

Moon-Sized, Deep-Space Battlestation Proves More than \$143 Trillion in Energy Savings in Just 6 Months by Partnering with EnergyPrint

Challenge

The Galactic Empire is one of the most influential organizations in the universe, with space stations and military installations across the galaxy, and an average facility size of 20 million square feet. A recent addition to their fleet, the Death Star is a spherical, 2.3 quadrillion square foot mobile battle station, described by employees as a “technological terror.”

Since the fall of the Republic and the Death Star’s construction, the Empire has been tracking its utility and energy performance data with EnergyPrint. They also leverage EnergyPrint’s Utility Dashboard, a cloud-based energy management software, to better understand their energy use and expenditures, prioritize improvements and prove results to the Imperial Senate.

With energy as a top 3 operating expense, especially when using the Death Star’s proprietary superlaser technology, the empire proactively searched for ways to invest in cost-effective solutions to increase efficiency and gain savings within the Death Star’s \$650 trillion energy budget.

Solution

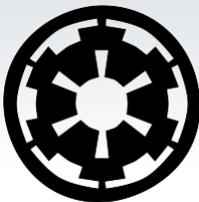
With construction of the Death Star taking significantly longer than expected, Death Star leadership saw an opportunity to optimize their energy performance, but were not confident where to begin. After working with EnergyPrint to identify possible avenues of improvement, the Empire brought in outside contractor Hoth Industries to update their antiquated ion energy systems with a new hypermatter reactor. Additionally, they were able to install more efficient carbonite chillers for temperature control and smart gravity and atmosphere systems throughout the facility to allow for remote monitoring and control, as well as advanced scheduling and setback capabilities.

“The Emperor will be most pleased with our progress,” says Grand Moff Tarkin, the Death Star’s commanding officer. “Working with EnergyPrint has been a success on almost all counts. They were even able to break down demand charges for us. By planning our planetary destruction during non-peak hours, we’re able to save a substantial amount of cost while achieving the same amount of fear that will keep the local planetary systems in line.”

With EnergyPrint’s Utility Dashboard as a guide, the Death Star team benchmarked the station’s performance to monitor its monthly progress and validate savings results. They were even able to increase their ENERGY STAR SYSTEM® score by over 25 points. The success of the Death Star pilot program also indicated potentially trillions more in savings to be earned across the Empire’s portfolio of installations. To begin, the Empire is moving forward with benchmarking the performance of their entire fleet of star destroyers under the supervision of Lord Vader, with plans for additional facilities to follow at a later date.

“While the energy that we conserve is insignificant next to the power of the force, I am satisfied with what EnergyPrint has helped us accomplish. When we started tracking our utilities we were but the learners, but now we are the masters of our data.”

— Darth Vader, Lord of the Sith & Chief Sustainability Officer



Highlights



Industry:
Military



Location:
A Galaxy Far, Far Away



Solutions:
EnergyPrint Utility Dashboard
Hoth Hypermatter Reactor
Hoth Carbonite Chillers

✓ Results

To date, the Utility Dashboard and Hoth Industries hypermatter reactor and carbonite chiller upgrades have saved the Death Star more than \$143 Trillion within the first six months of installation. This equated to a 22.1% drop in consumption and a 22.3% decrease in total energy costs for the station, which was far ahead of projected pre-installation calculations.

The collaboration between Hoth Industries and EnergyPrint provides the Empire with the ability to implement affordable solutions to improve efficiency and prove financial and strategic results. Additionally, EnergyPrint's Utility Dashboard gives the Death Star team a wide view of their portfolio so they can easily identify other installations where solutions could be beneficial.

22%
reduction in energy consumption

54%
more planetary destruction

\$143T+
in energy savings

