

CASE STUDY  
**AstraZeneca**



SAVINGS BY THE NUMBERS

**\$1,000,000**  
Total incentives

**6,702,000**  
Annual kWh savings

**\$536,277**  
Estimated annual savings

**THE OPPORTUNITY**

AstraZeneca, a global, science-led biopharmaceutical company that focuses on the development of life-saving medicines, has a strong commitment to sustainability and the environment, with the goal of reaching zero carbon emissions from their global operations by 2025. After repurposing a solar panel manufacturer's building when starting production in Frederick, Maryland, the company identified a need to improve the existing chilled water infrastructure of their manufacturing facility.

Through past participation with a Potomac Edison Energy Advisor, the AstraZeneca Frederick team recognized that Potomac Edison could help the company achieve their energy savings goals through incentives and technical support.

**THE PROJECT**

The AstraZeneca Frederick site contained a dedicated chilled water infrastructure with open cooling towers that were mounted on the roof for Building 633 and in the yard of Building 636. There was significant waste in pumping the condenser water to the roof and duplication in the operation of two separate chilled water infrastructures. The company realized that centralized ground level cooling towers and a consolidated chilled water plant would be more efficient. After reviewing the operation of the chilled water system, they also saw a need to address how the cooling was used in the building.



ENERGY  
EQUIVALENCIES



**180,017**  
Incandescent lamps  
switched to LEDs



**604,321,902**  
Number of smartphones  
that could be charged



**547**  
Average Maryland homes'  
electricity use for one year

Source: U.S. Environmental Protection Agency

## CASE STUDY

# AstraZeneca



The AstraZeneca team worked to identify additions to the scope to improve the cooling by removing the inefficient equipment at Building 636. Working with Potomac Edison's Energy Solutions for Business Program, AstraZeneca received proactive technical support and \$1 million in incentives from the program to help offset the costs of the ambitious project. The AstraZeneca investment was approximately \$21 million and created jobs for Maryland-based contractors.

### THE RESULTS

Through these energy efficiency upgrades and improvements, the Frederick, Maryland, facility saved approximately 13 percent of its yearly energy usage and reduced its carbon dioxide (CO<sub>2</sub>) emissions by 5,222 tons. The upgrades are now easier to maintain, and the new control scheme provides a more effective way of controlling the building's systems without negatively impacting AstraZeneca's operations.

---

“Through hard work and ingenuity from the team at the AstraZeneca Frederick site and with incentives from Potomac Edison, we were able to implement important site improvements and make a significant contribution toward our sustainability goals. It's a win-win for our company and the environment.”

**René Barcala**  
Sr. Engineer, Facilities

---

### Questions?

Visit [energysaveMD-business.com](http://energysaveMD-business.com) or call us at **855-801-5803** to learn how your business or organization can save.

EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money.