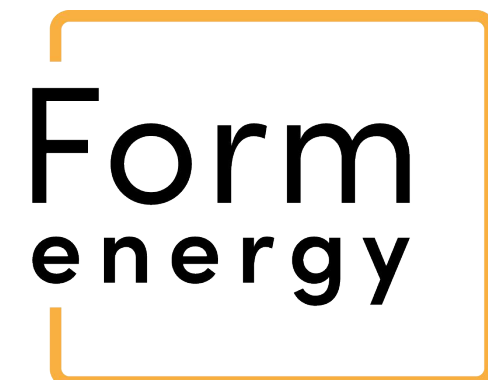


BREAKTHROUGH LOW-COST, MULTI-DAY ENERGY STORAGE

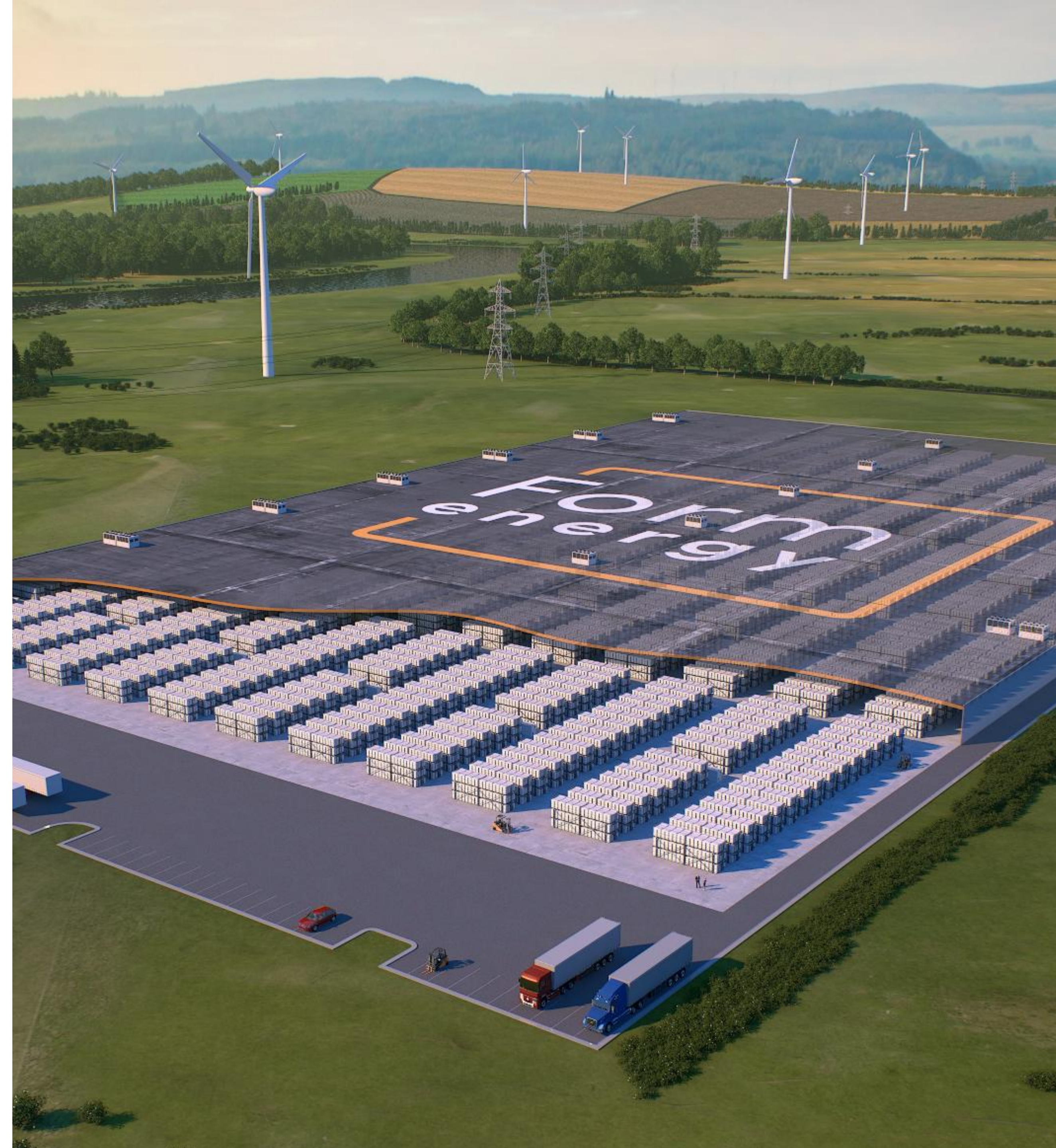
Jason Houck, Sr. Manager, Policy and
Regulatory Affairs

Presentation to the Minnesota House Climate
and Energy Finance and Policy Committee



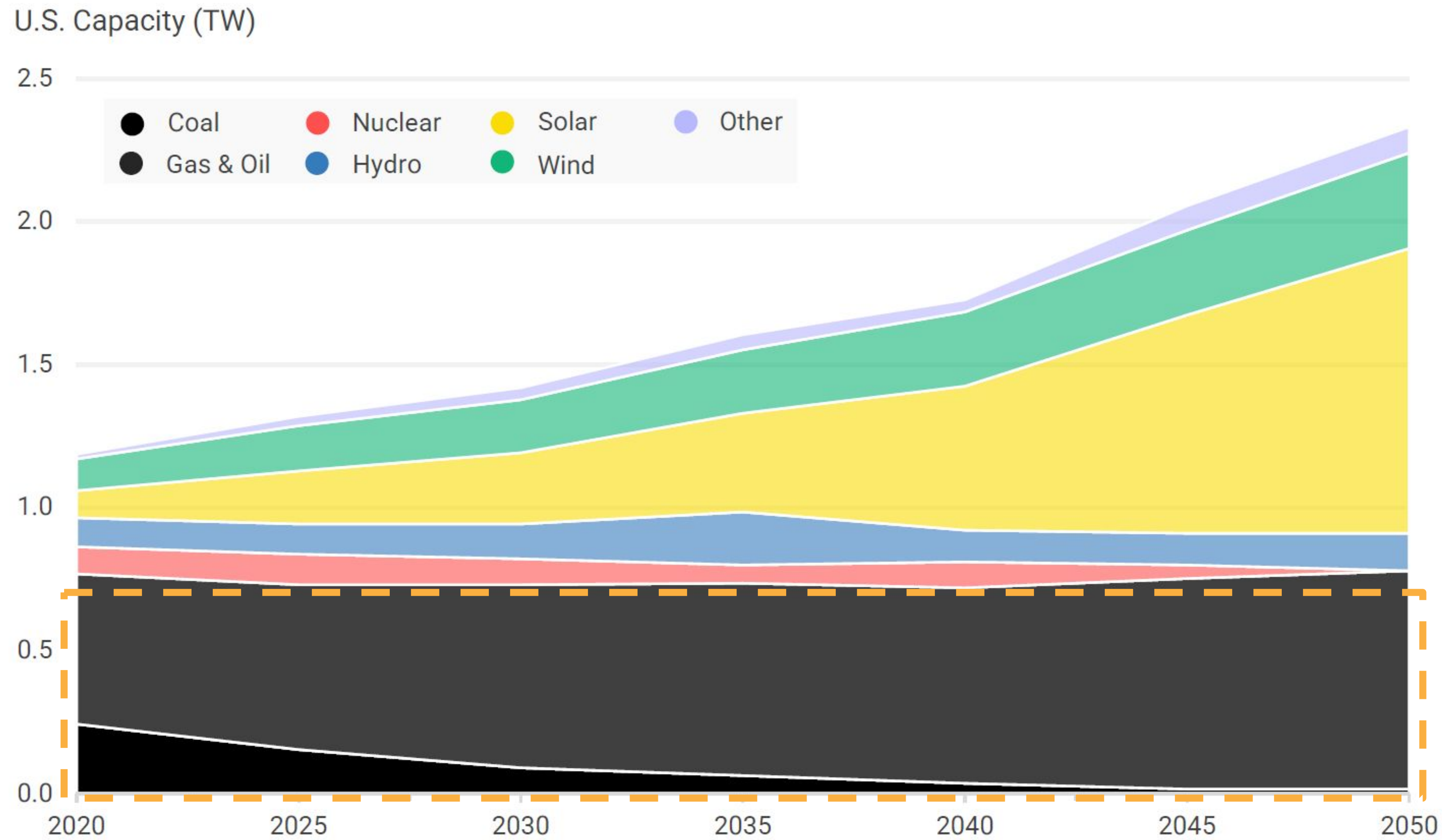
Energy Storage
For A Better World

CONFIDENTIAL



The tech gap: 780 GW opportunity to meet U.S. reliability needs

Forecast US Generation Capacity with Existing Commercial Technologies



Source: BNEF New Energy Outlook 2020

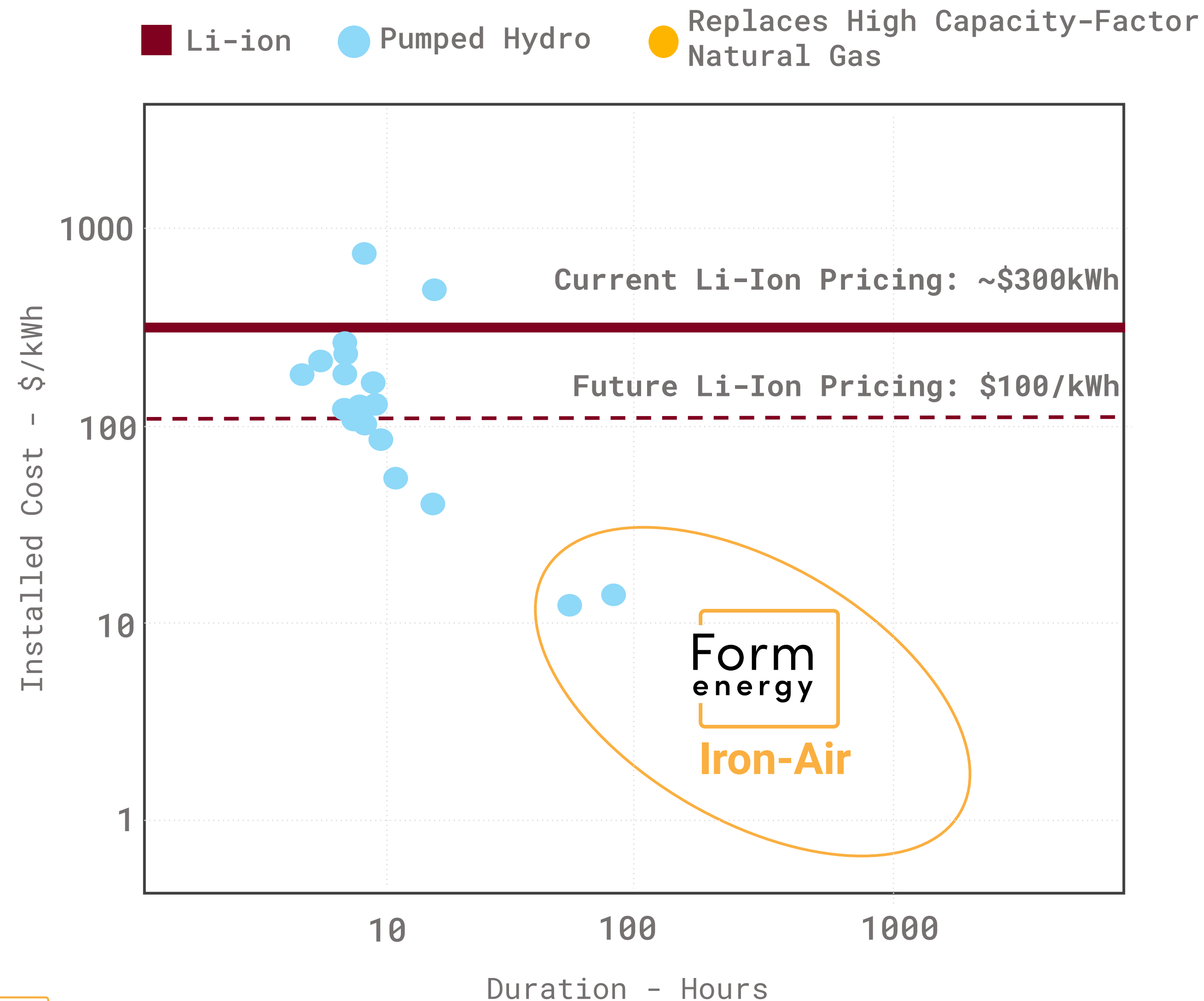
Change: As the grid electrifies and renewable costs plummet:

- >3.5x growth in renewables
- 1 additional TW of capacity

Obstacle: Legacy fossil remains to maintain reliability as electric demand rises.

Opportunity: Firm renewable energy to provide reliability forecast to be met by >780 GW of gas power plants

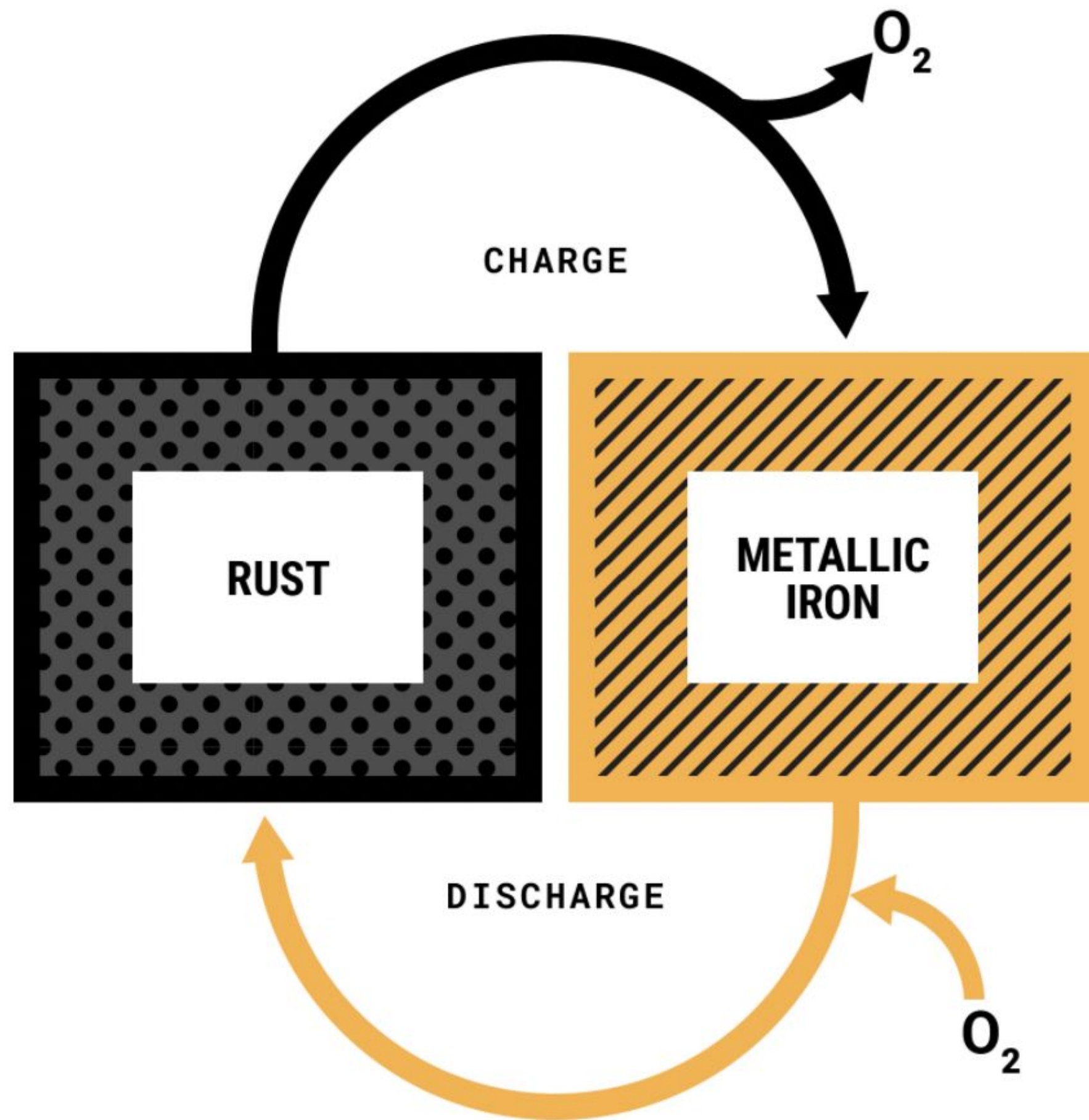
Our target: 10x lower cost and longer duration than lithium-ion



- **New storage solutions must be 10x longer duration and 10X cheaper than lithium ion** to enable renewables to replace the reliability function of gas and coal
- Pumped hydro is longest duration/lowest cost today

Rechargeable iron-air is the best technology for multi-day storage

Reversible Rust Battery



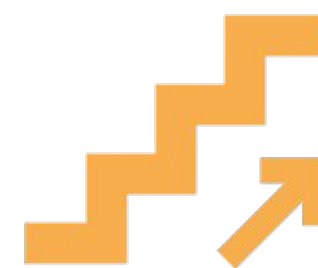
COST

Lowest cost rechargeable battery chemistry.
Less than 1/10th the cost of lithium-ion batteries



SAFETY

Non-flammable aqueous electrolyte. No risk of thermal runaway. No heavy metals.



SCALE

Uses materials available at the global scale needed for a zero carbon economy. High recyclability.

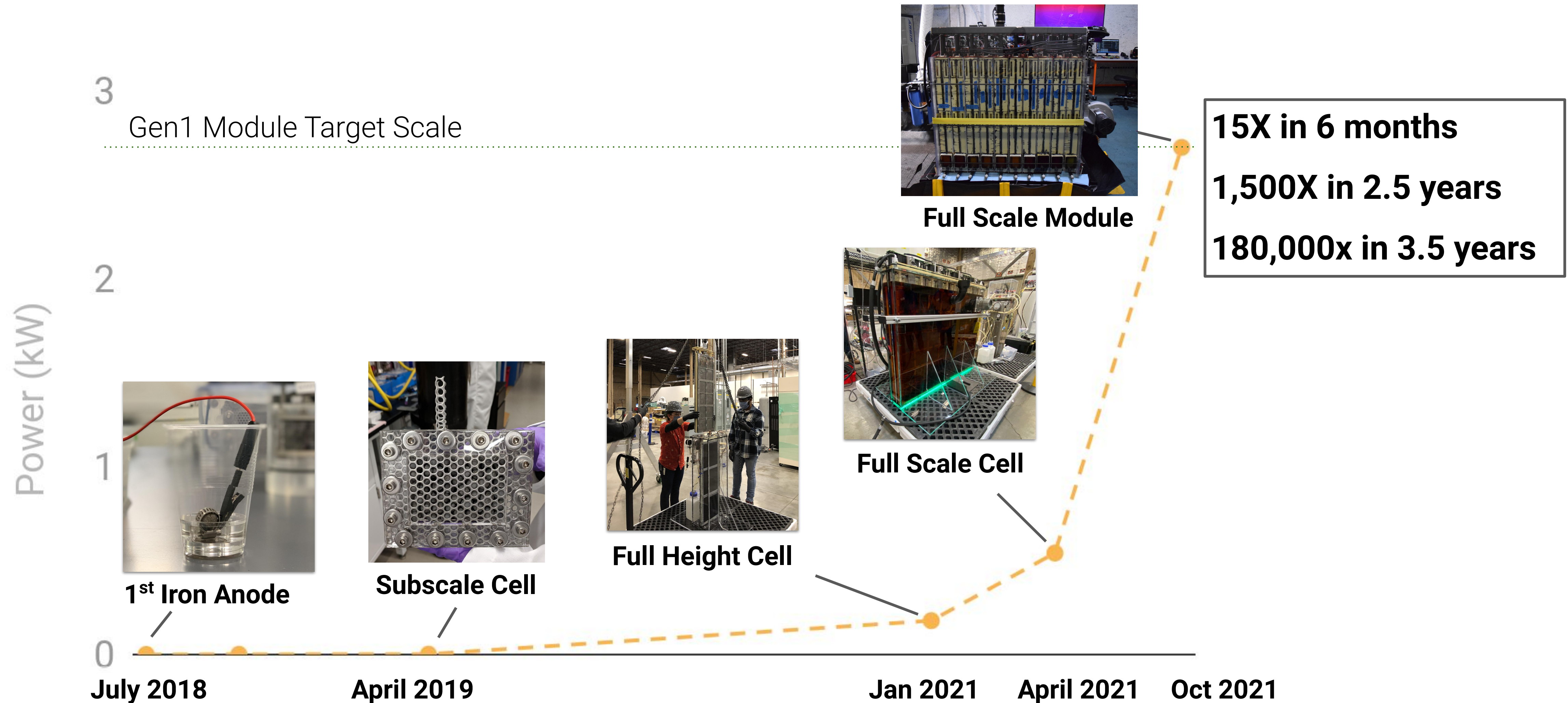


RELIABLE

100+ hr duration required to make wind, water and solar reliable year round, anywhere in the world.

Scaling iron-air from watts to gigawatts

Rapid scale from component to product size (manufacturing repeat unit)



Modular design enables easy scaling to multi-GWh systems

Energy Storage System



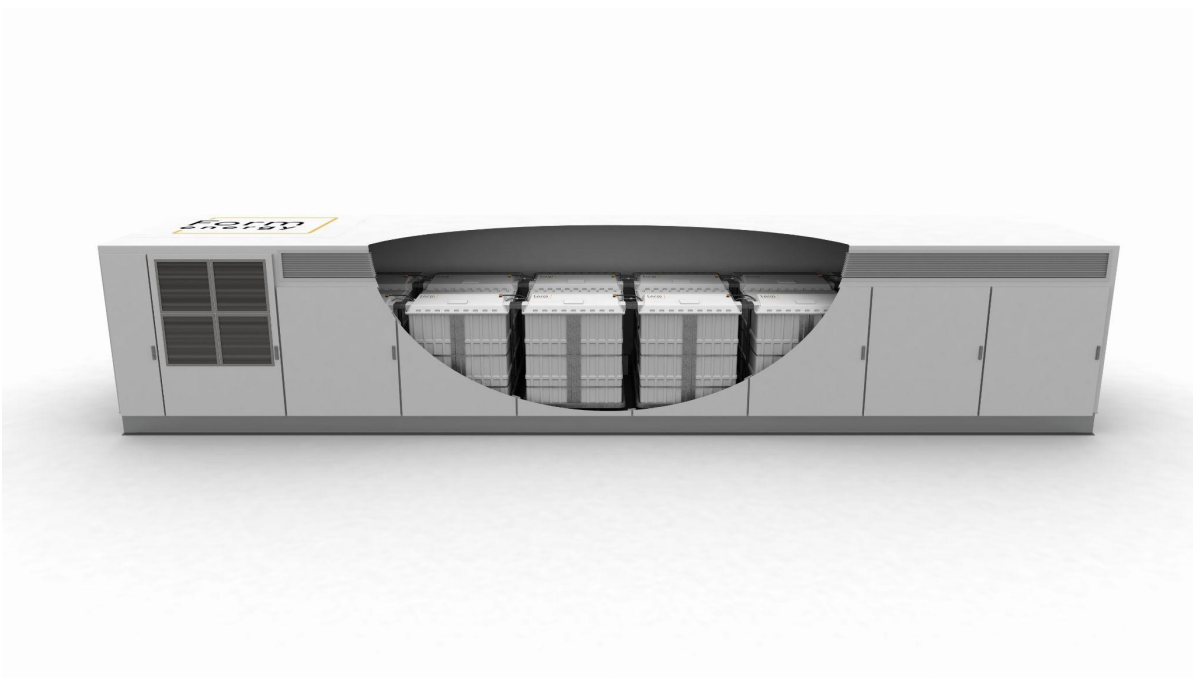
100+ MW / 10 GWh

50+ acres

1000s of **Skids**

Commercial Intent System

Skid



~ 10s kW

10 x 40'

10-15 **Modules**

Product Building Block with
integrated module auxiliary systems

Battery Module



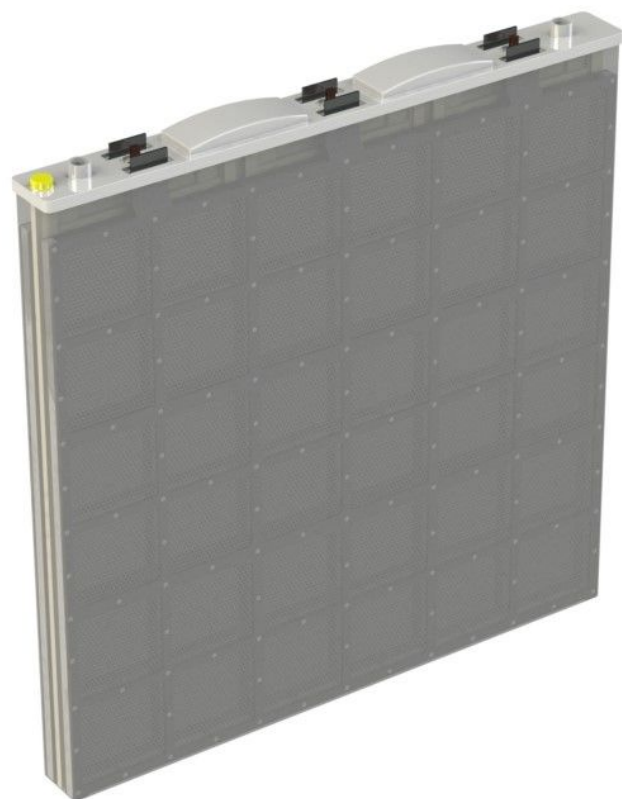
~ kW

1x1x1m

~10s **Cells**

Smallest Building Block of **DC** Power

Cell



< 1 kW

1x1 m

Electrodes + Electrolyte

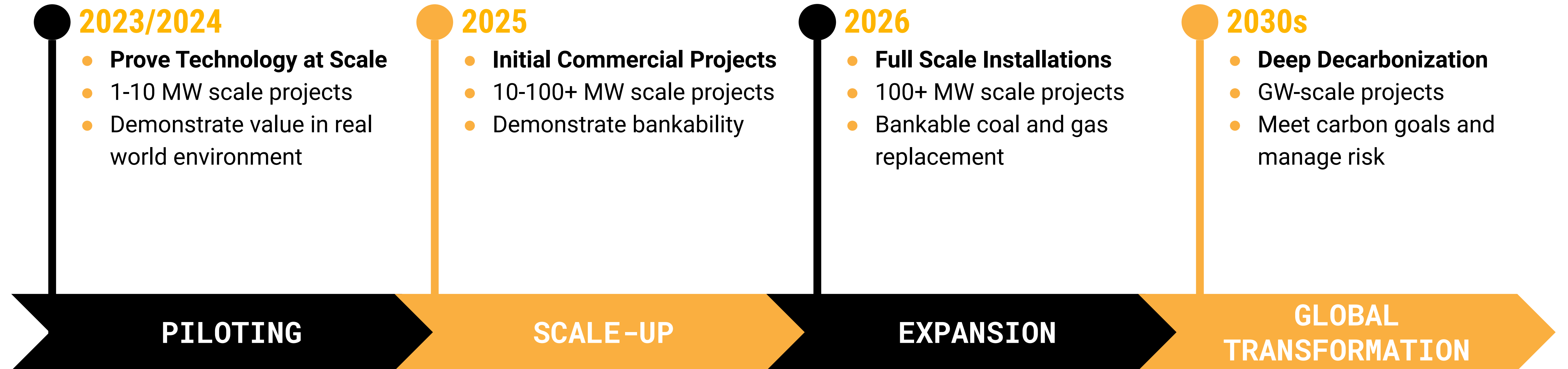
Smallest **Electrochemical** Functional
Unit

First pilot project



- **Partner:** Great River Energy
- **Location:** Cambridge, Minnesota
- **Size:** 1.5 Megawatts, 100 Megawatt-hours
- **Online Date:** 2023

Form Energy's path to transform the global grid



30 years after commercial availability, global lithium-ion manufacturing capacity was 500 GWh/yr in 2020. Form Energy will exceed that scale before 2030.

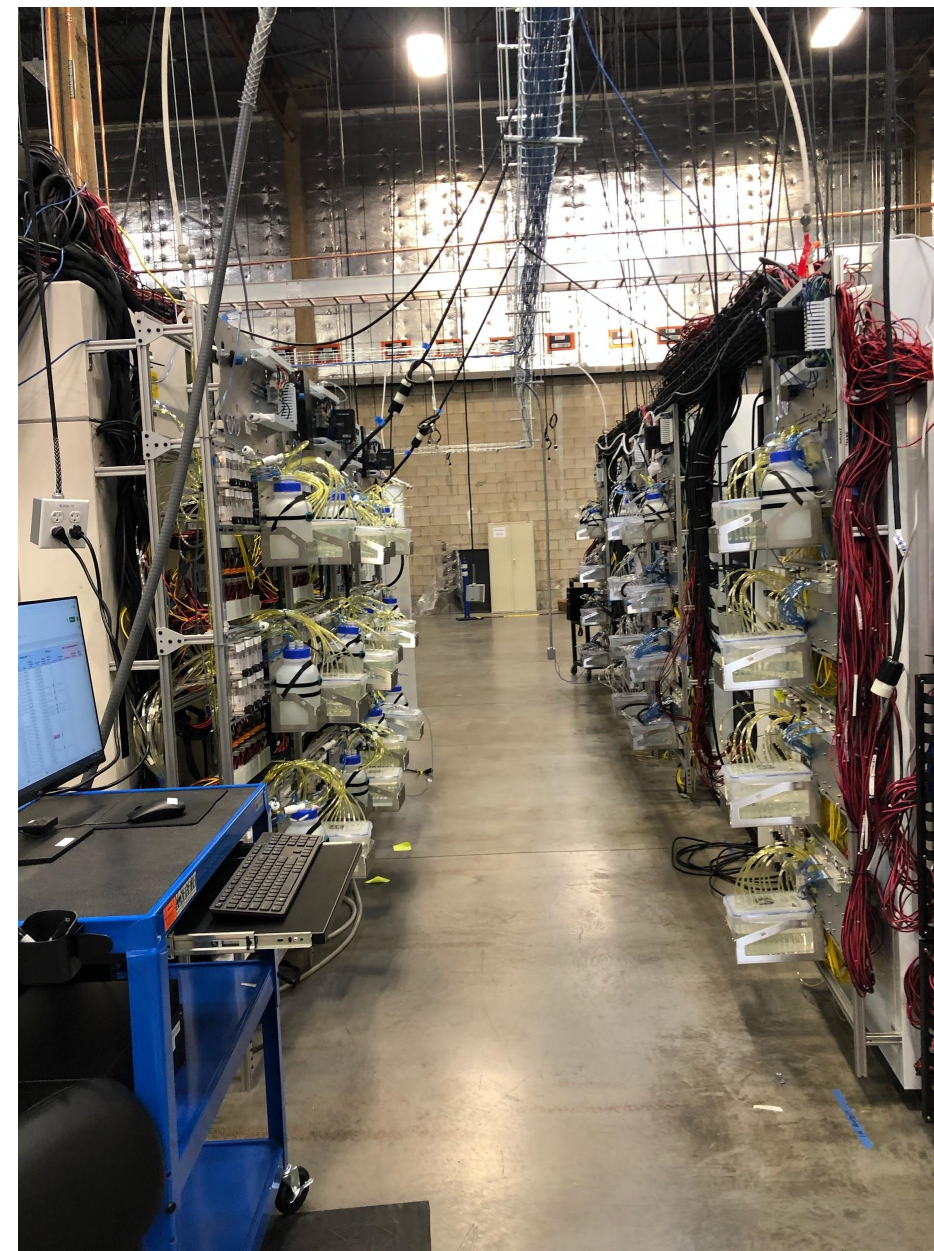
Our Team

- **Team:**

- 200+ employees across the U.S.
- 50,000 ft² facility in Somerville, MA
- 50,000 ft² facility in Bay Area, CA
- 35,000 ft² facility near Pittsburgh, PA

- **Investors:**

- **\$367M** in venture capital from Breakthrough Energy Ventures (BEV), Coatue Management, NGP Energy Technology Partners III, ArcelorMittal, Temasek, Energy Impact Partners, Prelude Ventures, MIT's The Engine, Capricorn Investment Group, Eni Next, Macquarie Capital and other long-term, impact oriented investors



Executive leadership team



CHARLOTTE BEARD
VP, Finance

- VP of Tile Inc; Director of Energy Products Finance for Tesla
- B.S Accounting, Defiance College



SARAH BRAY
VP, Communications

- Founder, Innovant Public Relations; VP External Affairs Clean Line Energy; Sr. Manager, Communications EDPR
- BBA Marketing, University of St. Thomas



YET-MING CHIANG
Chief Science Officer

- MIT Professor, Founder of 6 companies
- S.B Materials Science, Engineering, MIT



MARCO FERRARA
SVP, Analytics/BD

- VP IHI (ESWare)
- Ph.D. Nuclear Engineering, MIT



MATEO JARAMILLO
Chief Executive Officer

- Founder Tesla Energy, Tesla VP
- A.B. Economics, Harvard



RJ JOHNSON
SVP, Commercial Operations

- Head of Energy Operations, Tesla; VP of Origination, NextEra; US Army
- MBA, University of Chicago



ZAC JUDKINS
VP, Product Development

- VP of Products for SunPower
- M.S Materials Science, Engineering, MIT



BRIAN LEWIS
Deputy General Counsel

- Director & AGC, Facebook; Assistant U.S. Attorney, Oakland
- A.B. Princeton; J.D. Georgetown



TED WILEY
President & Chief Operating Officer

- Co-founder Aquion, HBS, US Army
- MBA, Harvard



WILLIAM WOODFORD
Chief Technology Officer

- Director R&D 24M
- Ph.D Engineering, MIT

Thank You!