Our mission is to develop solutions for our energy and environmental future.

At the Andlinger Center, faculty, researchers, and students are working toward a low-carbon world via innovative research on emerging energy and environmental technologies and novel, inventive solutions that are practical and scalable.

“The challenges in energy and the environment require a multitude of solutions and technologies because the issues from rising global temperatures and an environment under stress from a growing global population are complex, interwoven, and touch every facet of modern life.

– Z. Jason Ren
Center activities around research, partnerships, and education are focused on six intersecting areas.

- **built environment, transportation, and infrastructure**
  Smart infrastructure, resilient cities, building efficiency systems and retrofits involving faculty from the School of Architecture; microgrids and networks, green cements, cleaner burning combustion engines, electric vehicles, and water desalination technologies

- **electricity production, transmission, and storage**
  Emerging technologies to harvest wind and solar power, nuclear fusion, power electronics and superconducting materials that enable more power transmission, grid-scale electricity storage, and modeling of power grids with high renewables penetration

- **fuels and chemicals**
  Advanced fuels and chemicals from engineered microorganisms and artificial photosynthesis, development of catalysts with abundant elements, and techno-economic and lifecycle assessments of advanced biofuel production systems

- **environmental sensing and remediation**
  Sensors to detect emissions of carbon and nitrogen cycle gases to the atmosphere from the energy, water and food sectors, carbon capture and storage, and wastewater treatment and soil remediation technologies using nanoparticles and microorganisms

- **decision and behavioral science, policy, and economics**
  In partnership with faculty and researchers at the Princeton School of Public and International Affairs, individual and collective decision-making and economic analysis related to energy and environmental policy

- **environmental and climate science**
  In partnership with faculty and researchers at the High Meadows Environmental Institute, environmental monitoring and modeling of Arctic sea ice, carbon dioxide absorption by oceans, extreme weather, and coastal impacts

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**Research in Energy and the Environment**

The Andlinger Center for Energy and the Environment is a nexus at Princeton University for research that spans the technology-policy spectrum and aims to address today's global energy and environmental challenges to ensure a sustainable future. Through a variety of programs, including grants and fellowships, the Center supports collaborative, interdisciplinary research and bolsters a community of scholars focused on developing technologies and solutions that will pave the way for a world less reliant on fossil fuels.

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**Educating students and the public**

Preparing and training the next generation of leaders to tackle our energy and environmental challenges, the Center is home to a suite of educational initiatives to encourage innovation and collaboration. Two certificate programs are offered that cross-train students to be fluent in engineering disciplines, social sciences, humanities, and public policy, as well as courses, summer internships, fellowships, and seminars.

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**Princeton E-ffiliates Partnership**

The Andlinger Center’s convening power lowers the barrier for cross sector cooperation, diverse stakeholder partnership, and initiatives informed by realities on the ground.

> [acee.princeton.edu/e-ffiliates](acee.princeton.edu/e-ffiliates)