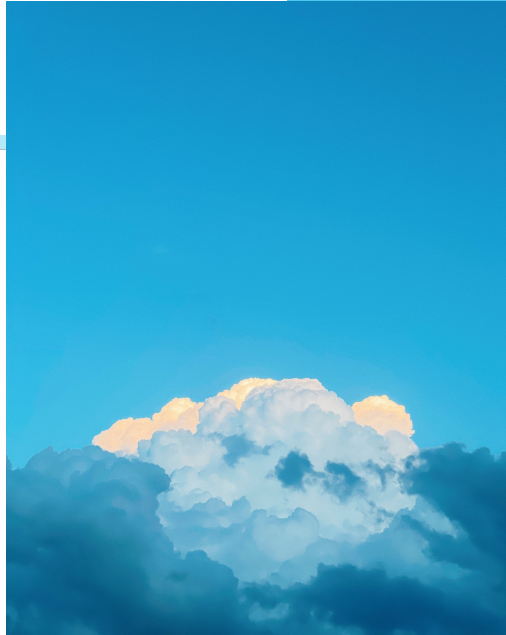


Utility-Scale Wind Power at Extremely Low Cost



October 2023

[AIRLOOMENERGY.COM](https://airloomenergy.com)



PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

BUSINESS MODEL

GO-TO-MARKET

TEAM

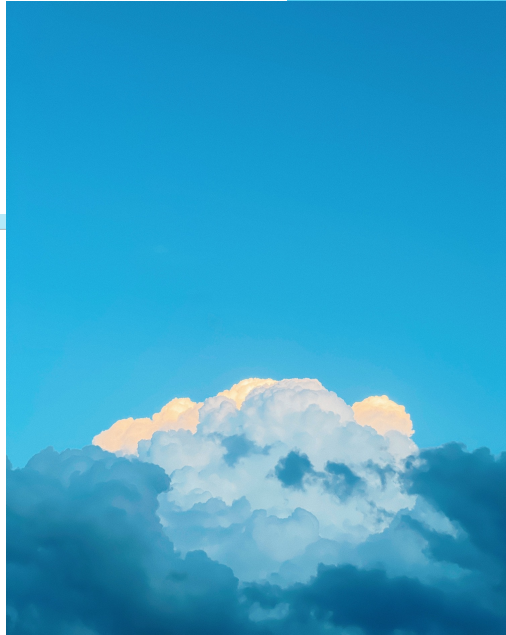
INVESTMENT & USE OF FUND



Conventional Wind Turbines are big and getting bigger.

This drives costs up, profitability down, and limits where they can be deployed.





PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

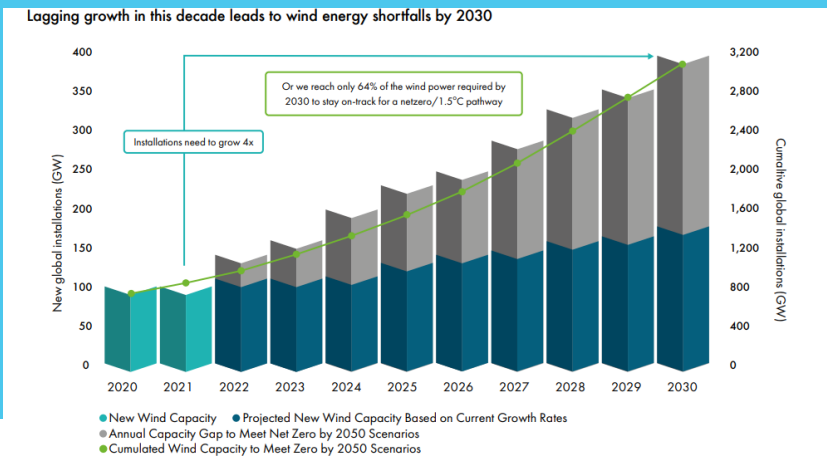
BUSINESS MODEL

GO-TO-MARKET

TEAM

INVESTMENT & USE OF FUND





Source: GWEC Market Intelligence; IEA Net Zero by 2050 Roadmap (2021). Projected new wind capacity from 2026-2030 assumes a ~6.7.0% CAGR, based on GWEC's projected CAGR from 2021-2026. It also accounts for ~34 GW in global decommissioned capacity from 2026-2030 based on 25-year turbine lifetime. Capacity gap figures are estimations based on the IEA Roadmap milestone for 2030. Cumulative global installations for wind energy are roughly in alignment with the IRENA World Energy Transitions Outlook: 1.5°C Pathway (2021). This data represents new capacity, cumulative capacity and decommissioned capacity, and does not include an estimate of repowering installations to replace the ~34 GW in decommissioned turbines globally.

The global market for new wind energy installations is enormous.

*Lazard (Oct. 2021) estimates new wind farms installations (US) at \$1.25 / W

2020

100 GW of new wind farms were installed
Global annual CapEx = \$125B

2030

Conservative Estimate (dark blue)
 Annual wind farm installations of 150GW
CapEx = \$190B

2030

NetZero Targets (grey)
 Annual wind farm installations of 400GW
CapEx = \$500B



The U.S. Inflation Reduction Act will likely spur wind growth even further



August 21, 2022

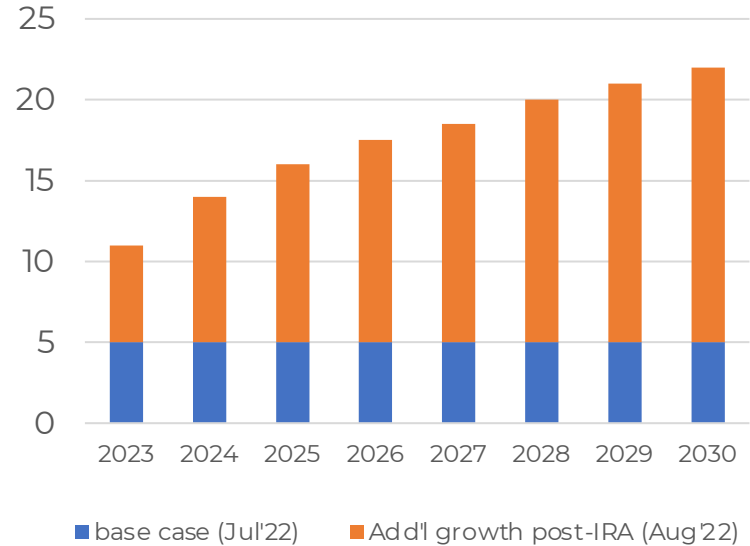
Inflation Reduction Act will attract an extra \$270 billion in US wind and solar investments by 2030



August 23, 2022

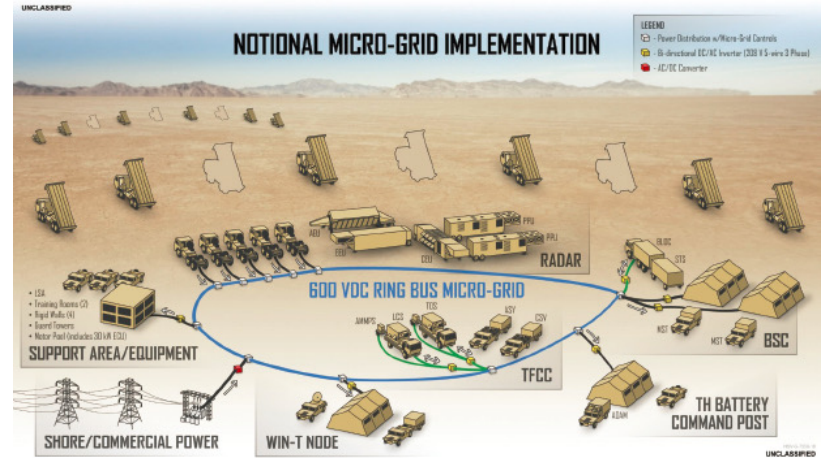
Inflation Reduction Act Benefits: Clean Energy Tax Credits Could Double Deployment

US Onshore Wind Annual Additions (GW)



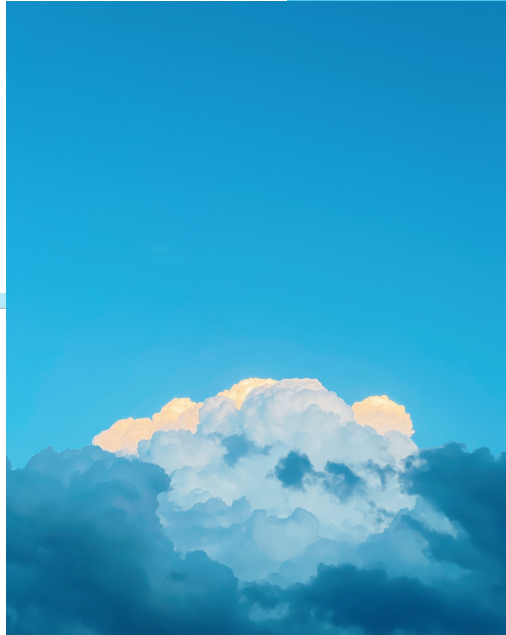
U.S. Department of Defense is seeking deployable alternative energy solutions

AirLoom can be deployed via truck and set up remotely without industrial equipment. This is uniquely valuable in defense applications.



AirLoom will soon have a Cooperative Research and Development Agreement (CRADA) in place with the US Navy

AirLoom is eligible for and will pursue non-dilutive R&D funding from the US DoD and intel communities



PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

BUSINESS MODEL

GO-TO-MARKET

TEAM

INVESTMENT & USE OF FUND

AIRLOOM TECHNOLOGY

The AirLoom offers a breakthrough approach to harnessing wind.

Two-minute intro video:

<https://vimeo.com/manage/videos/395482065/0837474b23>

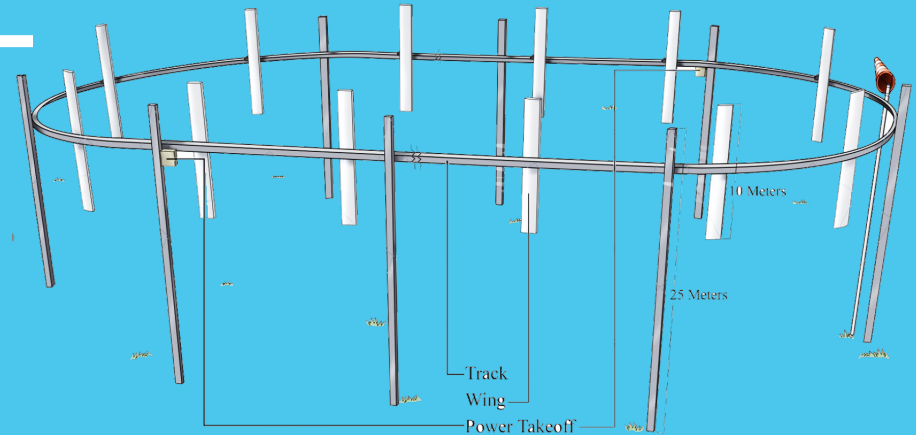


Prototype proving feasibility of technology - Pine Bluffs, WY (Seed funding)

How it works:

Airloom harnesses the power of the wind to propel wings along a lightweight track. Our unique geometry generates the same amount of electricity as conventional turbines at a fraction of the cost.

10-meter wings travel across a lightweight track that can stretch meters or miles. 25-meter towers are held in place by a patented bridling system. High or low, short or long, the configuration is highly flexible depending on landscape and use.



How can it be so low cost?

Five factors synergistically reinforce each other, yielding massive cost savings for the same power production



Short lever arms

30-ft wings instead of 180-ft blades

Forces held by tension, not compression

simple steel cables instead of massive towers

High RPM generators

5,000 rpm instead of 12 rpm
=> smaller generators for the same power

Mass production of human-scale parts

On the scale of motorcycles not aircraft carriers: modular & scalable

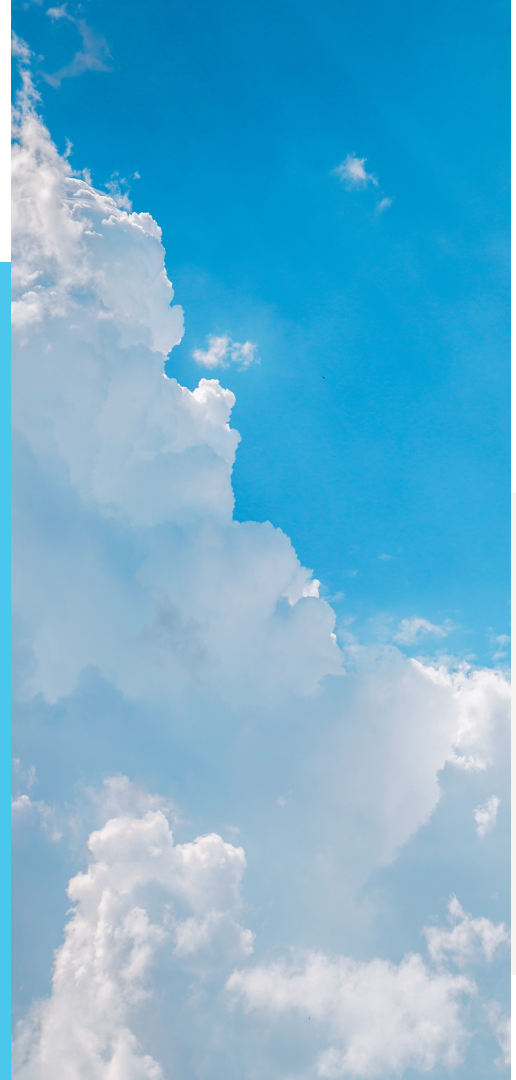
Simple transit and logistics

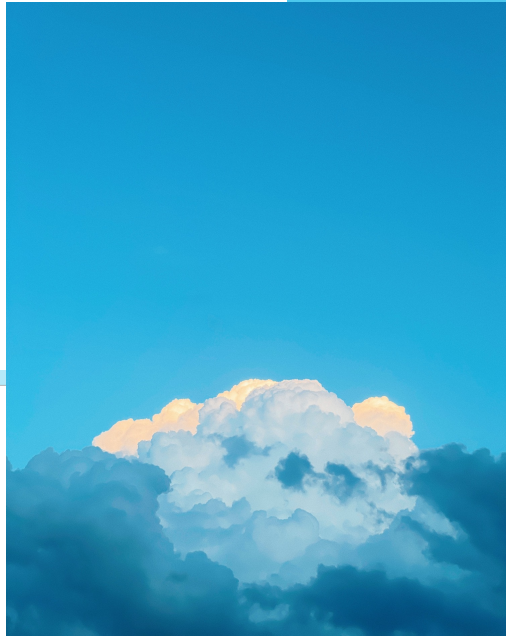
Smaller parts and lower mass simplifies manufacture, transport, assembly

Unit economics

AirLoom's CapEx advantage
over conventional wind turbines

	Utility-Scale HAWT	AirLoom Technology
Device CapEX	\$0.85/W (e.g., \$2.1M for 2.5MW turbine) (435 tonnes for 2.5MW turbine)	Less than \$0.09/W (under \$225k for 2.5MW AirLoom) (15 tonnes for 2.5MW turbine)
Site CapEX	\$1.25/W (e.g., \$25M for 20MW wind farm)	Less than \$0.3/W (under \$6M for 20MW wind farm)
LCOE	\$0.038/kWh (174 tonnes / MW)	\$0.013/kWh (6 tonnes / MW)





PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

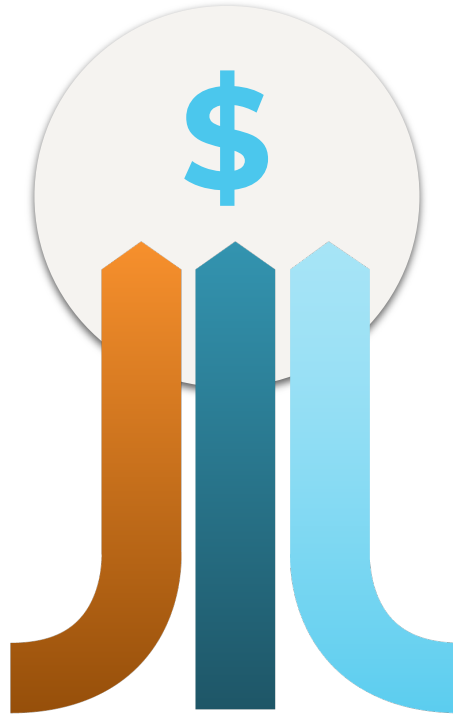
BUSINESS MODEL

GO-TO-MARKET

TEAM

INVESTMENT & USE OF FUND





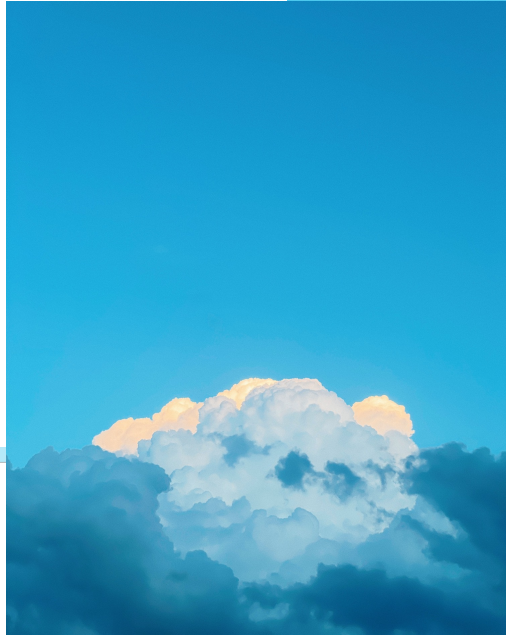
Revenue from sales of wind turbine Generators (OEM)



IRA Subsidy
ITC Drives Strong Demand for
Wind Generation



Revenue from warranty and O&M Service Contracts



PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

BUSINESS MODEL

GO-TO-MARKET

TEAM

INVESTMENT & USE OF FUND



TECHNICAL MILESTONES

COMMERCIAL MILESTONES

Series A
Product-market fit

Power curve demonstration and cost validation

Market validation via LOIs and government cooperation

Series B
Commercial demo

Demonstration of production system

Cost validation

Series C
Development

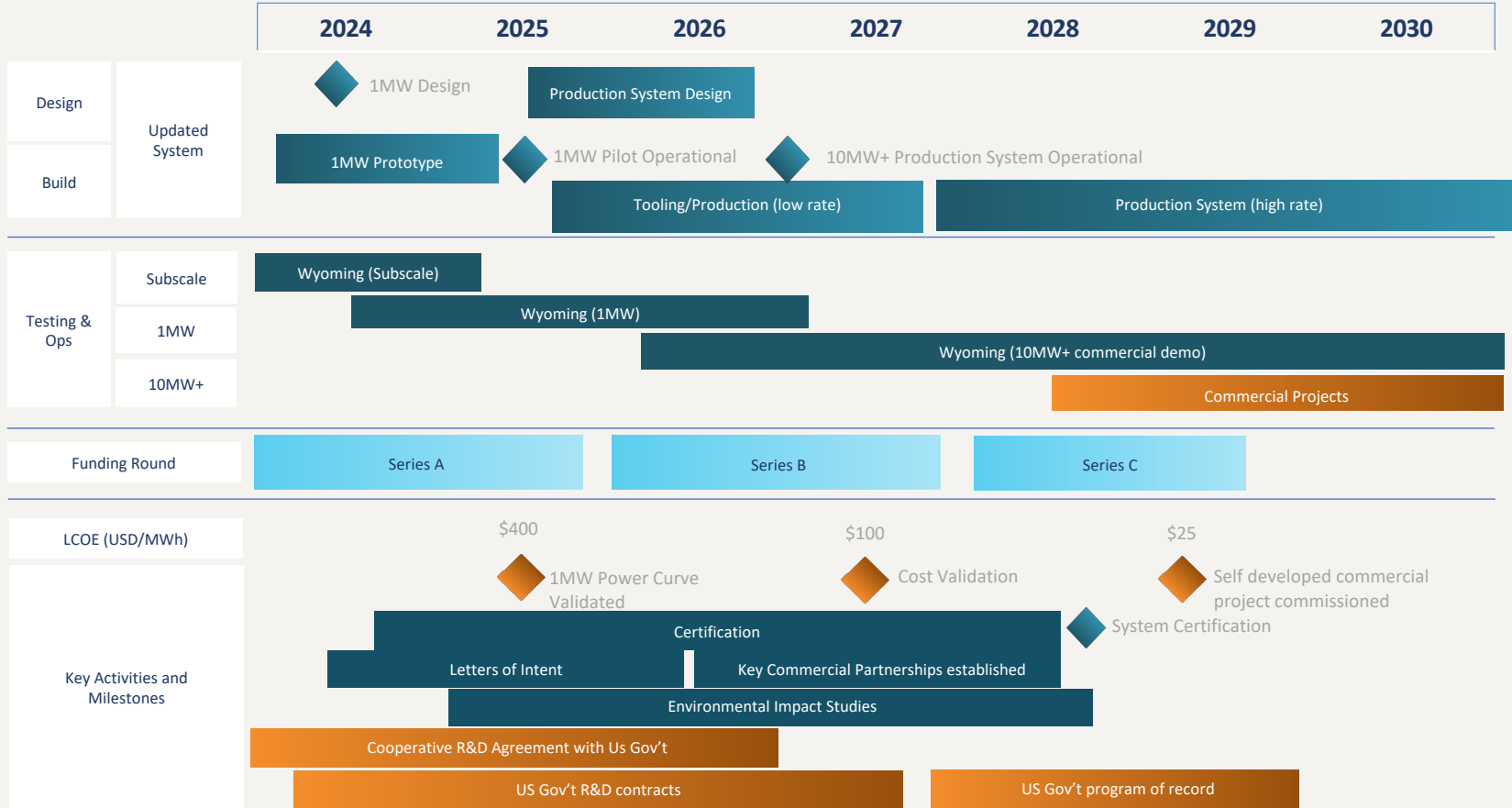
Self development of first site(s)

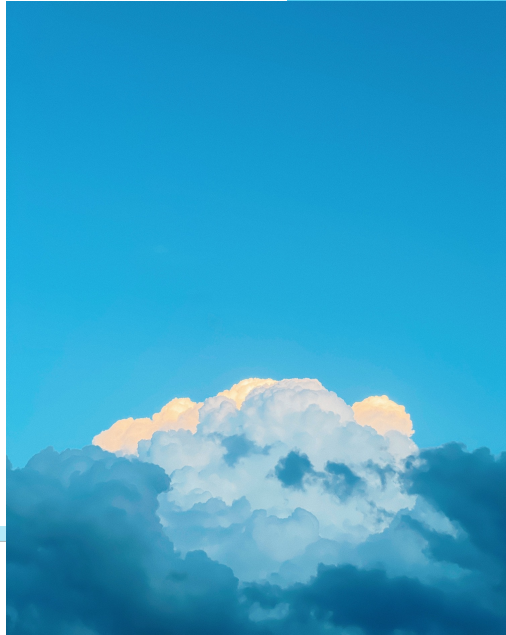
Sale of utility-scale power

Production
Distribution

Site development completed by partners

Sales of AirLoom Systems





PROBLEM

MARKET OPPORTUNITY

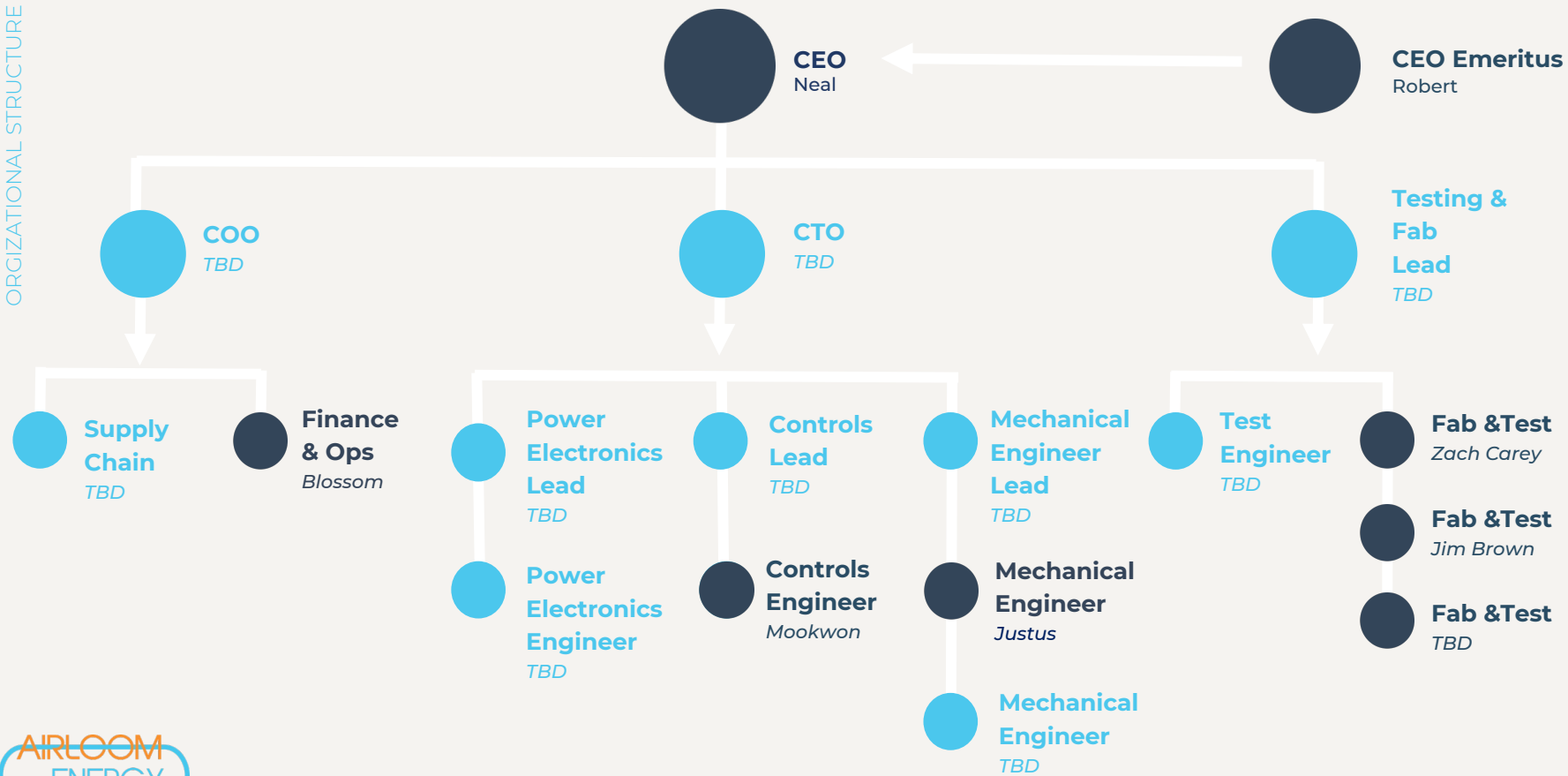
AIRLOOM SOLUTION

BUSINESS MODEL

GO-TO-MARKET

TEAM

INVESTMENT & USE OF FUND



Siggy Zerweckh

General Atomics, Google X

Joel Atwater

Google X

Michael Idelchik

GE

Matt Lackner

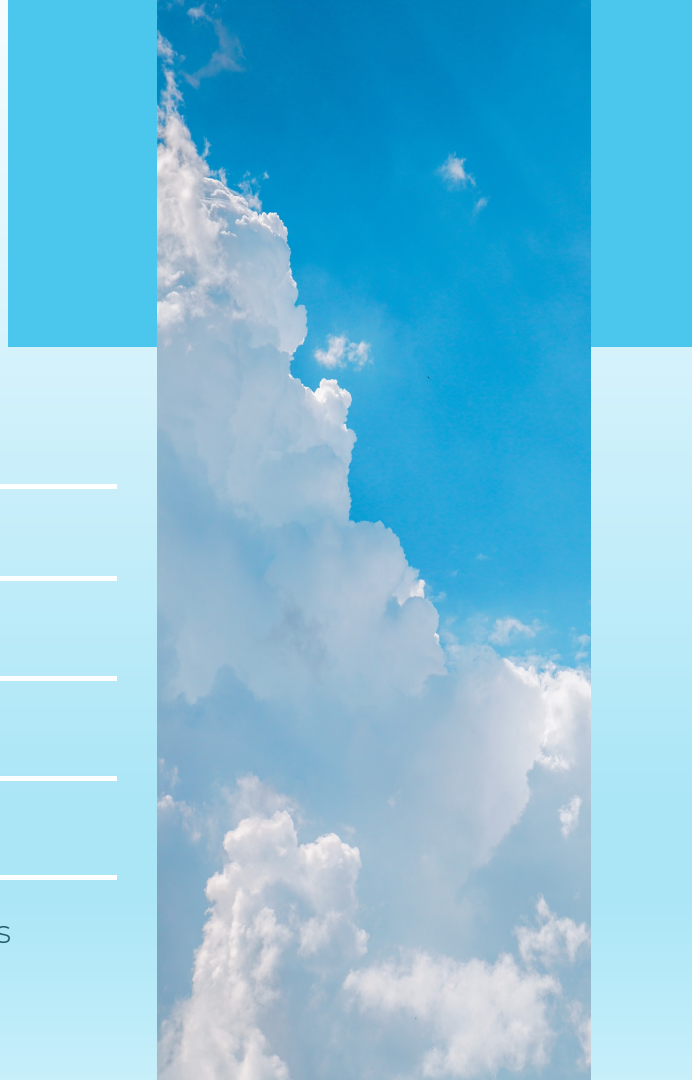
UMASS Amherst

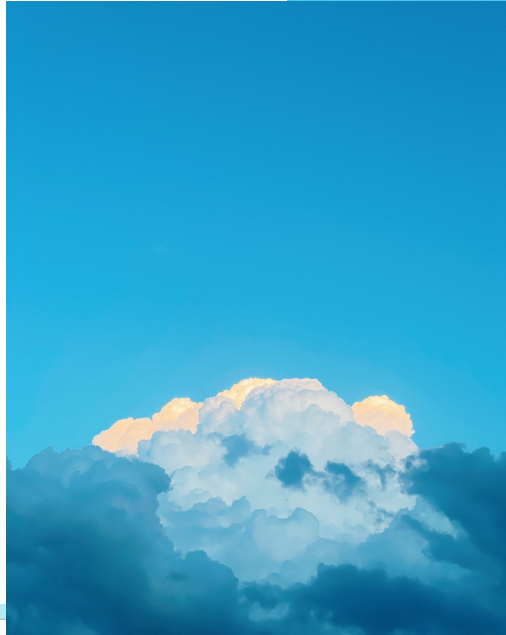
Annette Bossler

Wind Energy Expert

Astrid Skarheim Onsum

Former CEO of Aker Solutions





PROBLEM

MARKET OPPORTUNITY

AIRLOOM SOLUTION

BUSINESS MODEL

GO-TO-MARKET

TEAM

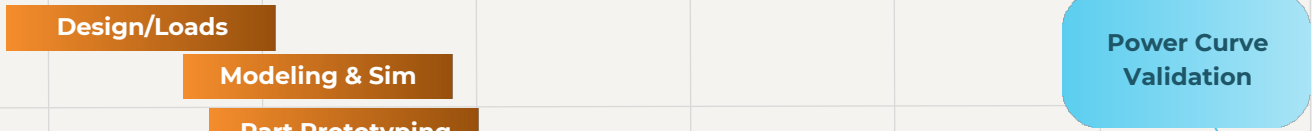
INVESTMENT & USE OF FUND



Team



Tech Development



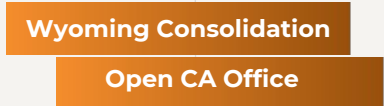
Fabrication



Testing Operations



Facilities



Project Development



Close Series A

\$15M Equity
\$3M Debt
Govt
Crada
SBIRs (\$5M+)

Team

Hire CTO and Senior
Engineers

Tech

Build small scale
Demonstration

Design 1MW system

Cost Reduction

Close Pine Bluffs
*Liquidate/move,
shop equipment*

Patent review

Prep for JIFX

Subscale model to
Camp Roberts
Oct 23-27

Thank you



Neal Rickner, CEO
neal.rickner@airloomenergy.com
(858) 254-2246

AIRLOOMENERGY.COM