

Building Decarbonization with Sustainable Energy Storage



Innovative ice based energy storage technology for commercial and industrial buildings

Commercial buildings account for 39% of energy-related carbon-dioxide emissions. Cooling consumes up to 70% of the peak electric load of commercial and industrial buildings. Nostromo's energy storage system lowers the building's carbon footprint, reduces energy costs, and enhances resilience. It's modular and compact, making it ideal for both retrofit and new build.

BENEFITS

Reduced Energy Costs

By storing energy in off-peak hours and avoiding the consumption of energy in on-peak hours, the customer enjoys lower rates and reduced demand charges.

Biggest Opportunity to Decarbonize the Building

The system stores energy when it's generated from zero / low carbon sources and avoids consuming energy when it is made by fossil fuel power plants.

High Performance

Unprecedented round-trip efficiency (>85%). High depth of discharge - 94% @4 hr window, Stable Discharge

ECONOMICS & CARBON

System as a Service

Commercial buildings in California may be eligible for a system as a service model, where Nostromo covers system installation and the customer pays out of the proven savings.

Minimal Real Estate Footprint & Modular

The system's modular design makes it ideal for both new construction and retrofits. It can be installed on most rooftops or basements. Its high energy density and capability to be installed in unused spaces saves precious real estate.

Superior Maintenance & Less Failures

Nostromo's encapsulated ice technology minimizes the probability of failures. and shows negligible degradation over 20 years.

Cloud Based Controls & Optimization

Full transparency of techno-economical data.

ANNUAL ESTIMATED CARBON REDUCTION & SAVINGS

Building Size (sq. ft)	Installed Storage (kWh)	Annual Savings (\$\$\$)	Annual Carbon Reduction (mTons CO ₂)
300000 sq. ft	1150	\$146,050	152
500000 sq. ft	1950	\$247,650	258
1.1 Million sq. ft	4250	\$539,750	563



COMMERCIAL AND INDUSTRIAL



Nostromo's TES is an ideal solution for data centers, office buildings, hotels, manufacturing facilities, shopping malls, cold storage and any building with an HVAC system with a cooling capacity of 1000 TR and above.

SYSTEM OVERVIEW

ICEBRICK™

A system is typically comprised of 100 IceBricks™ or more.

- ▲ The IceBrick™ is the basic storage unit. It stores 10 Ton-h. Equivalent to 8-12.5 kWh.
- ▲ Each IceBrick™ contains 192 capsules. The encapsulated ice technology enables better performance with minimal maintenance and failures.
- ▲ Compact and modular, IceBricks™ can be stacked, placed along walls, or under pavement.

ENVOY

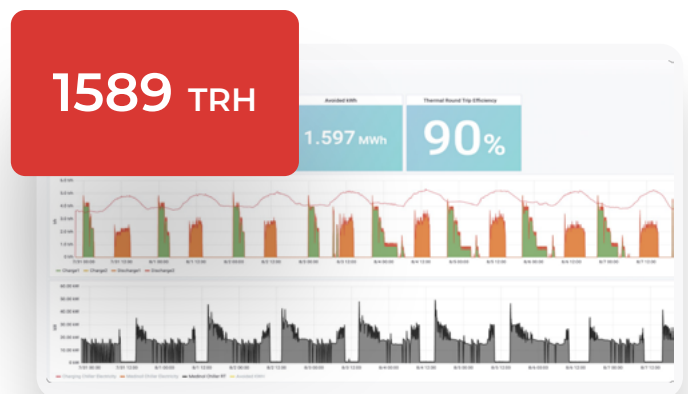
Pre-fabricated skid that manages the system operation.

- ▲ It's the fluid and energy junction.
- ▲ On Site Monitoring & Control System. Local & remote preset configurations, generic interfaces to additional equipment
- ▲ Circulating Pumps
- ▲ Heat Exchanger. Glycol cycle doesn't mix with the plant water - Communication & Metering

CIRRUS

Cloud control and monitoring system.

- ▲ Enables remote operation and optimization of the system.
- ▲ Ongoing Revenue Optimization. Cloud based analytics & optimization
- ▲ Deep Analysis & Techno-economical reports



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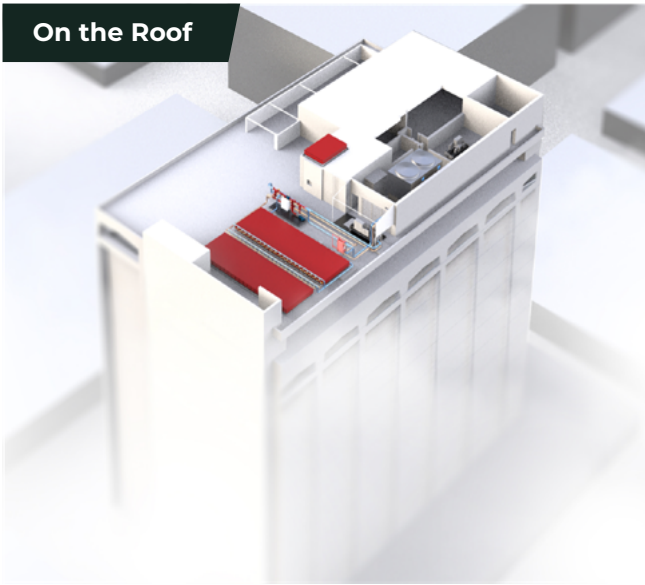
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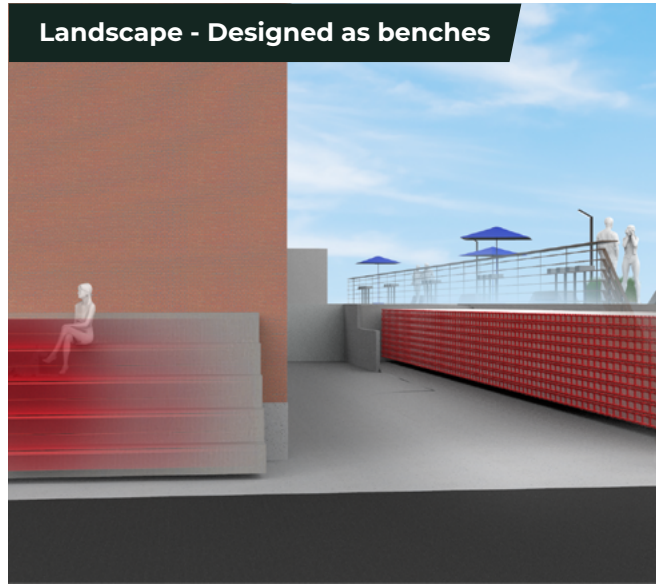
3 min video
of our
solution

ENHANCE THE ARCHITECTURE

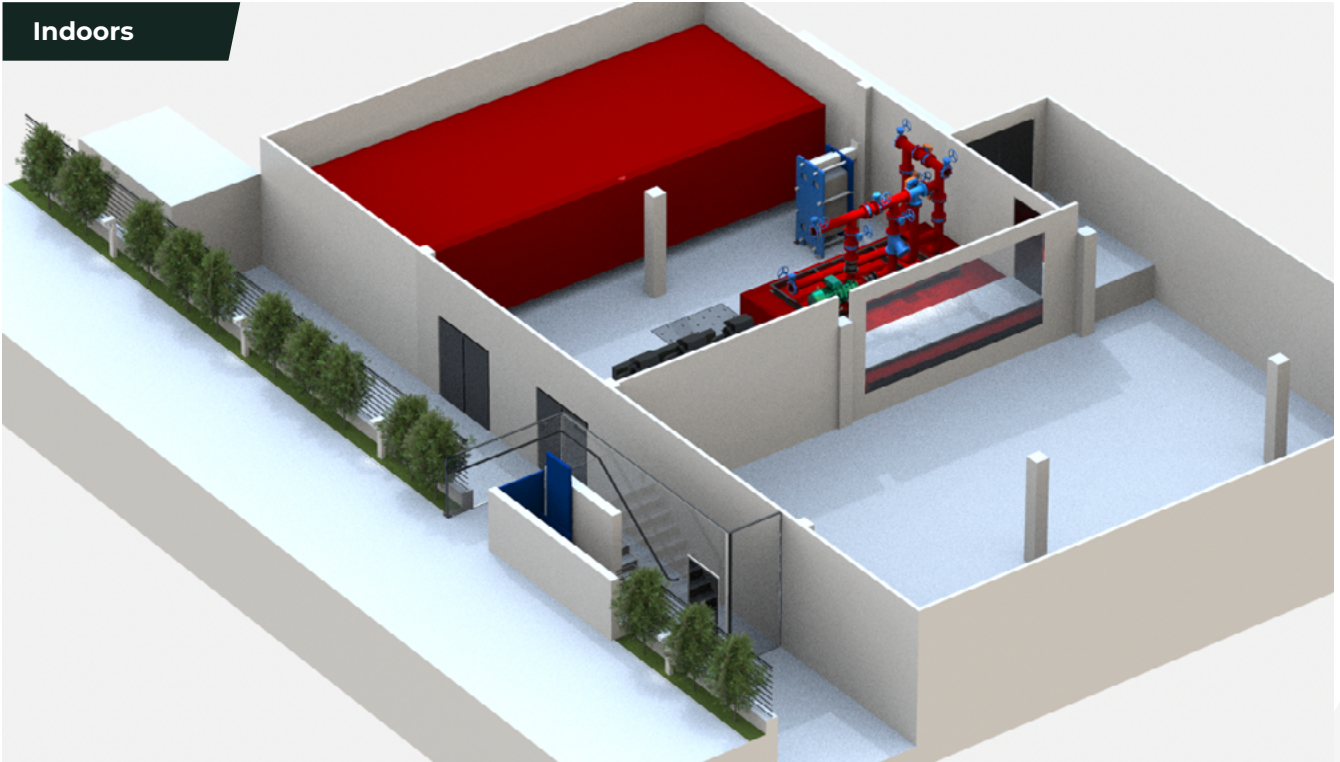
On the Roof



Landscape - Designed as benches



Indoors



LEED

Nostromo's system can award 6-12 points and can contribute to meeting the requirements of another 8 points.

*Assumptions: BD&C (Building Design & Construction);
Contribution defers for hospitals; For time of use electric rates



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