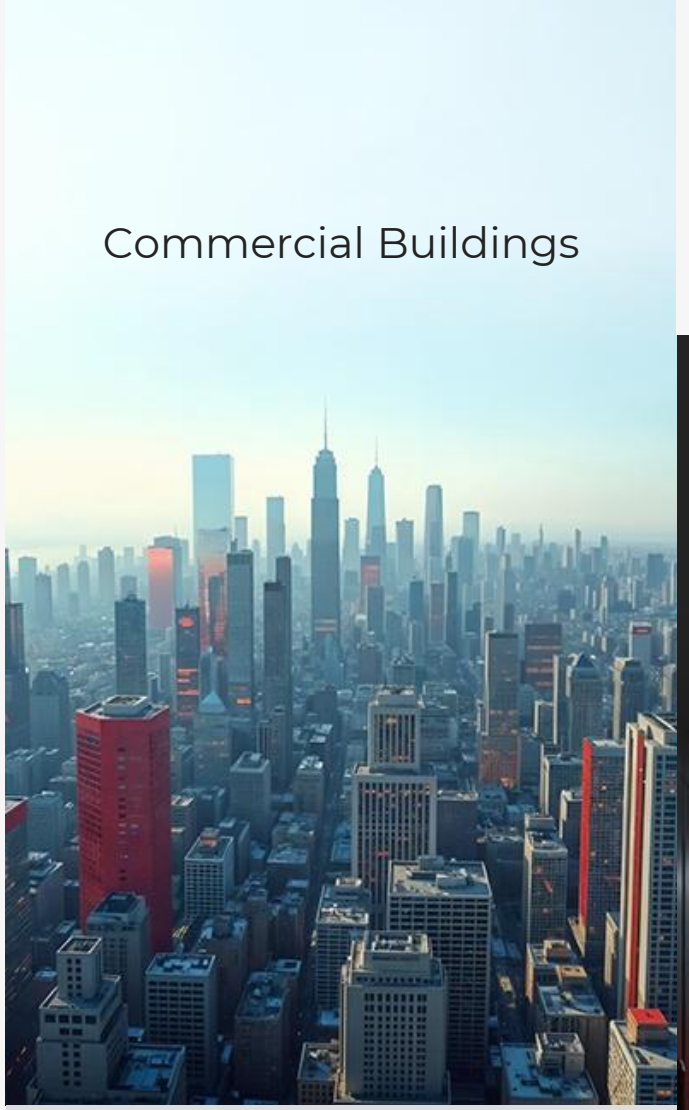
NOSTROMO

Breaking Peak Power Limits

Boosting power economics, efficiency and resilience for data centers and commercial buildings

April 2026

Nostromo is the first fully-scalable thermal energy storage platform that removes power-peak loads, enabling data centers to increase compute capacity and commercial buildings to cut peak-demand costs and emissions.



NOSTROMO

The Global Pain: Peak Power Is Breaking the Grid

The AI revolution and data center boom, as well as global shift toward electrification, are driving unprecedented growth in demand for electricity. Grid congestion and peak loads drive inefficiency, forcing oversized infrastructure that's only **half utilized**.

Cooling is the Culprit

Main Driver of Peak Load:
Cooling accounts for most demand variability.

In data centers, it accounts for up to

40%

of peak electricity demand.

In commercial buildings, it accounts for

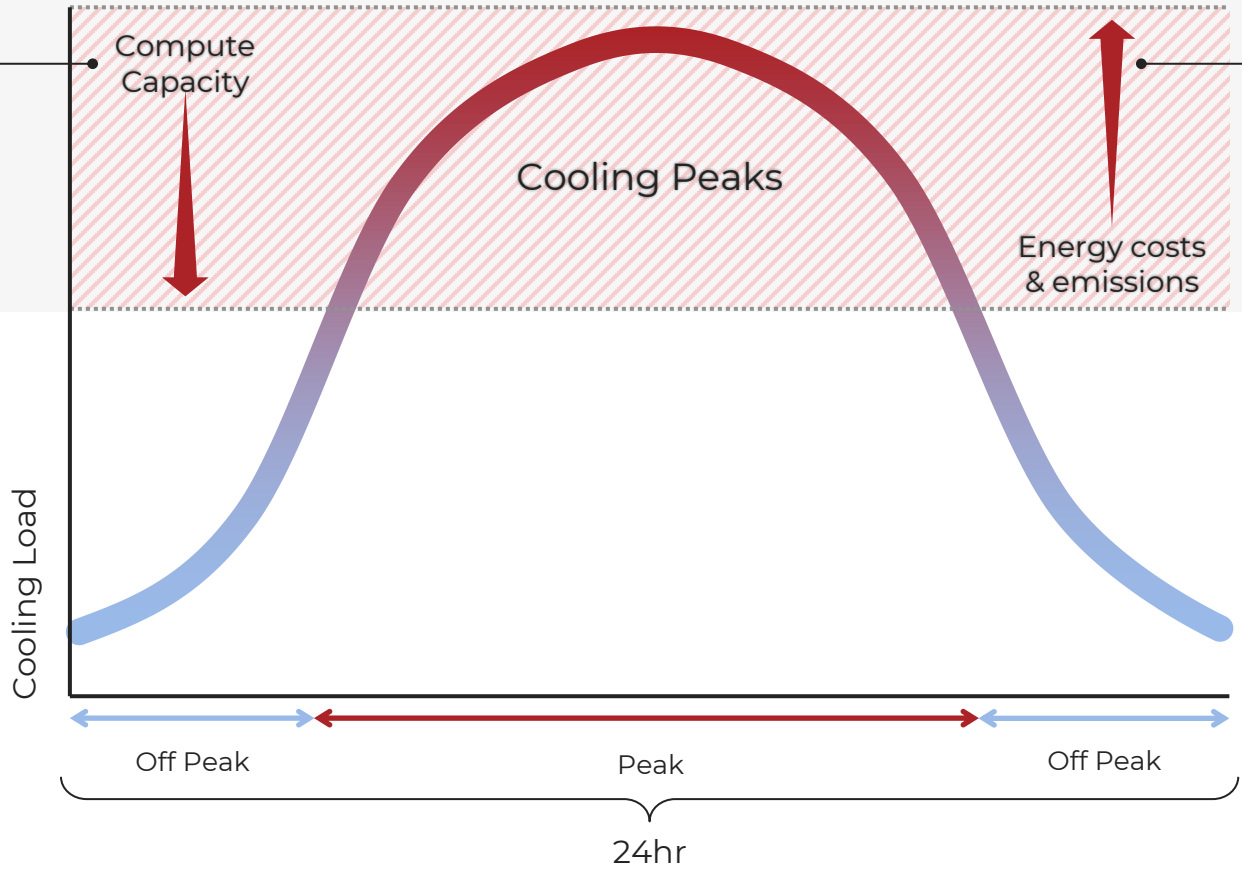
30-70%

of peak electricity demand.

NOSTROMO

The Customers' Pain

Data Centers
High value computing capacity is "stranded" by power and cooling peaks



Commercial Buildings
Cooling drives peak loads and power costs, increasing emissions

The IceBrick® Solution

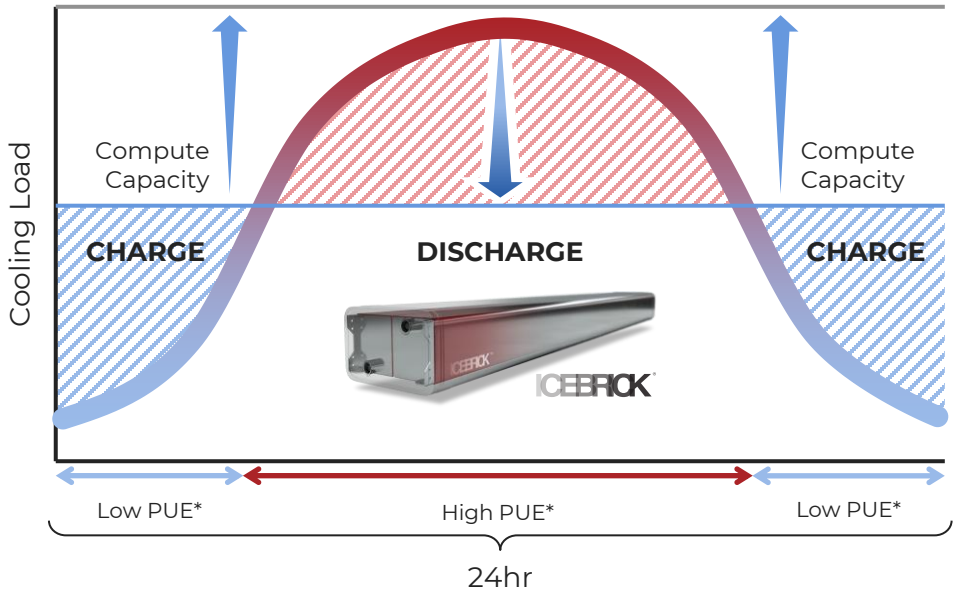
Data Centers

- Increase 5-15% Compute Capacity
- Improve Efficiency
- Back-up Cooling

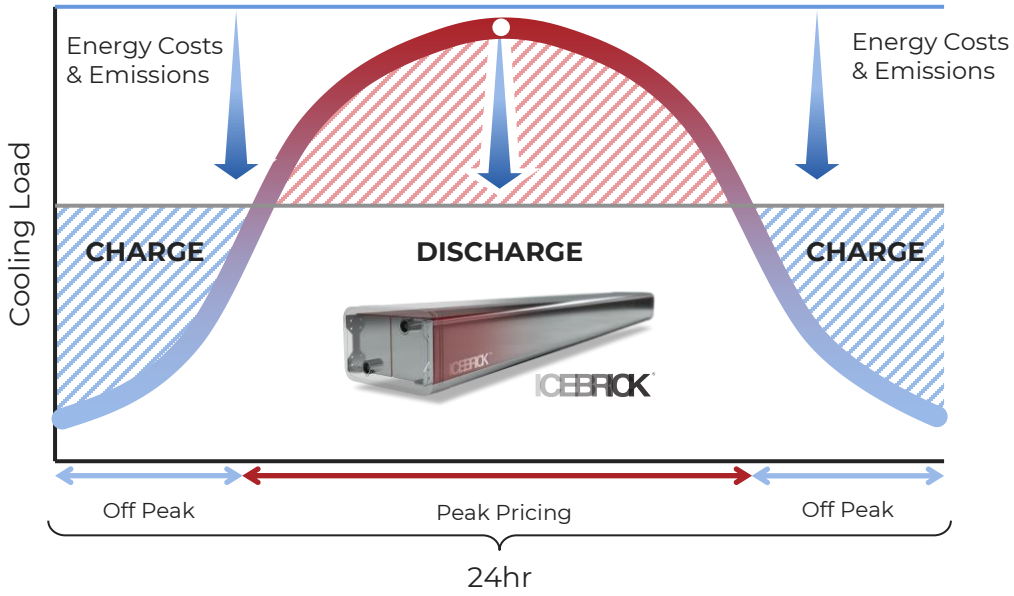
Commercial Buildings

- Cut Power Costs
- Cut Emissions
- Back-up Cooling

Shift cooling power consumption to unlock compute capacity and improve efficiency



Shift grid power consumption to reduce on-peak charges & generate Demand Response revenues



NOSTROMO

*Power Use Effectiveness

IceBrick®: Fully Integrated Demand Management

A turnkey platform combining breakthrough thermal storage hardware with AI-driven energy optimization software.

IceBrick® is the **first** thermal energy storage tech approved by market regulators* for wholesale market participation.

* California Public Utilities Commission (CPUC), and California Independent System Operator (CAISO).

NOSTROMO

IceBrick® System
Thermal Energy Storage

Compact & Modular
High density, fits in basements, and rooftops. Retrofit ready.

Sustainable & Safe
Water-based (ice), non-toxic, non-flammable. 100% recyclable.

Unmatched Performance
90%+ Round Trip Efficiency. Fast discharge capability (<4 hours).

Long Lifespan
25-year useful life, minimal degradation, no repowering.

100% US Made
No supply chain risks, ready to scale.

VIDEO ON TECHNOLOGY

Cirrus™ Platform
Cloud Management System

AI Optimization
Predictive load forecasting and dynamic dispatch with real-time corrections, for maximizing efficiency and savings.

Grid Integrated
Online interface with grid operator and wholesale markets (CAISO) for additional revenue generation.

Real-time Analytics
Granular telemetry, reporting, and settlement verification.

Multiple Modes
Optimize energy for maximizing capacity, savings, resilience and/or reducing emissions.

Process: The Intelligent Cooling Cycle

Unlocking Power for Compute

- Shifting load to low night-time PUE, take advantage of unutilized power capacity
- Reducing day-time cooling load – improves efficiency and releasing more power for compute

❶ Smart Charge

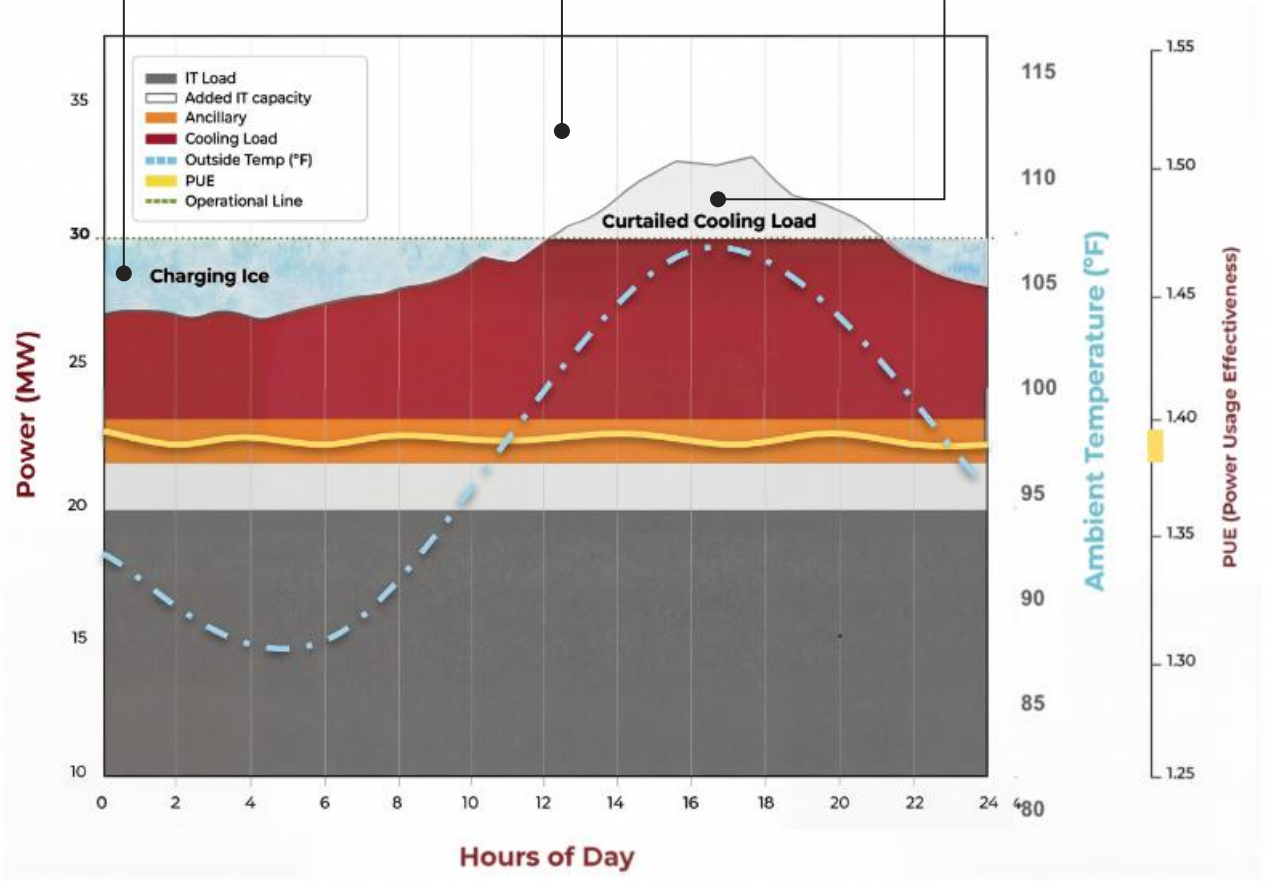
Charging during off-peak / low PUE hours, freezing water using surplus, low-cost, cleaner electricity and with high efficiency.

❷ AI Optimization

Cirrus platform forecasts loads, collects prices, and schedules the optimal dispatch cycle.

❸ Peak Discharge

During peak hours, ice melts to cool the building, offsetting chiller operation and demand.



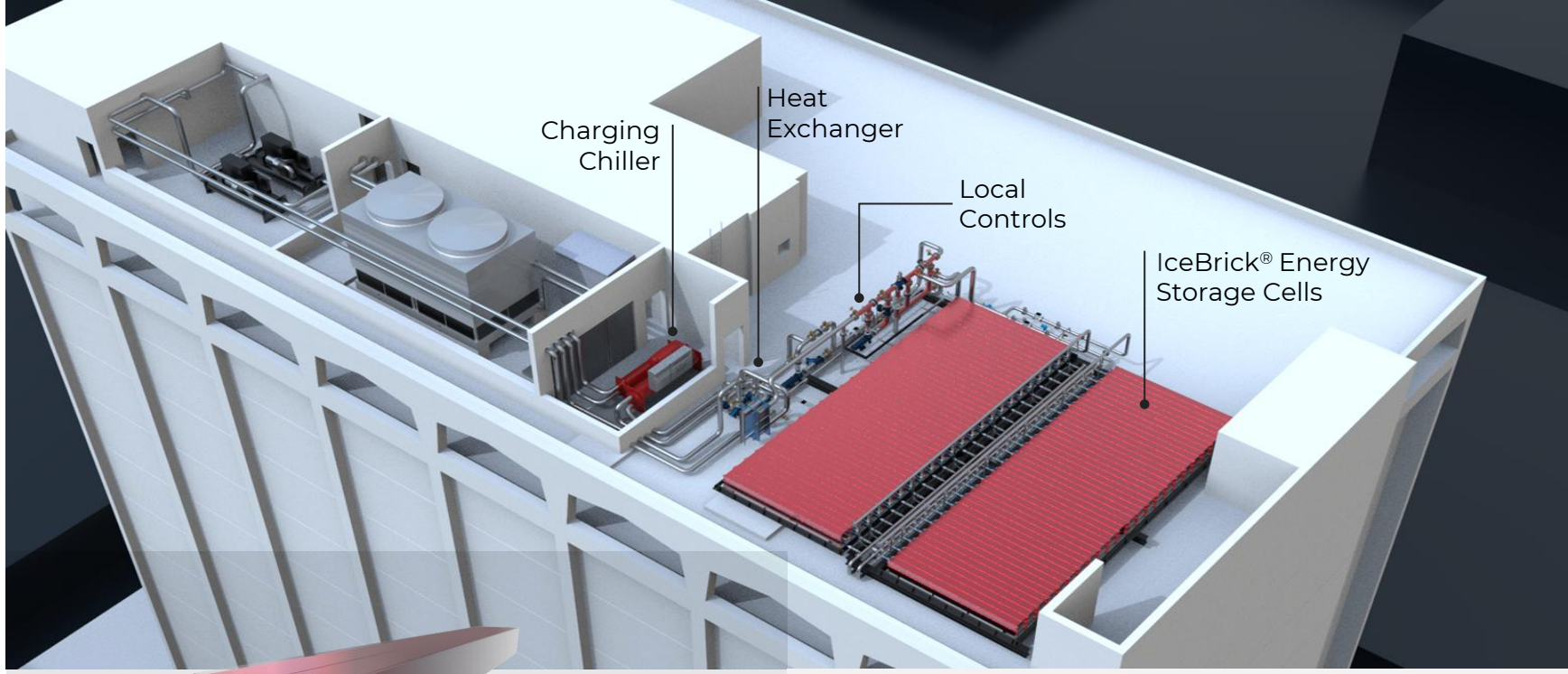
NOSTROMO

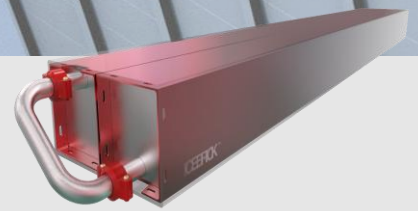
Technology:
Patented IceBrick® modular thermal energy

Vetted By Industry Leaders

U.S. Department of ENERGY	U.S. Dept of Energy
GSA	U.S. General Services Administration
BERKELEY LAB	UC Berkeley National Lab
	California Public Utilities Commission
	California Independent System Operator
ASCE	American Society of Civil Engineers

NOSTROMO





- Highly-efficient charging process, accelerated by proprietary freeze-promoting agents.
- Closed-loop system, zero water waste, energy delivered directly to the facility's circulating chilled-water system.
- Multiple modes: support, standalone cooling, and backup.
- 100% US Made, 100% Recyclable, 100% Safe
- 8 US patents (3 issued, 5 pending).

- Advanced, cloud-based management system using AI, machine- and deep-learning for forecasting, optimization, multi-modal analytics.
- Forecasts energy needs, optimizes and controls charge & discharge cycles
- Integrates with the power grid.

Urgency Meets Opportunity

Grid Crisis & AI Boom

3-5 Years

Interconnection delays for new data centers due to capacity constraints. "Power is the new real estate"

Grid Under-utilized

47%

Nearly half of capacity is unused due to load peaks, driven mainly by cooling. Sufficient power available (prioritized) for flat/flexible loads

Infrastructure Spend

$1.1 T

Projected grid infrastructure investment through 2030. Utilities are actively seeking non-wires alternatives to meet demand

Supporting Policies

40-50%

Investment Tax Credit (ITC) for thermal storage. Financing and regulatory opportunities for distributed energy resources and VPPs*

NOSTROMO

* Virtual Power Plants

Competitive Landscape

	IceBrick®	Traditional Thermal Energy Storage	Li-Ion Batteries
Increase Data Center Capacity	✓ 90% storage output Shifting *and* cooling efficiency	✓ 90% storage output Shifting *and* cooling efficiency	− 50% storage output Shifting only
Safety & Fire Risk	✓ 100% Safe	✓ 100% Safe	✗ Flammable & Thermal Runaway Risk
Retrofit Design & Density	✓ Compact & Modular. 1/3 space of traditional thermal storage for same usable energy	✗ Massive Tanks. Mount on ground level mount new construction / renovation	− Fire code limitations. Limited in-door capacity, spacing, fire precaution, fire access
Permitting	✓ Simple	✓ Simple	✗ Complex (Fire Code)
System Lifespan Performance Degradation	✓ 22-25 Years 0.05%/yr	− +20 Years	✗ 10-12 Years 2.00%/yr
Backup Energy	− Cooling	− Cooling	− Electricity
Grid Revenue	✓ Yes	✗ No	✓ Yes

Due to these limitations, energy storage in commercial and industrial sector (C&I) is <1% of total, ~1/6 of residential

NOSTROMO

Business model: Flexible revenue streams

	Financial Value	Transaction options: Purchase	Transaction options: Service
		Maximum Value Retain incentives*	Energy Storage-as-a-Service (ESaaS) $0 Upfront, Monthly Fee
Data Centers	Unlock 5-15% compute capacity Revenue	~2 yr payback ~50% IRR	Fixed Fee (>70% margin)
Commercial Buildings	Save 30% of cooling costs + demand response revenue	3-4 yr payback 25-33% IRR	30-40% discount off utility price 10-15% saving on cooling costs

Both models generate high gross margins and long-term recurring revenue optimized via the Cirrus™ Software Platform

Operational Benefits

- Backup cooling
  N+1 chiller
- CO2 reduction
  200-300 mTon CO2/yr
- EV charging
  Up to 40% of spaces
- LEED Certification
  Up to 20 points

NOSTROMO

* Investment Tax Credit (40-50%), Bonus Depreciation

Serviceable Market (US only)

	Data Centers	Commercial Buildings
Potential Sites	3,000[i]	250,000[ii]
Capex[iii]	$24 Bn	$134 Bn
ARR[iii]	$1 Bn	$15 Bn

(i) 5-50 MW (colocations, small hyper-scalers, large enterprise) (Markets and Markets); (ii) Energy Information Agency, Commercial Buildings Energy Consumption Survey (CBECS); (iii) see financial model.

NOSTROMO

Traction: Proven Commercial Momentum, Top-Tier Customers

$XXM
Contracted Backlog
For delivery in 2026:
- Atlanta International Airport
- Major utility HQ
- Residential Tower, South Calif

$XXM
Booking in Process
Projected closing Q2'26

$XXXM
Qualified Pipeline
Signed Development Agreements with major data centers operator, national commercial REITs and asset managers, +150 buildings

$XXXM
Deployment Capital
Term sheets secured to fund ESaaS projects, anchored by a $305M DOE conditional loan commitment.

High Visibility

Click on the arrow to go to the article.

TIME

“Air Conditioning Has a Big Climate Impact. This New Technology Could be a Game Changer”

The Economist

“New tech can make air-conditioning less harmful to the planet. The key is energy efficiency.”

The Washington Post

“These buildings use batteries made of ice to stay cool and save money”

AP

“Data centers are very energy-hungry and about 30% to 40% of their energy use is for cooling … that’s where a solution like ours could really help.”

WORLD ECONOMIC FORUM

“This start-up is using ice thermal energy storage to cool global warming”

KTLA 5

WIRED

“Cutting-Edge Technology Could Massively Reduce the Amount of Energy Used for Air Conditioning”

Massachusetts Institute of Technology

“Your future air conditioner might act like a battery: New technologies store cooling power for when it’s needed most.”

NOSTROMO

Our Team: Management with scale DNA

Yoram Ashery
CEO
2 successful global tech launches (0-$100M), 3 IPOs, 2 acquisitions

Medtronic · EndoChoice · nobio bioprotection for life

Yaron Ben Nun
Founder, CTO
Energy efficiency, big data & analytics, IAF Fighter Pilot

Phoebus Energy · zira.

Ori Asscher
SVP Eng. & Ops
Hybrid thermal, IoT R&D & major retrofit projects leader

ami · Phoebus Energy

Nir Vaiman
CFO
Multiple CFO and financial leadership roles, M&As and turnarounds

syngenta · NaanDanJain by Rivulis · Phibro

Boaz Ur
Chief BD Officer
Demand response, oil-spill response, energy efficiency

HARBO · zira. · PG&E

Kobi Zohar
VP Core R&D & QA
Multidisciplinary R&D, quality and reliability leader

ColorChip Group · hp Indigo · RADWIN

Doug Poffinbarger
VP, US Commercial Ops
Executive leadership in distributed resources and energy efficiency

nrg · Honeywell · 3fficient

Preciouse Gross
Director of Marketing
Executes full spectrum marketing, branding, and content operations

BlueSnap · nuvei · CalCom

NOSTROMO

THANK YOU

nostromo.energy