
THE PENN CLIMATE & SUSTAINABILITY PLAN 3.0

Executive Summary

The *Climate and Sustainability Action Plan 3.0 (CSAP 3.0)* outlines Penn's goals for improved environmental performance in 2019 to 2024. As with the first two iterations of Penn's *Climate Action Plans*, this plan's five-year horizon ensures both that we hold ourselves accountable for progress, and that we make timely and accurate reports to our stakeholders, including students, faculty, administrators, alumni, and trustees.

The plan that follows is the result of deliberative discussions stretching over 15 months that involved over 180 students, faculty, and staff members of the seven subcommittees of Penn's *Environmental Sustainability Advisory Committee (ESAC)*.

Two aspects of the *CSAP 3.0* are different from Penn's previous two climate plans. The first is the plan's title: members of Penn's ESAC Academic Subcommittee advised that term "sustainability" be included, as many of the areas in which Penn has made progress encompass more than carbon mitigation. Penn's ongoing efforts to reduce waste, make responsible purchasing and consumption choices, and improve options for sustainable commuting have modest impact on carbon emissions, but lead to improved ecological health of our region - clearly a part of Penn's sustainability ambitions. The expansion of our academic offerings, internships, and environmental research also greatly expand Penn's leadership on sustainability - and support for this work is a key feature of the *CSAP 3.0*.

The second difference in *CSAP 3.0* is a result of deeper understanding of the urgency of climate change mitigation. The October 2018 release of the International Panel on Climate Change's *Special Report on Global Warming of 1.5°C* stated that only unprecedented emissions reductions within the next ten years will keep this century's a global temperature rise below 1.5°C. Even a half a degree more of warming would have devastating impacts on our shared environment and on civilization: mass extinctions, drought,

floods, extreme heat, increasingly severe storms, and exacerbated poverty for hundreds of millions of people. Penn's ESAC members, and the entire campus community, is responding by redoubling its efforts to reduce campus emissions, consistent with President Amy Gutmann's *100x42* carbon neutrality pledge—a 100% carbon neutral campus by 2042.

PLAN ORGANIZATION

The *CSAP 3.0* is organized around seven initiatives, each developed by an ESAC subcommittee. Each section begins with the subcommittee's mission statement and an introduction of initiatives' themes, detailing how the work contributes to Penn's sustainability agenda. A chart outlines the five-year goals and respective strategies. Following the goals, each section acknowledges Penn's successes from the previous two climate action plans, including initiatives that have become integrated into Penn's best practices, highlights of key successes, and graphic representations of progress.

Academic goals include:

- » Campus as Lab initiatives;
- » Advancing regional sustainability through faculty leadership and student internships;
- » Improving climate literacy on campus;
- » Expanding tracking and reporting of sustainability majors, minors, and concentrations; and
- » Improving opportunities for cohesive sustainability education at Penn.

Key highlights of Penn's *CAP* and *CAP 2.0* accomplishments in academics include a tripling of courses included in Penn's *Sustainability Course Inventory*, the considerable growth of academic centers focused on environmental issues, and the development of robust programs for undergraduate and graduate/professional sustainability internships and research fellowships.

The Utility and Operations section has a single goal:

- » **Reducing the campus overall carbon emissions, in accordance with Penn's carbon neutrality target of 2042.**

Highlights of past Utility & Operations work include the development of robust recommissioning programs, vastly improved utility data metering and reporting, and the implementation of the \$200M Century Bond program of lighting upgrades and deep energy retrofits.

The Physical Environment goals include:

- » Updating campus design and management standards to incorporate best sustainable practices;
- » Advancing ecological stewardship of the campus landscape; and
- » Improved environmental performance of Penn's real estate holdings, including energy efficiency, green leasing policies, and sustainable practices for landlords.

Past highlights include the adoption of LEED Silver standard for capital projects, the creation of Penn's *Ecological Landscape Stewardship Plan*, and the designation of Penn's West Philadelphia academic campus as a Level Two arboretum in the international ArbNet Certification standard.

The Waste Minimization and Recycling goals include:

- » Increasing Penn's waste diversion and minimizing landfill waste; and
- » Supporting the City's 2035 Zero Waste initiative by registering campus buildings to report waste and recycling data and aligning waste minimization and diversion strategies with those outlined by the city.

Highlights of past work include improved tracking and reporting of waste and diversion, routine recycling of construction and demolition waste, and launching food waste composting programs in local restaurants, academic buildings, and all student cafes.

The Purchasing goals include:

- » Increasing procurement of sustainable food products;
- » Encouraging purchase of low- or zero-emissions vehicles across campus;
- » Evaluating mechanisms to reduce or offset emissions from Penn-sponsored air travel; and
- » Expanding sustainable office equipment leases and purchases.

Past highlights include elimination of cardboard from office product deliveries, the launch of Penn's Green Purchasing Awards, and integration of sustainability goals within service, purchasing, and procurement contracts.

The Transportation goals include:

- » Creating an accessible, integrated, and multi-modal transportation system for Penn students, staff, and faculty;
- » Supporting an accessible and safe campus for cyclists and pedestrians;
- » Improving efficiency of parking and transportation facilities; and
- » Introducing more electric and low-emitting vehicles into Penn's fleet.

Past highlights include the development and promotion of incentives for sustainable commuting, adoption of best practices in fleet management, and the development of a robust cycling and pedestrian infrastructure.

The Outreach and Engagement goals include:

- » Expanding and strengthening existing outreach programs; and
- » Engaging with Penn's leadership to continue to serve as sustainability champions by participating in and promoting sustainability initiatives

Past highlights include the creation and growth of campus engagement programs such as the *Penn Green Fund*, *Student Eco-Reps*, *Staff and Faculty Eco-Reps*, the development of the *Sustainability Coordinator's Group*, and support for student extracurricular organizations through the *Student Sustainability Association at Penn*.

The Penn Sustainability Office has developed an assortment of campus-wide outreach and education programs, including the *Power Down Challenge*, *ReThink your Footprint*, *Move-In Green*, the *Penn MOVES* recycling program, and the 30x30 nature awareness program.

With the *Climate and Sustainability Action Plan 3.0* as the blueprint, Penn embarks on another five years of environmental leadership. We are responding to today's urgent call for action, guided by a long-term vision and supported by strong commitment from Penn's senior leadership, alumni, students, staff, and faculty. We look forward to your engagement and support for our work and in the challenging journey ahead.