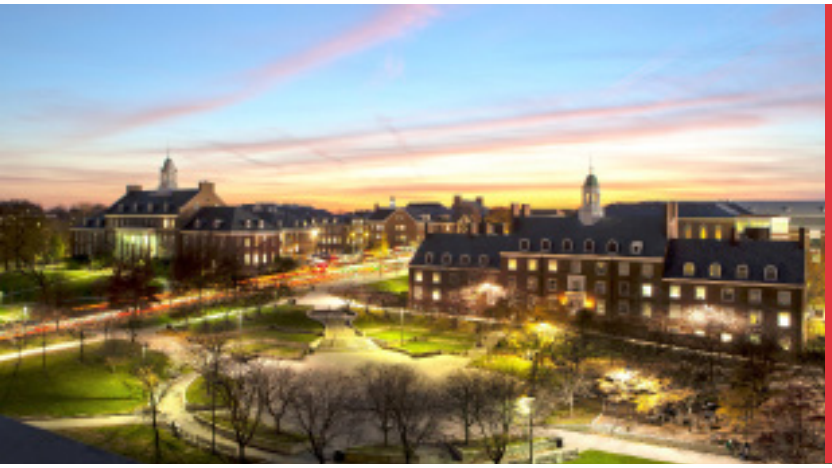
UNIVERSITY OF MARYLAND

The NextGen Energy Program

Energizing Our Campus. Securing Our Future. Strengthening Our Resiliency.

The NextGen Energy Program (NextGen) is a plan to replace, renew and modernize the University of Maryland, College Park's aging energy system through a public-private partnership (P3). Under the proposed P3 for NextGen, UMD will contract with a private sector entity to design, engineer, finance and install energy system improvements. The entity will also manage, operate and maintain UMD's energy system.



NextGen will ensure that our College Park campus has reliable, efficient and affordable energy services for decades to come, while allowing us to decarbonize our energy system.

Our Energy System Today

- With over 40,000 students, faculty and staff living, working, teaching and doing research, our College Park campus is a small city unto itself.
- There are over 250 buildings on our campus that require cooling, heating and electricity to operate.
- Our on-campus energy system produces steam, electricity and chilled water for cooling, which makes it a tri-generation system. Tri-generation allows us to produce all three types of energy with only one fuel input, minimizing lost or wasted energy.
- Our current system, originally installed in 1999, is at the end of its useful life which has resulted in outages and decreased efficiency. The NextGen Energy Program will address these issues by replacing our system in a way that is consistent with our core values and best serves our community.

How NextGen Will Improve Our Energy System

The final scope and approach of the NextGen Energy Program will be determined based on an evaluation of proposals from bidders that best align with the university's goals. However, we know NextGen will allow us to improve our system in a variety of ways, including:

1. Updating the distribution system to make heating and cooling campus buildings more efficient
2. Implementing measures to increase efficiency and resiliency based on available technology, cost and greenhouse gas (GHG) emissions considerations
3. Making modifications to incorporate new renewable energy sources and technologies

Visit **NextGen.umd.edu** for more information

UNIVERSITY OF MARYLAND

NextGen will serve as a path to our clean energy future, helping to meet and surpass critical UMD-wide sustainability goals.

The university's accelerated Climate Action Plan seeks carbon neutrality by 2025. NextGen can make progress through:

- Improved operational efficiency and water recycling and decreased energy loss
- Flexibility to incorporate low- and zero-emission fuel options in the future
- Integration of energy storage or other microgrid compatible technologies
- Energy conservation measures through enhanced building controls and monitoring systems

NextGen not only seeks to reduce emissions in the short-term but to ultimately decarbonize our energy system by eliminating the need to purchase carbon offsets for on-campus energy production altogether.

Modernizing our campus energy system will continue UMD's legacy of achievement as a preeminent center for research and education.

NextGen has the potential to foster new initiatives on campus like:

- Groundbreaking research in collaboration with faculty and students
- Upgrades to campus facilities
- Student scholarships and internships
- New and innovative academic programs

Getting to NextGen: A Roadmap

Oct. 2018
Kick-off meeting with university stakeholders and student leaders

Feb. 2019
Follow-up meetings with university stakeholders and student leaders

Apr. 2020
Approval from the State of Maryland Board of Public Works

Fall 2021
Competitive procurement process with shortlisted proposers

Winter 2022-Early 2023
Identify private sector energy company and secure partnership approval from Board of Public Works

Fall 2023 & Beyond
NextGen Implementation
Existing system maintenance and improvements and new system construction and transition

As the NextGen Energy Program progresses, we are committed to working alongside the State, the university community and other stakeholders.

Visit **NextGen.umd.edu** or scan the QR code for more information