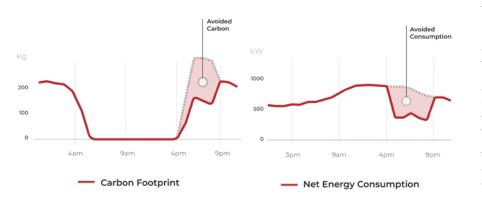
## Step up your ESG performance and become a coveted carbon-free destination.

Add the IceBrick<sup>®</sup> to significantly cool down your hotel's carbon footprint and energy costs while enhancing cooling resilience overall.

# Cut down your carbon footprint and energy costs

Cooling a hotel 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 and costly for the grid and for 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<sup>®</sup> 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



Add redundancy to your

## ESG Compliance

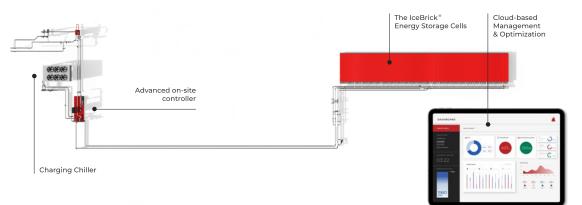
Ensure your building is truly carbon compliant and use the dashboard for easy reporting

# <u>+</u>]7 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.



money or reduce costs.

Resilience

cooling operations

## The IceBrick<sup>®</sup> 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)

> Weight, Filled 11720 lb (780kg)

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

Number of Capsules

192

Volume of Water/Ice 89 gal

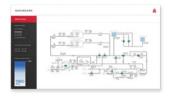
Coolant Solution 30% Ethylene/Propylene Glycol 70% water

## **On-site controller**

The heart of the IceBrick® is the local control system, responsible for the system's energy and flow management, communication, sensoring 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<sup>®</sup> 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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