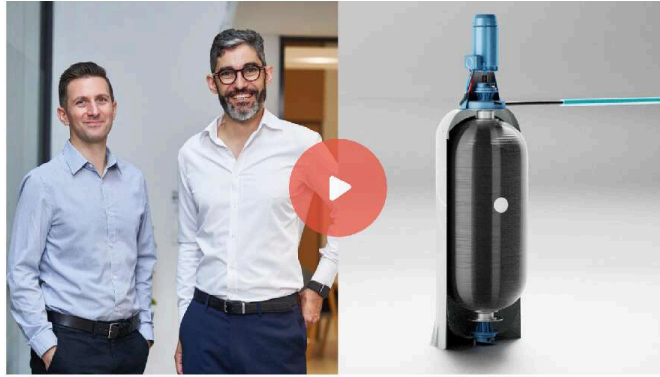


Mechanical battery—the sustainable energy revolution



qnetic.energy New York NY

Technology B2B Hardware Energy Sustainability

LEAD INVESTOR

Adriana Verde Rios

I invested in Qnetic because of their ambitious mission to accelerate the transition to green energy. They address the biggest obstacle in this transition by providing a technology that allows to store energy in a cost efficient and reliable manner. The founders and team have strong domain expertise and market understanding. They have been collaborating for years and share the passion and skill to take energy storage to the next level.

Invested \$10,000 this round

Highlights

- 1 Our mission—transition our civilization to sustainable energy
- 2 Our product—a low-cost, long-life, long-discharge grid-scale energy storage
- 3 The result—the solution to solar and wind power intermittency
- 4 Team—strong technical expertise, experienced in business and complex system execution; global
- 5 The market—growing exponentially, doubling every 3 years

Our Team



Michael Pratt Founder, CEO

Product design and development specialist with award-winning product designs and invention patents. 16 years at a leading product design consultancy: founding China GM and Technical Director, leading the design and engineering team for a decade.



Loïc BASTARD Founder, CTO

Former Head of Department at Envision Energy; 10y experience at Siemens; 18 years of designing and analyzing complex rotating systems; Specialist in vibrations, rotor dynamic and FEA. China 1000 specially recruited talent award in 2016.



Malcolm Mathews Head of Finance, Business Ops. & Strategy, CFO

Global business executive with over 30 years of success leading organizations providing diverse technologies and services across multiple industries and segments. Former CFO, APAC at Johnson Controls, Stanley Black & Decker, Carrier Corporation



Dr. Mathias Mier Head of Quality, Procurement, Head European Office

Almost 40 years in leading roles in renewable energy, e.g. 12y REpower Systems, 5y Envision Energy. Expert in intercultural business, Quality, risk and supplier management. Experience in managing global JV & license agreements.

QNETIC'S MISSION

TRANSITION TO FOSSIL FUEL-LESS
SUSTAINABLE POWER

We must **stop** burning fossil fuels and **urgently** transition to renewables

ENABLE
ENERGY SECURITY

Fossil fuel **dependency** is a threat to our economies

Wind and solar energy are **cheaper** than oil and gas
BUT THEY ARE INTERMITTENT. **ENERGY STORAGE WILL SOLVE THAT**



wind



solar



energy storage

= **THE SUSTAINABLE ENERGY REVOLUTION**

is the solution plan to eliminate fossil fuels

to the missing piece to enhance sustainability

The world needs a scalable solution that is
LOW-COST, LONG-LIFE AND LONG DISCHARGE

“The original goal of Qnetic is to help humanity transition to a sustainable civilization on Earth, which is a fundamental good.”

— Qnetic Manifesto

Discussion of the products and financials contained herein represent the management's good faith estimate of potential results should the team execute its development roadmap.

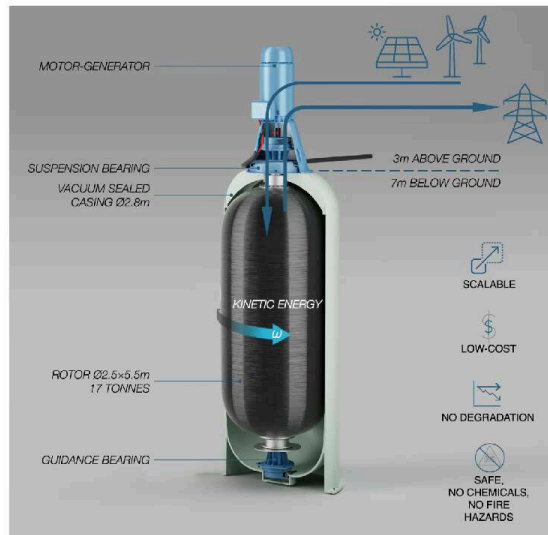
THE PRODUCT

THE QNETIC BATTERY: ENERGY REVOLUTION

Qnetic is a power-to-power flywheel energy storage system: It takes in electricity and converts it to kinetic energy of a spinning rotor.

The energy is held as momentum, with very low losses due to the vacuum and special magnetic levitation bearings.

To discharge the energy again, the motor acts as a generator and the process is reversed. Simple.



2,000kWh BREAKTHROUGH CAPACITY

- Designed for long-duration discharge
- Innovative, ultra-light composite rotor
- Ultra-high speed for maximum stored energy
- Low losses (Round Trip Efficiency 85%)
- Integration of existing technologies: no high technical risk
- Electrical system based on standard technology
- Optimized for solar and wind energy shifting
- Designed for automated series production
- State of the art grid integration, system control and monitoring

KEY ATTRIBUTES

- LOW COST**
Cheaper than Li-Ion
- LONG LIFE**
Last for 30 years (15,000 cycles) and doesn't degrade
- LONG DISCHARGE**
4-12 hrs., perfectly suits daily energy shifting

KEY ENABLERS

- SMART ROTOR**
Super lightweight composite rotor, ultra-high speed, ultra-stable (patenting)
- ADVANCED BEARINGS**
Full magnetic levitation bearing design, extremely low losses (patenting)
- ASSEMBLY AND BALANCING**
Innovative manufacturing and assembly, accurate balancing of the system (patenting)



SAFE & CLEAN



THE QNETIC ARRAY

A facility comprises any number of Qnetic, connected and working together to form a megawatt-scale battery.



WHY IS QNETIC BETTER?

○ LCOS 2x CHEAPER THAN LI-ION

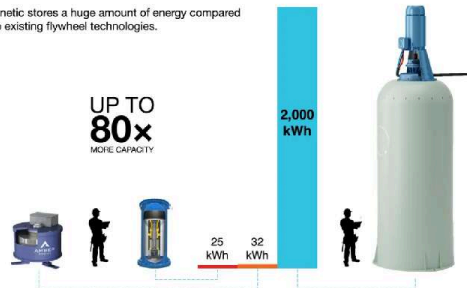


*Levelized Cost of Storage (LCOS): the cost of a MWh of electricity discharged from a storage device when accounting for all costs incurred (including full cost of goods, installation, maintenance, round trip efficiency, energy losses, degradation, end-of-life costs), and energy produced, throughout the lifetime of the device (Schmidt). Wholesale energy price used is \$30/MWh. Based on 700 cycles/year and 4hr discharge. Li-ion prices taken November 2022.

○ DESIGNED FOR GRID-SCALE STORAGE

"We are not reinventing the wheel; we are radically redesigning the wheel for bulk storage."
—Dr. Mathias Mier

Qnetic stores a huge amount of energy compared to existing flywheel technologies.



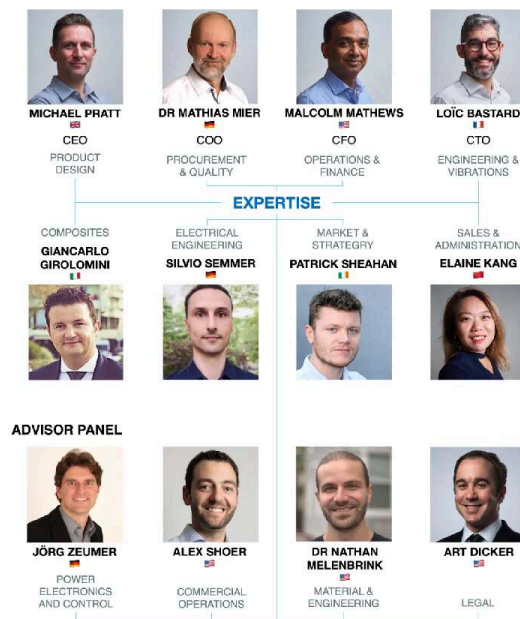
○ EACH QNETIC WILL AVOID 4 TONNES OF CO₂ EMISSIONS EVERY DAY*

*Considering 2 full discharges per day.
Source: IER report: US electric utility independent results: storing coal power produces 1012 gCO₂/kWh
<https://www.eia.gov/broadsheets/inf/pdf/1012-P48-11>

WE ARE COMMITTED TO SUCCESS

KEY TEAM

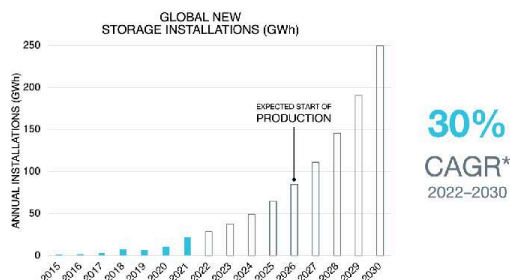
- Exceptional and highly experienced team covering business, finance, engineering (mechanical, electrical, composites) and execution.
- Expertise from wind turbines and other rotating machinery, ideally suited to develop Qnetic
- Future hiring will include market development, manufacturing and additional engineering expertise



THE MARKET IS GIANT

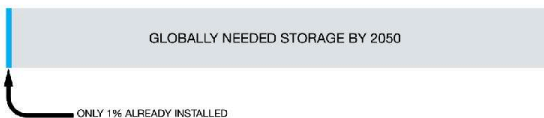
The market is **doubling** every three years.

In 2026, predicted demand is 85GWh—equivalent to 42,000 Qnetic.



*CAGR=Compound Annual Growth Rate.
Source: BloombergNEF Global Energy Storage Outlook 2021.

All of today's combined global storage capacity is less than 1% of what is required to enable the full transition to renewables.



OUR BUSINESS MODEL

- Manufacture and sell Qnetic batteries (ourselves and through partners), focusing on Europe, USA and China
- License the design or the IP to other manufacturers
- Ongoing revenue: maintenance contracts; management software licensing; Qnetic Virtual Power Plant*

\$560,000
Price of each Qnetic

\$280/kWh × 2,000kWh
Undercuts the market

50%
Gross product margin

Target COGS of \$140/kWh
Our LCOGS includes 50% margin

IPPs
Key customers

Independent Power Producers adding storage to solar/wind assets

Partnerships

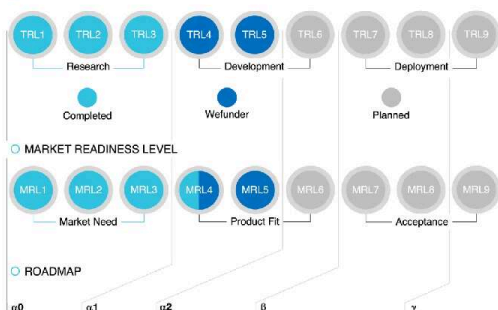
Accelerating manufacturing, sales and non-core R&D

*The Qnetic Virtual Power Plant

Qnetic's software will be responsive to the supply and demand of the grid. Acting synchronously, many Qnetic can behave as a virtual power plant for the grid. Long-term, this software layer may be more significant than the hardware. However, Phase 1 of the company is the R&D to bring the hardware product to the market.

WHERE WE ARE AND WHERE WE'RE GOING

○ TECHNOLOGY READINESS LEVEL



MODELS	LAB-PROTO	PROTOTYPE	CERTIFICATION	PRODUCTION
Product: <ul style="list-style-type: none"> Cost Model Dynamic and stress models Market: <ul style="list-style-type: none"> Need identified 	Product Goals: <ul style="list-style-type: none"> Lab-prototype IP filed Market Goals: <ul style="list-style-type: none"> Product market fit Assumptions validated 	Product Goals: <ul style="list-style-type: none"> Medium scale prototypes 3rd Party Verification Market Goals: <ul style="list-style-type: none"> Customer interest 	Product Goals: <ul style="list-style-type: none"> Commercial prototypes Production system ready DNV GL Certification Market Goals: <ul style="list-style-type: none"> Customer down-payments 	Product Goals: <ul style="list-style-type: none"> Production launch (Europe) Expansion (US, China) Market Goals: <ul style="list-style-type: none"> Revenue
Q1 2022 Q2 2022 Q3 2022 Q4 2022	Q1 2023 Q2 2023 Q3 2023 Q4 2023	Q1 2024 Q2 2024 Q3 2024 Q4 2024	Q1 2025 Q2 2025 Q3 2025 Q4 2025	Q1 2026 Q2 2026 Q3 2026 Q4 2026 Q1 2027

OUR AMBITION BY 2030



Forward looking projections cannot be guaranteed.

THE RAISE

