teaching, research, outreach, and operational activities of the College, while realizing the College's aspirations to improve impact. To stay at the forefront of understanding the needs and advancements in sustainability, the Council fosters communications and collaborations with other universities, industries, and government agencies, as well as other Penn State colleges and campuses (for example, through their Sustainability Councils) to continuously enhance and implement our shared vision. Toward these aims, the Council therefore undertakes the following activities:

1. **Teaching:** Assess teaching capabilities and outcomes as well as emerging trends and best practices in sustainability engineering education in order to make recommendations for improving the College's teaching and support services for students. Promoting the integration of sustainability into the core academic experiences of engineering students also supports ABET requirements that all students have the ability to produce engineering solutions that consider global, cultural, social, environmental, and economic factors.
2. **Research:** Assess scholarly activity, strengths, and weaknesses, as well as emerging trends and research expertise in sustainability in order to make recommendations for supporting sustainability research in the College.
3. **Outreach:** Assess outreach activities, strengths, and weaknesses in order to make recommendations for supporting sustainability outreach for the College. Of particular interest is exploring collaborations with industries, businesses, and government agencies that have expressed active interest in increasing their sustainability practices and investment in Penn State.
4. **Operations:** Assess the operations of the College to make recommendations for reducing our overall environmental footprint. This includes: supporting the university's Sustainable Labs Initiative for teaching, research, and user facilities; evaluating our carbon footprint through regular emissions inventories; and providing recommendations for waste management at College sponsored events.

Recommendations from the Council are shared through annual reports to the Dean's office and Sustainability Institute, as well as individual departments, as needed. The Council also provides content for the COE website and newsletter to showcase the sustainability-related activities of the College.

# Membership

1. The Council is composed of a Chair and a faculty representative from each department in the College of Engineering.
2. The Chair is appointed by the Dean of the College of Engineering for a 3-year term that is renewable for a second term.

3. One faculty representative is solicited either by the Dean or the Chair from each Department Head in the College of Engineering. The Chair may also serve as a representative for their home department.
4. The membership term is two academic years. A partial year counts as a full year unless otherwise specified.
5. Consecutive terms may be held at the discretion of the Council membership and as per minimum attendance requirements. A term may be renewed only once (i.e., 4 academic years).
6. Lack of a reasonable good-faith effort to fulfill his/her responsibilities set forth in this charter can be a reason, at the recommendation of the Chair with approval by the Dean, for removal from the Council. Any vacancy in the Council must be filled as soon as possible.

## Member Responsibilities

1. Attend COE Sustainability Council meetings:
  - a. In order to best vitalize the collaborative work being done, Council representatives are strongly encouraged to participate in all meetings.
  - b. A minimum attendance of two Council meetings per academic year is required to maintain membership for the next academic year.
2. Maintain a visible role as a representative of the Council for sustainability efforts in their home department in the areas of teaching, research, and outreach. This includes relaying Council activities to their Department Head and faculty members at least once per academic year, and relaying their department's activities back to the Council.

Representatives will also:

  - a. **Act as an ambassador** for sustainability leadership and for sustainable engineering in general within and beyond the College, both listening for ideas and input, as well as informing and advocating where appropriate (e.g., at departmental meetings, other committees including Green Teams, professional and academic societies, etc.);
  - b. **Represent the expertise, unique interests, and needs of each department** while considering how to advance the College's efforts in sustainability;
  - c. **Contribute ideas** for new collaborative and cross-disciplinary initiatives that involve faculty, students, staff, and alumni from multiple departments as well as other colleges; and
  - d. **Connect the college to appropriate people, groups, and resources** in their network to provide expertise, funding, connections, and opportunities for faculty, students, staff, and alumni.
3. The Council depends upon every member to actively serve and contribute to Council activities throughout the academic year.

## Chair Responsibilities

1. Represent the Council and the College at the University level.
2. Interface with Department Heads directly regarding appointment of Council representatives as needed.
3. Schedule meetings with Council representatives at the beginning of each semester via an online scheduling application to select the best date and time for the majority.
4. Remind the Council representatives about meetings via email and embedded scheduling reminders in Outlook.
5. Plan and distribute meeting agendas.
6. Conduct meetings.
7. Follow-up with representatives as needed regarding completion of activities.
8. Report Council activities and recommendations annually to the Dean of the College of Engineering and the Chief Sustainability Officer at Penn State, or more frequently if required/requested.

## Council Meetings

1. **Schedule:** The Council meets twice per semester, but may meet more frequently in order to address current responsibilities.
2. **Attendance:** Council representatives are expected to attend all meetings. If a member may not be able to physically attend a meeting, alternative methods of participation may be configured (e.g., having an alternate representative from their department or participation via Zoom).
3. **Agenda and Minutes:** Prior to a Council meeting, the Chair prepares and distributes an agenda to all members. The minutes (including any presentations and/or handouts) are recorded by the Chair and archived on a shared drive accessible to all members, the Dean of the College of Engineering, and the Chief Sustainability Officer of Penn State. Minutes may be distributed to others upon request.

## Decision Making

The Council seeks to make decisions by consensus. To accomplish this, the members work together to create a collaborative, inclusive, and supportive environment. When unanimity cannot be reached on a certain issue, voting is undertaken, adhering to the following guidelines:

1. Out of a Council of 13 representatives (including the Chair), a majority of at least 7 representatives must be present to vote.
2. A majority yes is required for a resolution to pass.
3. In the case of a tie vote among an even numbered majority, the Chair acts as tie-breaker utilizing the perspectives of the group and working in the best interest of the college.
4. In the event that a quorum is not met, the Chair determines the appropriate method of voting (ex., anonymous online survey, postponement to future meeting, etc.).

## **Review, Amendments, and Changes to the Charter**

1. The Council's charter is reviewed annually and provided to the Sustainability Institute.
2. Any member of the Council may propose an amendment to the charter at any time.
3. An amendment may only be ratified by an affirmative majority vote of the Council.  
Clerical errors or omissions are not considered amendments and may be corrected at the discretion of the Chair, as long as the correction does not change the meaning or intent of the original.