ENERGYDOME

Our WORLD can't wait.

Energy Dome
Eric Watson
TMCES 2025 – July 31

Not just a scale-up

Experienced group of people that have been working together for **10 years** delivering disruptive innovation to the energy market

EXERGY

Innovative in-house development of the **Radial Outflow Turbine**

50+ Turbines Installed and Currently Operational

Design and built **500+MWe** of Geothermal, WHR, and CSP Power Plant

SEBIGAS

Design, construction and management of biogas plants worldwide with a reference list of **80+ biogas plants**

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Investors backing Energy Dome – €135m raised

eni next

BARCLAYS

cdp

European Innovation Council

a2a

Finanziato dall'Unione europea
NextGenerationEU

Breakthrough Energy

جهـــاز الاستثمـــار العُمانـــي
Oman Investment Authority

European Investment Bank

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The Process

CO2 BATTERY

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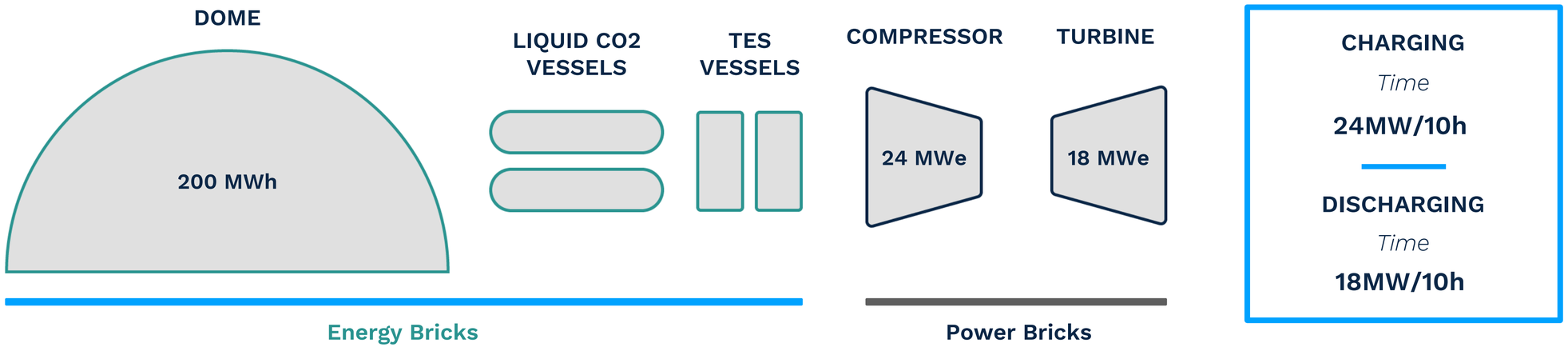
Long Duration, High RTE, Low Cost, Ready-to-Build

Standard Configuration

20MW/200MWh Frame



CHARGING

Time

24MW/10h

DISCHARGING

Time

18MW/10h

Site-Independent Design (Wind resistance, snow load, seismic)

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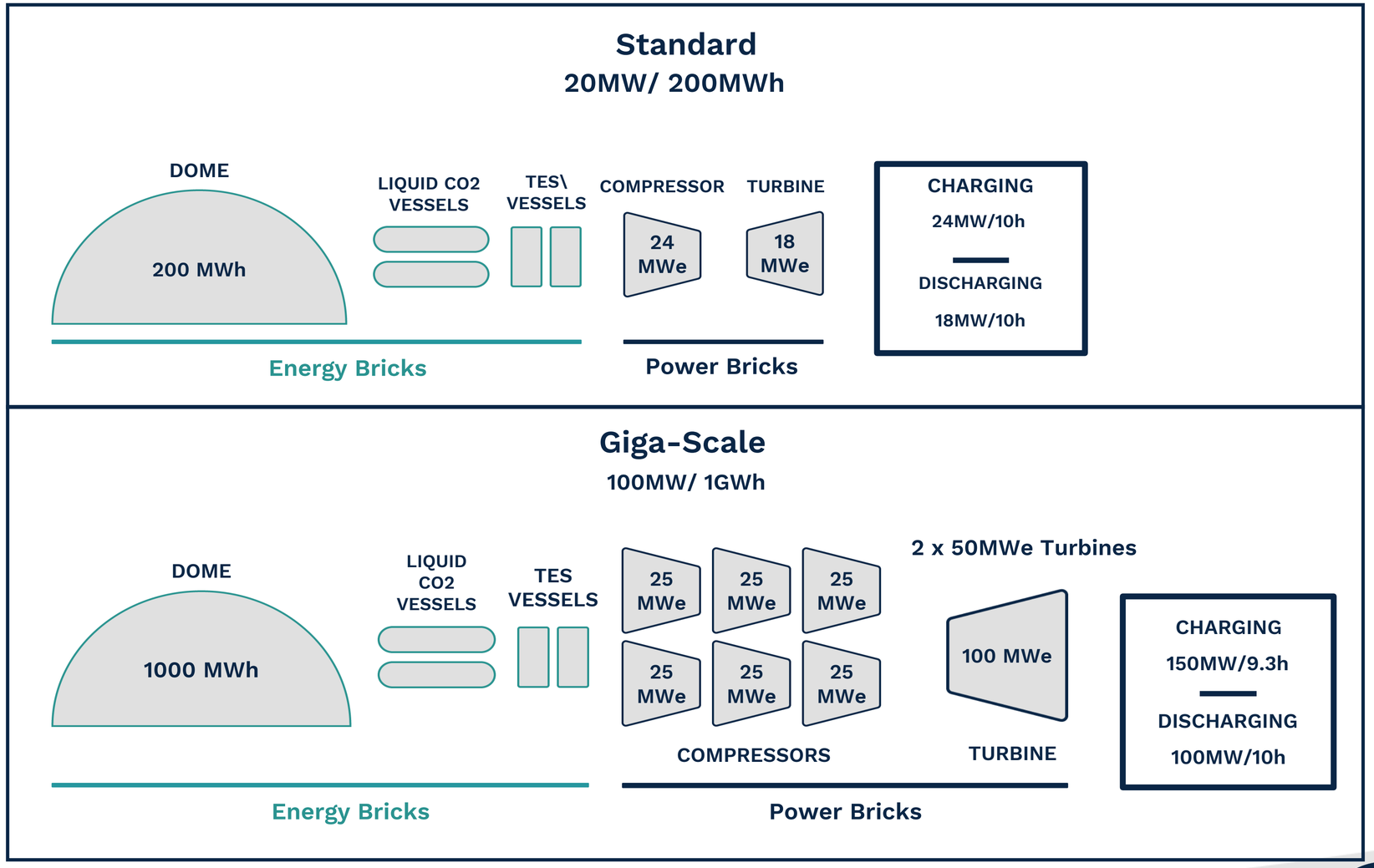
CONFIGURATIONS – 10-hour discharge

Identical types of equipment and operation produce the exact same thermomechanical process. The turbine can be altered to provide discharge duration based on optimal use-case. Discharge durations of 8-24 hours are possible.

Standard CO2 Battery

VS

Giga-scale CO2 Battery



The CO2 BATTERY Main Benefits

Efficient

Round-trip efficiency (75%+) AC-AC and MV-MV

Cost-effective

Highly competitive CAPEX and OPEX

Flexible

CO2 Batteries can be constructed anywhere in the world

Proven

MW-scale plant already operational and grid-connected

Durable

No degradation of capacity or performance over 30+ years

Reliable

Off-the-shelf components made of eco-friendly materials

Independent

No dependence on rare metals such as lithium

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Global and Resilient Supply-Chain

All Readily Available Off-the-shelf components

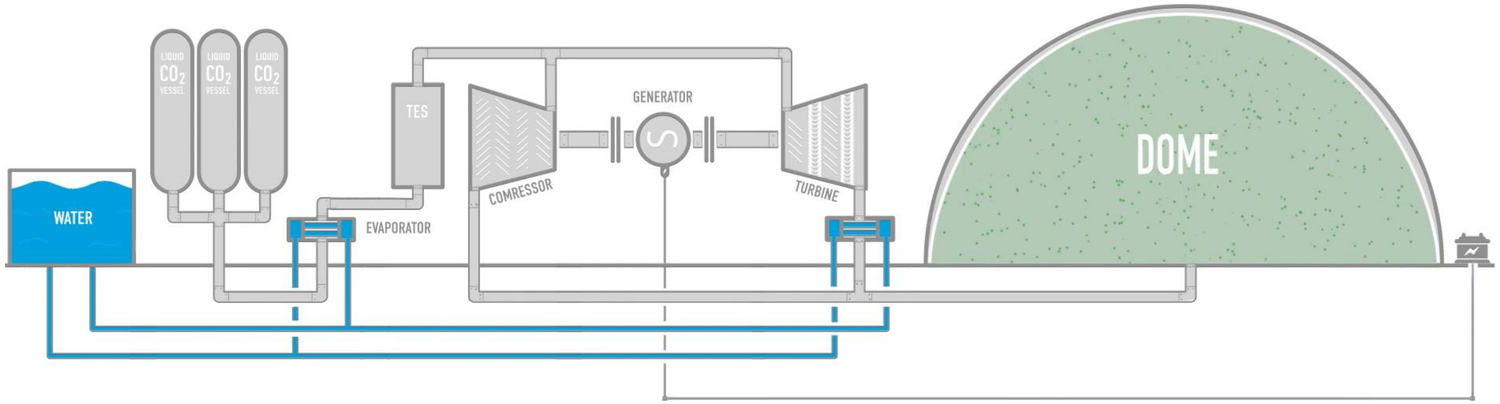
Atlas Copco

SSS® Clutch Company, Inc.

Nidec
All for dreams

Geometrica®

ECOMEMBRANE.
ENVIRONMENTAL TECHNOLOGY



ARIZON®
BUILDING SYSTEMS

ZC- SPACE
中成空间

KOBELCO

FRANCO TOSI
MECCANICA

MITSUBISHI
HEAVY INDUSTRIES

MAN
MAN Energy Solutions

SIEMENS

TGM KANIS
TURBINEN

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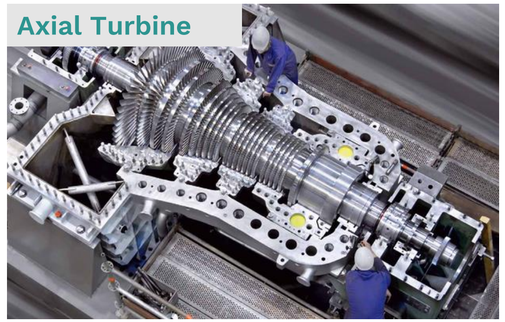
Readily and widespread off-the-shelf components

	# of units worldwide
Dome 	> 700,000
Motor/Generator 	> 6,000
Heat exch. 	Widely referenced

	# of units worldwide
Carbon Steel Pressure vessel 	Widely referenced
Int. Gear Compressor 	> 2,200
Axial Turbine 	> 120,000

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WE HAVE BEEN READY SINCE JUNE 2022

First 2.5MW Plant successfully operational and Grid Connected for almost 2 years

Almost 2 years of plant operation have confirmed:

- Maturity of the technology
- Performance validated by

FICHTNER

EPRI

MAN Energy Solutions

POLITECNICO MILANO

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First standard frame 20MW – 200MWh CO2 Battery to startup in Sardinia Q2-2025

Undergoing Commissioning & Testing

Breakthrough Energy

European Investment Bank

€35M GRANT

+

€25M
VENTURE DEBT

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ENGIE-OFFTAKE AGREEMENT

COD in 2025. Location: Ottana, Sardinia, Italy

BOO Contract signed with ENGIE for the offtake of the storage capacity.

Energy Dome will own and operate the CO2 Battery facility, while ENGIE will leverage its market expertise to optimize and dispatch the stored energy in the Italian power markets

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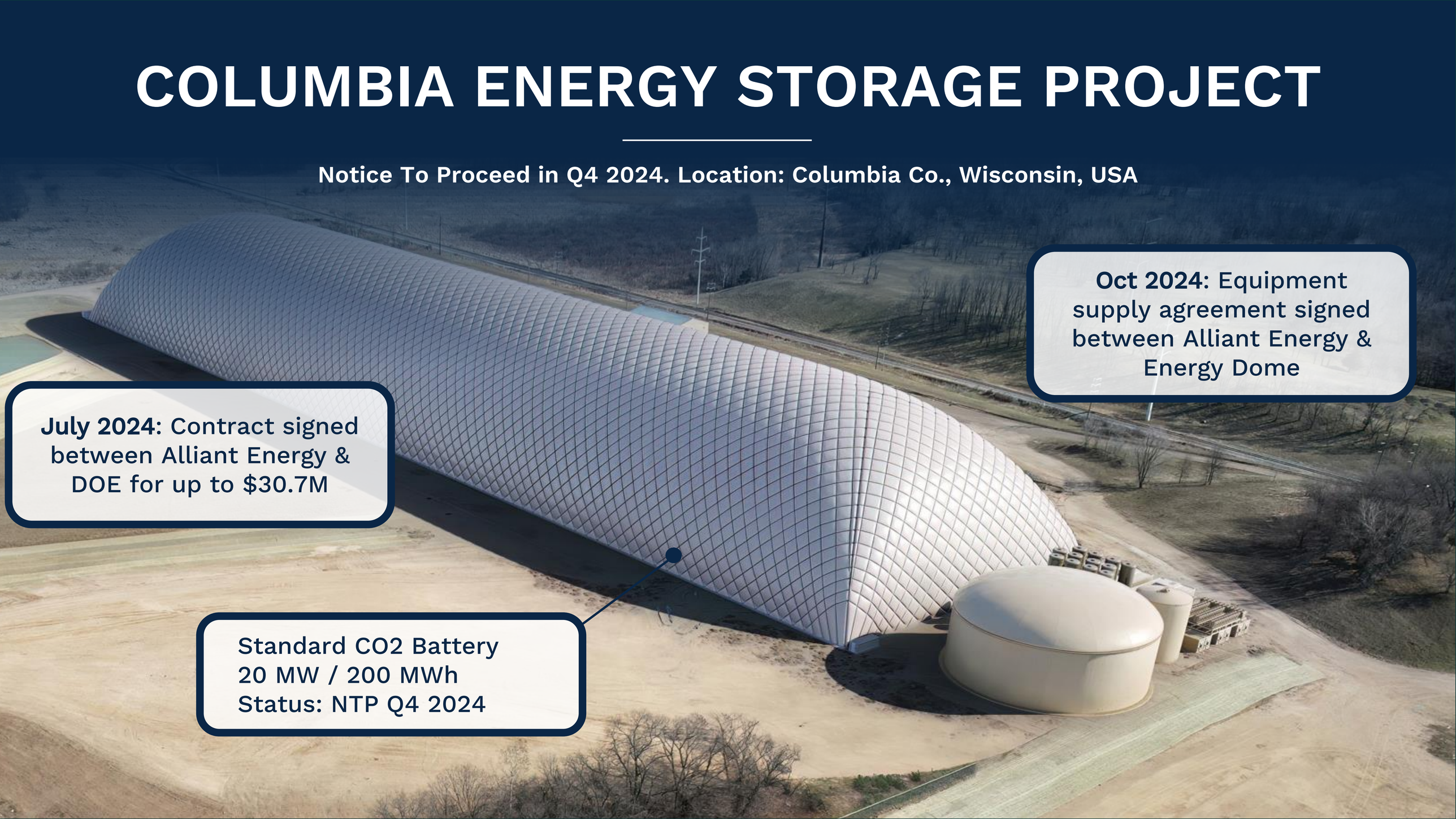
COLUMBIA ENERGY STORAGE PROJECT

Notice To Proceed in Q4 2024. Location: Columbia Co., Wisconsin, USA



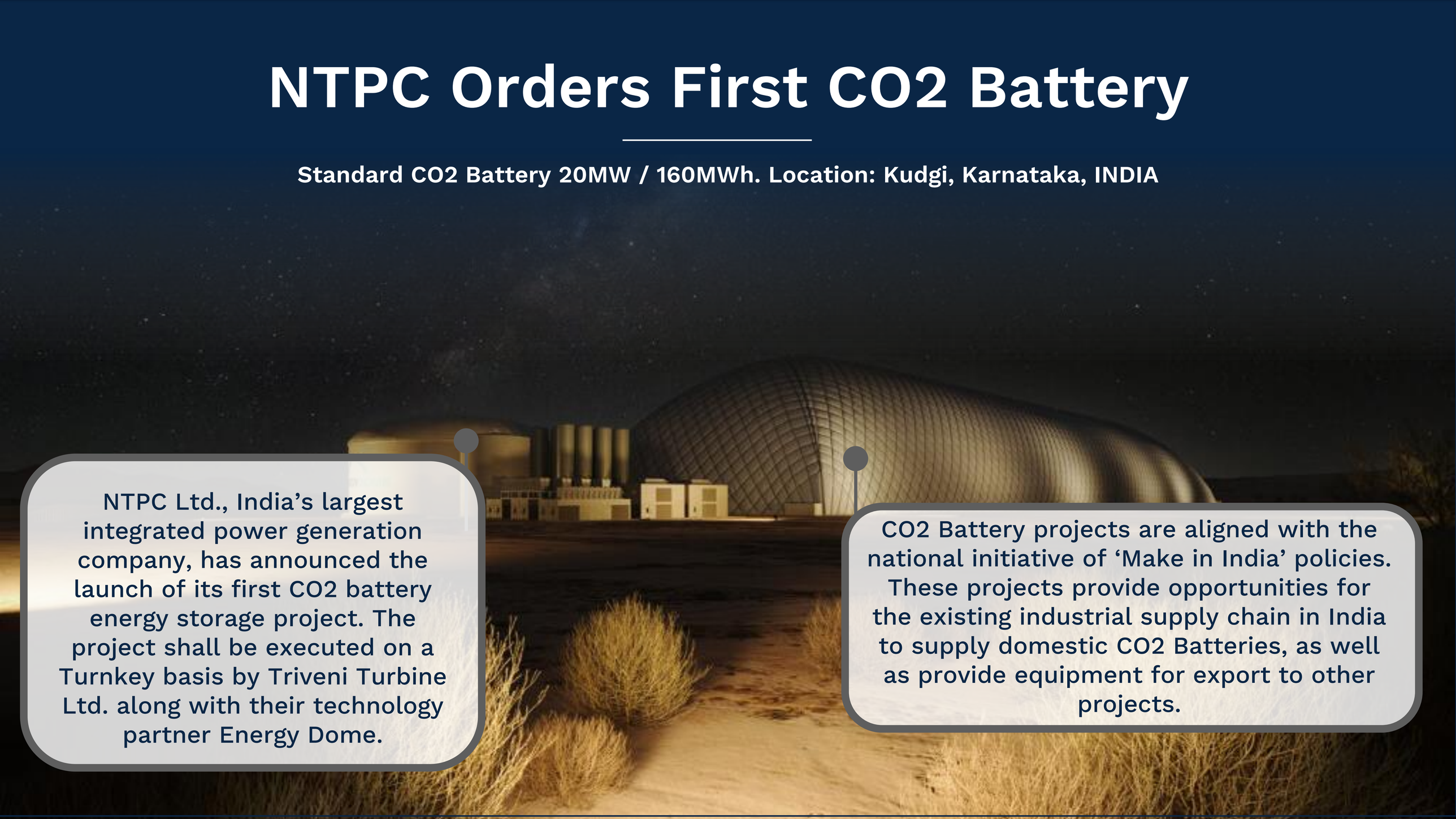
July 2024: Contract signed between Alliant Energy & DOE for up to $30.7M

Oct 2024: Equipment supply agreement signed between Alliant Energy & Energy Dome

Standard CO2 Battery
20 MW / 200 MWh
Status: NTP Q4 2024

NTPC Orders First CO2 Battery

Standard CO2 Battery 20MW / 160MWh. Location: Kudgi, Karnataka, INDIA



NTPC Ltd., India’s largest integrated power generation company, has announced the launch of its first CO2 battery energy storage project. The project shall be executed on a Turnkey basis by Triveni Turbine Ltd. along with their technology partner Energy Dome.

CO2 Battery projects are aligned with the national initiative of ‘Make in India’ policies. These projects provide opportunities for the existing industrial supply chain in India to supply domestic CO2 Batteries, as well as provide equipment for export to other projects.

Ottana, Sardinia CO2 Battery – July 2025

Strategic Commercial Agreement

- Provide carbon-free energy for the grids that power Google's operations
- Help the electricity system grow more flexibly and reliably
- Achieve 2030 Carbon-free energy goal

"Google is committed to powering our operations with clean energy, and Energy Dome's technologically proven and scalable long-duration energy storage solution can help us unlock rapid progress," . "But this isn't just about Google. By helping to scale this first-of-a-kind LDES technology, we hope to help communities everywhere gain greater access to reliable, affordable electricity and support grid resilience as we integrate more renewable energy sources." - Maud Texier, Director of EMEA Energy at Google

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THANK YOU