

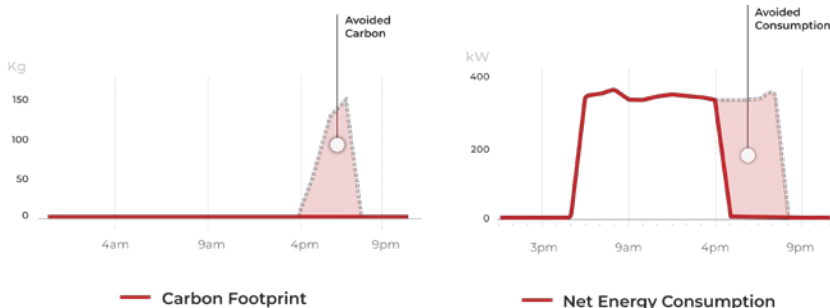


Carbon-Free Cooling for government offices and public facilities

Lower energy costs and meet your climate action commitments with a sustainable energy storage solution that will help you be carbon compliant in years to come.

Cut down your carbon footprint and energy costs

Cooling your building consumes up to 70% of your peak energy load. Cutting down both energy costs and carbon emissions to meet sustainability goals while meeting cooling demands can be a capital-intensive challenge. The main problem is that cooling demands stay at peak levels long after renewable energy sources are out. This means that the electricity you use during the afternoon and evening hours is both carbon intensive as well as costly for the grid and you. The IceBrick® changes all that.



The IceBrick® allows you to store clean energy by charging when it's available—either from renewables onsite or from the grid—and when grid or price signals indicate it's cheap. Then, when the grid price is up, or renewable energy is out, the system can discharge the stored cold energy to **generate grid revenue and maintain uninterrupted cooling without resorting to carbon-intensive, costly afternoon-evening grid electricity.**

The IceBrick® helps you reach carbon free cooling, significantly reduce energy costs, and enhance overall resilience.

The compact and modular IceBrick® packs some powerful benefits



Zero-carbon

Use ice to cool your building in place of electricity when renewable energy isn't available



Savings

Charge with low-cost electricity and discharge per grid or price signals to earn money or reduce costs.



Resilience

Add redundancy to your cooling operations



ESG Compliance

Ensure your building is truly carbon compliant and use the dashboard for easy reporting

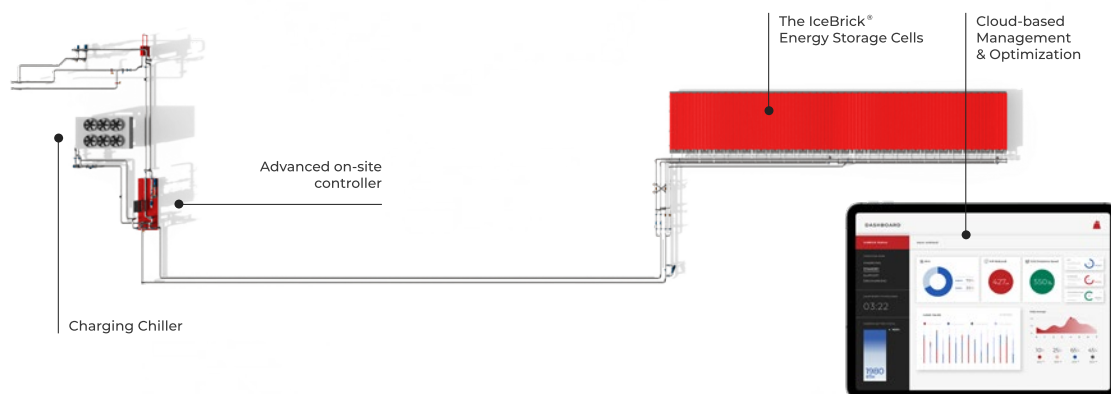


Value

Enjoy longer equipment life and add competitive edge to any property at no up-front cost

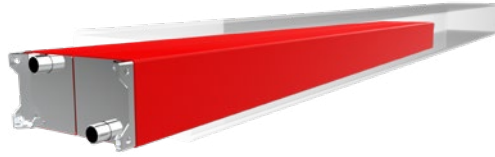
How it works

The core of the IceBrick® system consists of an array of patented, modular energy storage cells, customized to your building. The system is managed by an advanced on-site controller, for energy flow management, and a cloud-based management and optimization platform for performance control, grid-integration, and reporting.



The IceBrick® Energy Storage Array

200 to 10,000 ton refrigeration hour of clean cooling energy, whenever you need it.



IceBrick® Technical Specs

Total Capacity
10 Ton-Hrs. (~7-12 kWh-e)

Number of Capsules
192

Volume of Water/Ice
89 gal

Weight, Filled
11720 lb (780kg)

Floor Loading
75lb/sq.ft. , (375 kg/m2)

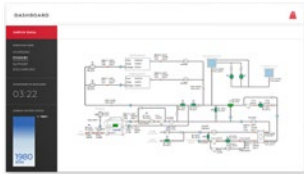
Coolant Solution
30% Ethylene/Propylene Glycol
70% water

On-site controller

The heart of the IceBrick® is the local control system, responsible for the system's energy and flow management, communication, sensing and metering. It operates the charge and discharge cycles of the IceBrick® based on a plan provided by the cloud-based energy storage management platform and sends energy data back to the cloud-based management system.



Cloud-based energy storage management platform



Advanced on-site controller to cloud platform integration

The local control system sends data to the cloud-based energy storage management platform in real time via secure wireless link for performance optimization, deep analytics, system health monitoring, and reporting. The cloud-based energy storage management platform in turn sends to the local control system operational plans and scheduling settings, incorporating this data, as well as site preferences and external inputs, such as weather, grid signals or pricing.



Performance optimization

Unlock the full potential of the IceBrick® system with our dynamic cloud management platform. Choose your desired outcomes - financial gains, reduced carbon emissions, increased EV charging capacity, enhanced backup and resilience, or a combination of the above - and let our platform optimize system operations to deliver maximum impact.



Deep analytics & reporting

The energy storage management platform offers ongoing performance analysis for continuous optimization, enabling your building to achieve maximum efficiency and financial outcomes. Anomaly detection algorithms enable quick intervention and long-term system health maintenance, to ensure that your IceBrick® system will always operate at optimal performance.



Grid Integration and Aggregation (VPP)

The cloud-based energy storage management platform can automatically receive and process dispatch requests and price signals from utilities, scheduling coordinators or third-party aggregators. This feature ensures seamless integration into existing energy markets and enhances revenue opportunities. The system also provides real-time reporting of available capacity and performance, enabling easy billing and quality control.

See Zero-Carbon Cool Energy Storage at Work

[Schedule an on-site tour >](#)

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