



**EIC. Solutions.**

# **Solutions for Energy Availability – AI and Beyond**

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Liquid Piston technology applied  
to ensuring energy availability

Investor Deck

**SAFE HARBOR:**

EIC has made many forward-looking statements based on current management belief. Forward looking statements involve risk and uncertainty because they relate to future events and circumstances that could cause actual results and developments to differ materially from those expressed or implied by them. Actual results may differ materially from the plans, goals and expectations set forth in such forward-looking statements



Proprietary & Confidential

# EIC Solutions for Energy Availability– AI and Beyond

15 Patents

4 + New Patents 2025

**Compressed Gas  
Long Duration Energy Storage  
\$15B EIC 2035 Revenues**

- Grid Scale Storage
- Demand Side Storage

Liquid Piston  
Core  
Technology

**High Pressure Gas  
Vessels  
\$11B EIC 2035  
Revenues**

- Fuel Gas Storage
- Process Gas Storage

**Industrial Gas  
Compressors  
\$5B EIC 2035  
Revenues**

- Gas storage
- Gas pipelines
- Refrigeration
- Process plant gases

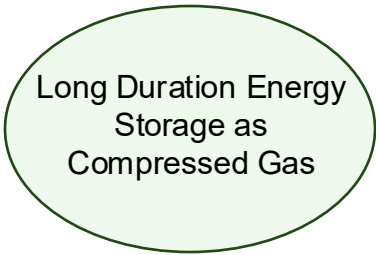
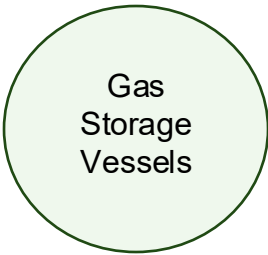
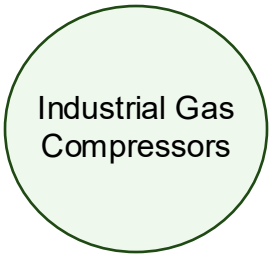
Three Complimentary Revenue Streams



# Multiple Solutions for Energy Availability

2026 Revenue Start

2028 Revenue Start



Revenue Activity	<p>\$20mm quoted</p> <ul style="list-style-type: none"><li>➤ Bio-methane</li><li>➤ Hydrogen</li><li>➤ Flue Gas</li></ul>	<p>\$100mm quoted</p> <ul style="list-style-type: none"><li>➤ Bio-methane</li><li>➤ Hydrogen</li><li>➤ E-fuels</li></ul>	<ul style="list-style-type: none"><li>➤ Commercializing Designs</li><li>➤ Recruiting Pilot Customer</li><li>➤ Planning Series A</li></ul>
Developments	Lead Customer in final pricing with end user	Lead Customer provided offtake and partnering LOI	LOI with Plasma Tunnelling Startup, Device Level Patents
Pre-requisites	Certification	Factory Stand Up	Pilot Plant

Short Term and Long-Range Revenue Plan



# The Problem

## Energy availability threatens energy security and AI dominance



### Electrical Power Demand is Accelerating Rapidly

Digital expansion, electrification, and emerging economies driving demand



### Generation and Transmission Lead Times Delaying Projects

5-6 year lead times



### Renewable Energy Installed Base Growing Rapidly

Cost, availability and cleanliness offset by variability



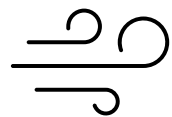
### Grid Stability Decreasing

Demand or environment stressors overwhelm changing grid infrastructure

Energy Storage is Critical to Success



# The Timing Is Now



## Tailwinds

### Demand is Skyrocketing

AI, Electrification, Emerging Nations, Climate

### Solar and Wind Reaching Critical Level

'Duck Curve' Worsening but Low Cost and Job Creation Favorable

### Grid Resilience Declining

Spinning Reserve Down, Variability Up

### Energy Storage Scale Must Increase

Weeks, not Hours Needed for 2030

### All Forms of Energy Required

Renewables and Fossils Need Storage

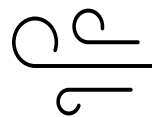
### Localized Generation Critical

Location Independence and Fast Power Ramp Needed

### Battery Energy Storage Challenges

Scarce Materials, End of Life, Runaway

## Headwinds



### Climate Change Mindshare Decreasing

US Gov't Policy and AI Focus Distracting Despite Climate Events

### Policy Uncertainty

Geo-political Volatility

Speed and Cost over Rhetoric



# EIC Technology Overview

Instantaneous heat transfer via **Liquid Piston** provides:

- **Highest efficiency compressed gas energy conversion possible**
- **Longest duration storage at lowest cost**

Scale

Simple hydro-mechanical technology provides:

- **Avoidance of specialty material cost and risk, recycling**
- **Long life without degradation**
- **Lighter footprint than battery, pumped hydro or gravity**
- **Variations of commercially available devices and components**

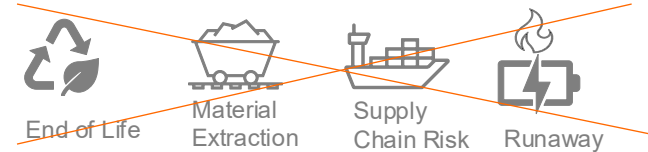
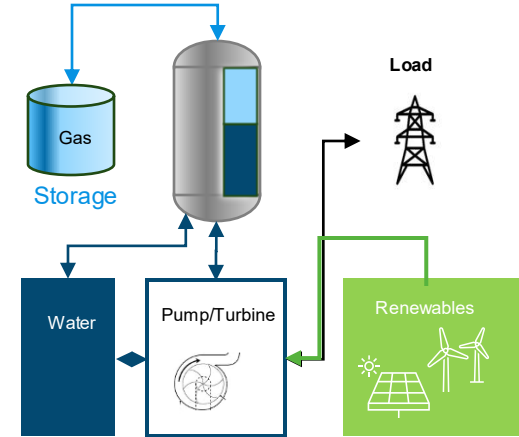
Footprint

Versatile core equipment provides derivative uses:

- **Industrial compression i.e. pipeline or process plant gasses**
- **Green hydrogen and ammonia production enhancement**
- **Carbon capture**
- **Multi-benefit i.e. datacenter cooling and power**

Breadth

## EIC Isothermal Liquid Piston



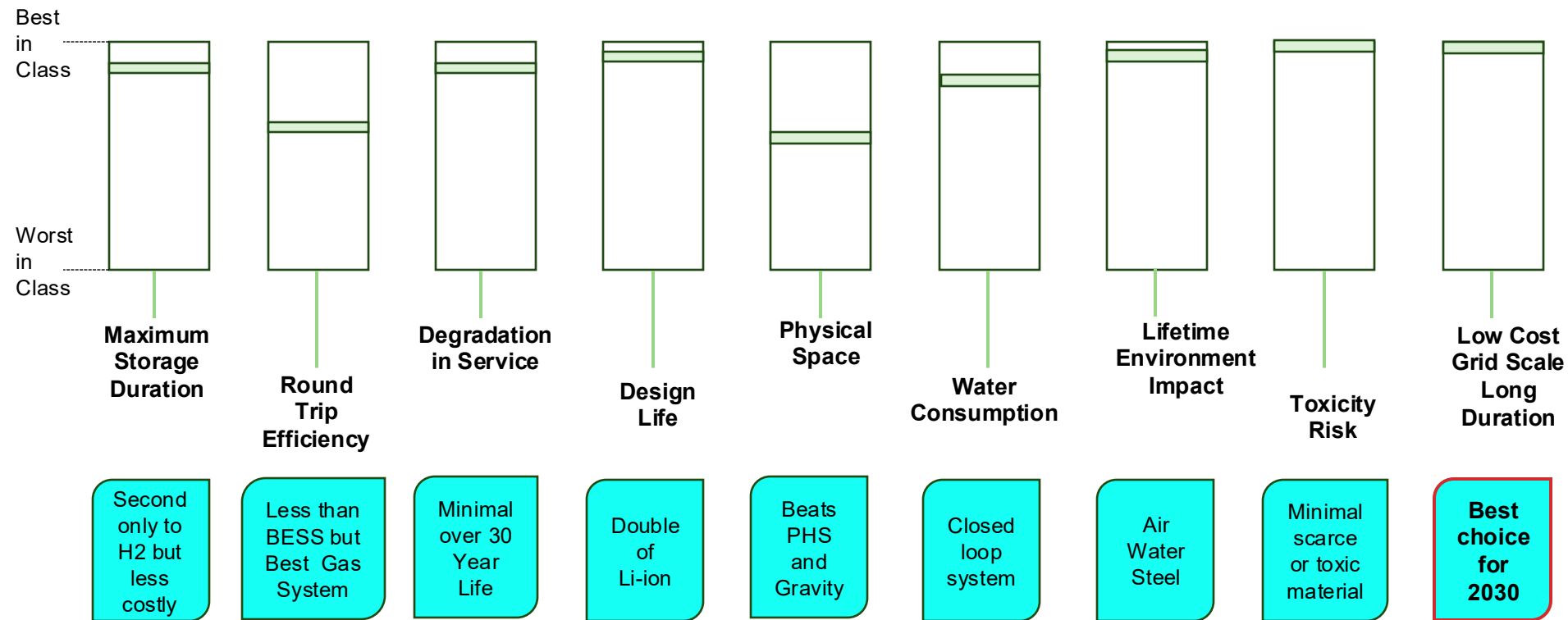
15 Patents

IP Moat

4 + New Patents 2025



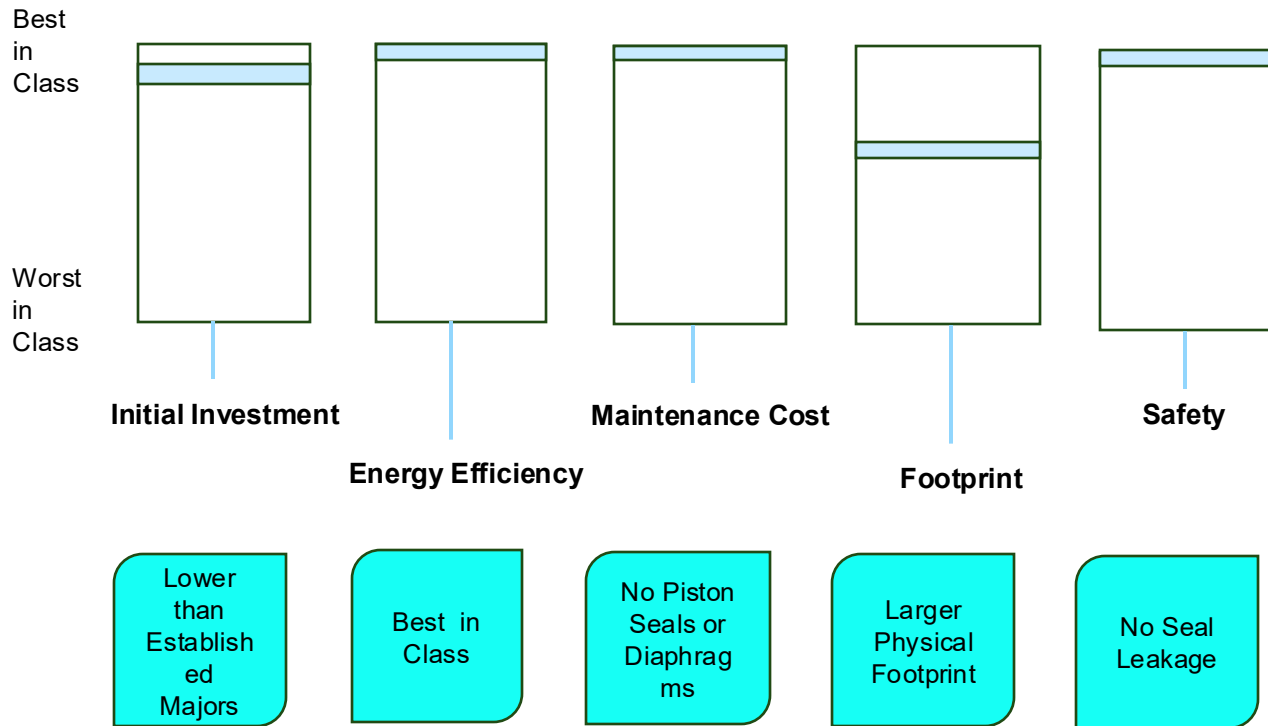
# EIC Energy Storage Vs. Competing ESS



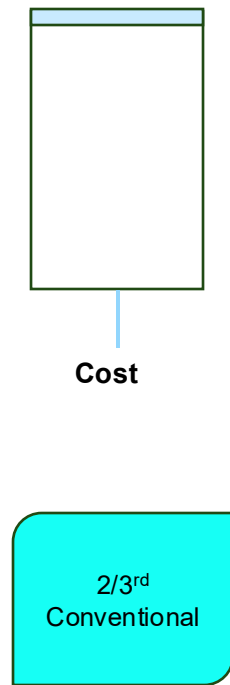
Best in Class for Multi-Day Energy Storage



# EIC Compressor Vs. Competition



## Vessels



Lifetime Operational Savings 4x Capex





# Business Model (Compressor and Energy Storage)

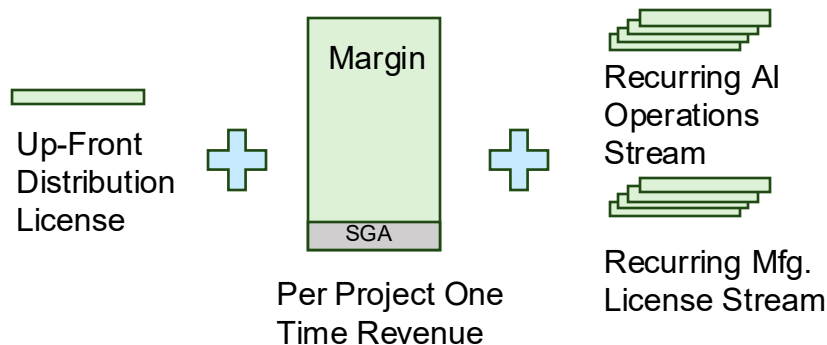
## Hardware Business with Software ROI



### Upfront Design Concentration Provides Infinitely re-Deployable Solution

- Modular Design for any Scale Factory
- Standard Building Blocks Avoid Intensive Project Design
- Highly Automatable and High-Volume Suitable Designs to Leverage Existing Global Capacity
- Asset-lite Model Licensing Design and Process to Value-Chain Partners Avoiding Most Equipment and Working Capital Tie-up
- Multiple and Diverse Revenue Streams

## Revenue Stack



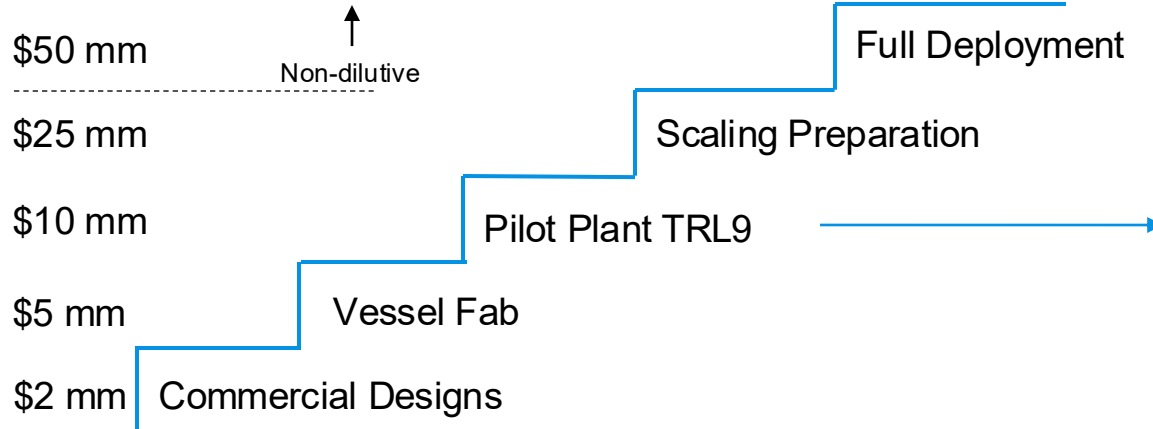
Infinitely Re-deployable Designs



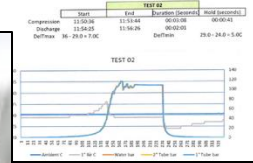
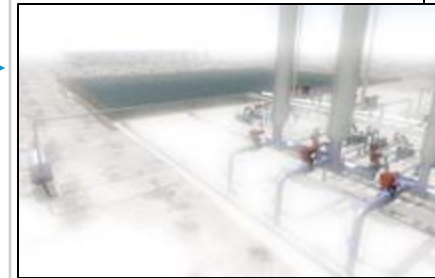
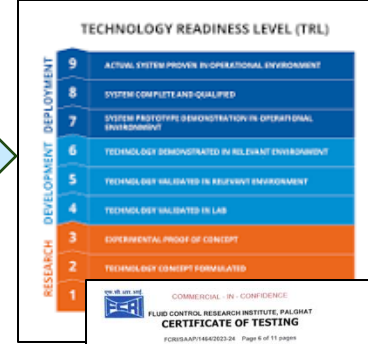
# Development Status

## Investment to Date

- \$5mm founders, execs, SAFEs
- Fragmented Cap Table
- Recent Investments in In-House Engineering and R&D Center Producing Fast Learning Cycles
- Focus Shift to Commercialization



## EIC Bangalore R&D Center Devices and Certification

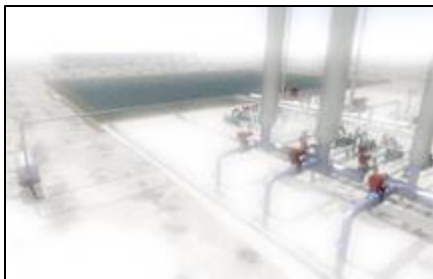


Technology Readiness Level 6



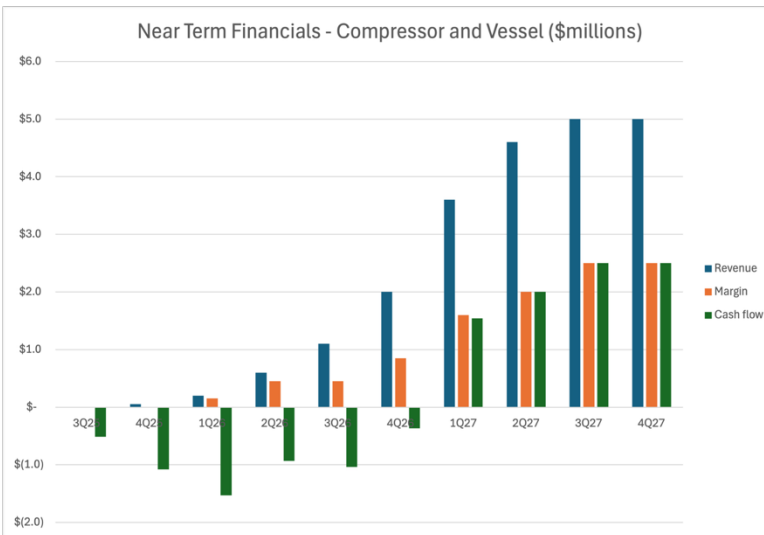
# Investor Return

1. Design Commercialization  
Seed Round ~\$2mm
2. Vessel fabrication  
equipment~\$5mm (Debt + Equity)
3. Demo plant Energy Storage  
Series A~\$10mm

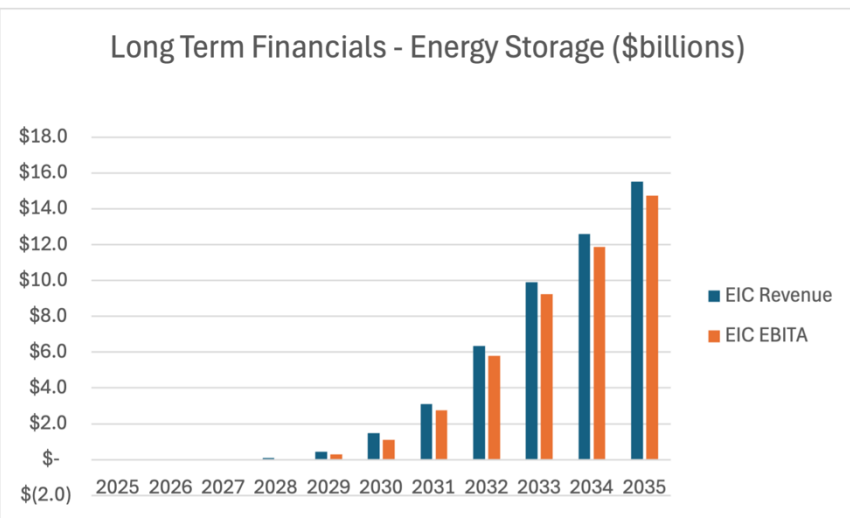


4. Series B Final Dilutive  
Investment~\$25mm

Note: Compressor and Energy Storage are licensing models, Vessel fabrication is traditional



Near Term



Long Term



## Exec Team



### **Mark Weathers**

CEO

Experienced Operations Leader, GE, Honeywell, Small Business Owner



### **Sastry Bhamidipati**

Sr Vice President - Engineering  
EIC Labs

Former CTO @ GE JV in Power Sector, Senior techno-commercial roles @ Baker Hughes and Applied Materials



### **Scott Cisel**

Sr. VP – Business Development  
Former Chair/CEO, Ameren Illinois,  
Strategy advisor and board member  
at First Banker Trust



### **Raja Ratnam**

Managing Director (Australia)  
Experienced Energy Executive, ALSTOM Power, Aurecon,  
Worley, Projects Services International



### **Vikram Kaul**

Sr. VP - Technology Licensing  
Experienced executive business leader at NIIT, Mindtree and  
Bristlecone, Advisor Univ of Texas

Execs and Advisors Cumulative  
Experience Approaching **700 Years**

## Technical Advisors and Staff

- 12 Technical Experts
- 20 Engineering Degrees
- 6 Doctoral Degrees
- 4 Entrepreneurs

## Board and External Advisors

- 3 Board Members
- 6 External Advisors
- Average 30 years of executive experience



# Thank You

Mark Weathers, CEO

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+1 602 363 7929

Backup Slides Follow



## Energy Storage System

- Convert excess electricity into compressed gas energy
- Generate electricity from stored gas energy
- 68% round trip efficiency
- Storage duration from days to months
- Power from microgrid to utility scale
- Low impact materials
- Cost parity to fossil fuel

## The Product:

Liquid Piston  
Isothermal Gas  
Compression  
and Expansion

.Efficiency

.Duration

## Industrial Gas Compressor

- 20-50% energy use reduction
- Cost advantage for high pressure compression
- Reduced maintenance and robust seal-less operation
- Lowest cost high pressure stationary gas storage vessels via JV

Approaches Theoretical Maximum Efficiency



## Energy Storage Applications

## Compressor Applications



Supply Increase Solutions

Demand Decrease Solutions



**Compressed Gas Energy Storage**

- ❖ Giga-Scale Compressed Air Energy Storage
- ❖ Mega-Scale Multi-Day Energy Storage

Round-the-clock Renewable Energy Curtailment Avoidance  
Lowest Cost, Cleanest Energy  
Local Generation and Storage  
Spinning Reserve

**Compressed Gas Energy Storage**

- ❖ Time shifting via energy storage
- ❖ Decoupled data center cooling

Peak Charge Avoidance  
Demand Abatement Requests  
Off-Grid Data Center Cooling

**E-Fuel Production Enhancement**

- ❖ Liquid Piston Gas Compressors
- ❖ Big-Ton Storage Vessel (JV)

Green Hydrogen  
Green Ammonia  
Bio-methane  
Waste to Energy

**Industrial Compression Energy Reduction**

- ❖ Liquid Piston Gas Compressors

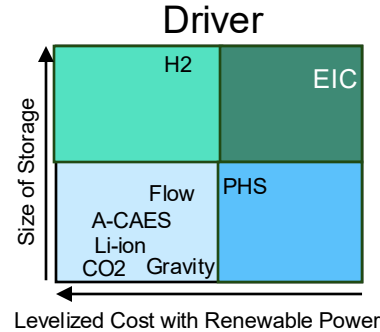
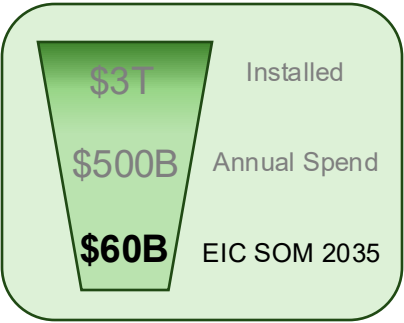
Refrigeration  
Gas Pipeline Pressure  
Gas storage Compression  
Chemical Process Compression

**The Product:**  
Liquid Piston  
Isothermal Gas  
Compression  
and Expansion  
.Efficiency  
.Duration



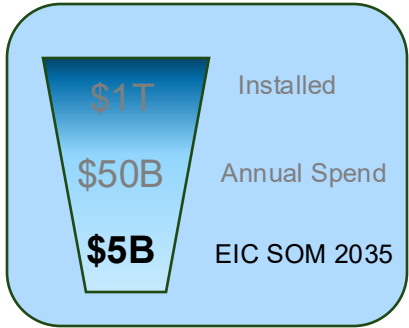
# Market Size

## Energy Storage Applications



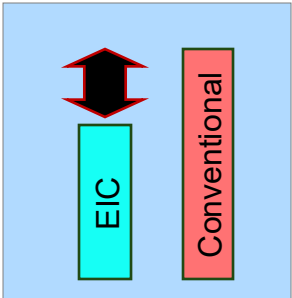
**The Product:**  
Liquid Piston  
Isothermal Gas  
Compression and Expansion  
.Efficiency  
.Duration

## Compressor Applications



### Driver

Energy  
required to  
compress  
gas 100:1  
20-50% less



Huge Potential Market Opportunity





# Investment Opportunities Detail



New Energy

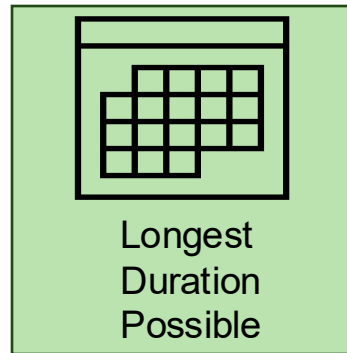
FSC TECH

Obtainable Market Size	\$60B (\$500B SAM) + \$5B (\$50B SAM)	\$60B (\$500B SAM)	\$11B (\$35B total mkt)
Investment Opportunity	\$2mm Design Commercialization	\$10mm Pilot Plant Series A	\$5mm Manufacturing Plant
Investment Vehicle	SAFE \$100mm Cap 80% Discount	SAFE \$100mm Cap 80% Discount	Direct Investment in Joint Venture
Resultant Equity	1% Plus Discount	10% Plus Discount	10%
Use of Funds	Value Engineering and Operating Software for Commercial Deployment	Build and Operate 1 MW 10 Hour Pilot Plant	Equip and Operate Vessel Mfg. Plant
Expected Results	Readiness for 1MW Pilot Plant	TRL9 in 18-24 Months	Production Line 18-24 Months
Use Cases	Microgrid, Datacenter, Solar or Wind Farm, Grid Storage	Pipelines, Refrigeration, H2 Refueling, E-Fuel Production	Hydrogen Storage, E-Fuels, Compressed Air



# The Solutions

## Iso-Thermal Compression and Expansion of Gas Enables Storage **Efficiency** and **Duration**



### Low Cost 24 Hour Renewable Power

Firm dispatchable zero carbon energy at grid scale for partial or full load power



### Time Shifting

Peak charge avoidance, demand abatement revenue



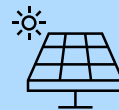
### Local Generation

Avoid Buildout and Congestion



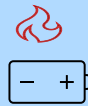
### Reduced Curtailment

Store and Re-deploy



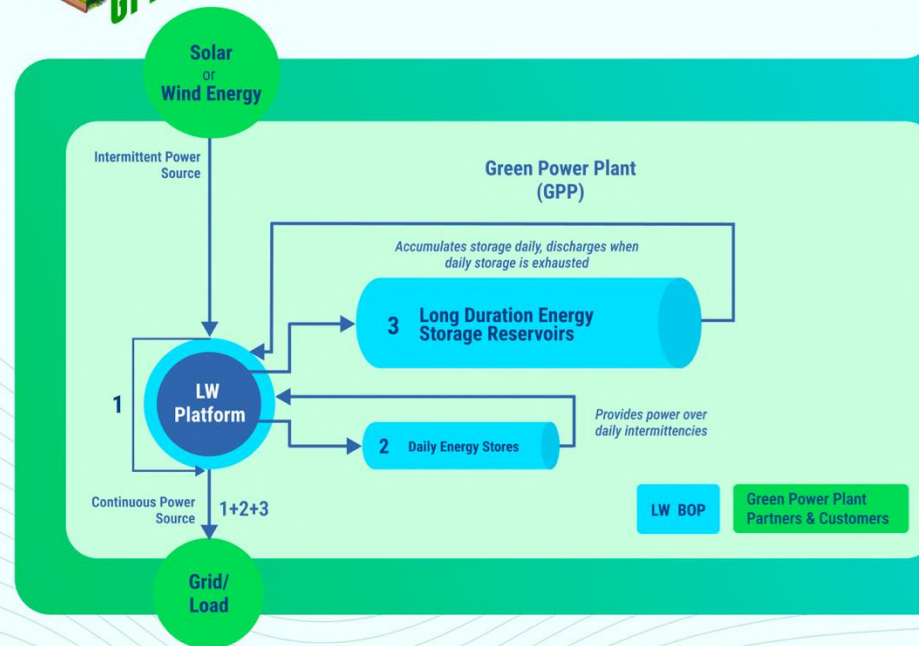
### Reduced Risk

Less Operational and Supply Chain Risk





## Green Power Plant



Solar or wind energy has daily intermittences and extended periods of zero generation in a year. The Green Power Plant (GPP) uses this supply to deliver 24X7X365 continuous power to grid or customer loads.

GPP directs the available power first to the load or grid.

1 Any surplus first fills a Daily Energy Stores (DES) Vessels.

2 Then accumulates the Long Duration Energy Storage (LDES) Reservoirs.

3 The GPP delivers grid the power from DES over daily supply zeroes and shortfall and the LDES over multi-day zeroes.

The LW platform efficiently stores energy (in DES & LDES) and generates power from it using its isothermal compression - expansion system.



# Applications - Green H2 and Ammonia

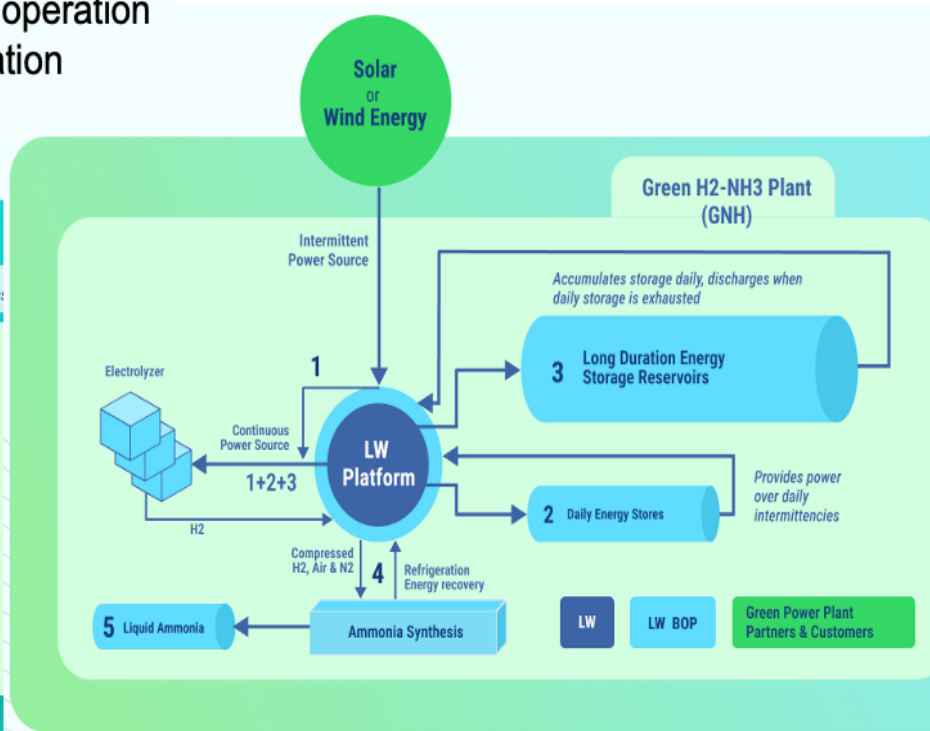
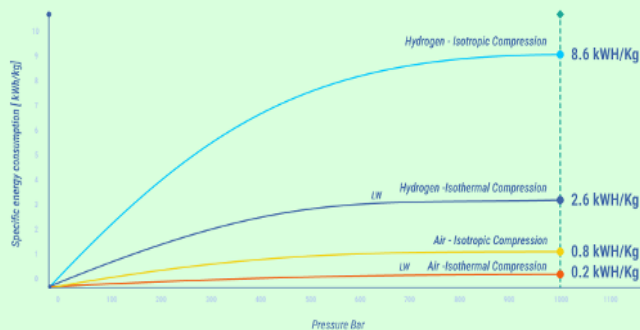


High capacity factor & efficiency → low cost of H<sub>2</sub>/NH<sub>3</sub>

- continuous green power, 24X7 electrolyzer operation
- Low costs of gas compression and refrigeration
- 24X7 ammonia synthesis
- Higher ammonia yield

A comparison of gas compression energy expenditures

Reduce costs of gas compression to high pressure



# Applications - Industrial gas compression and HVAC



Replace deployed equipment to recover investment in 2 years from annual power savings

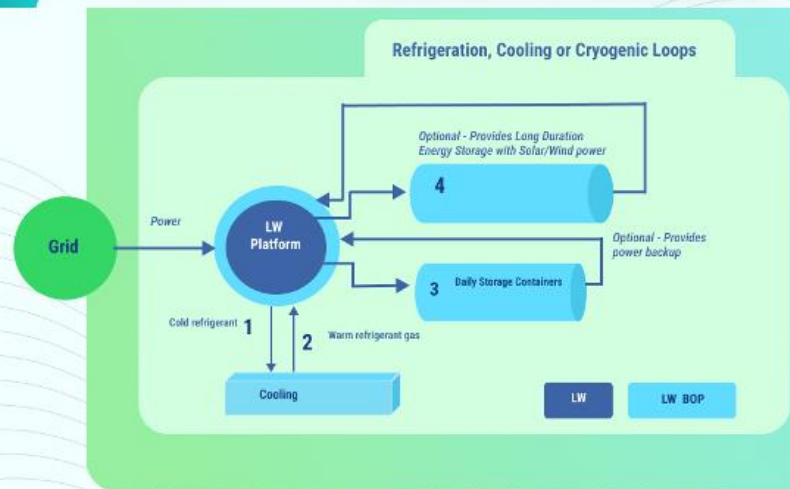
## Illustration- Cold Storage 24X7 Refrigeration Cycle using R134a

Item	Systems today	LW system
Power use (KW/TR)	0.47	0.25
CapEx (\$/TR)	\$2500-\$4000	
Annual Power Costs (\$/TR-year) @ \$80/MWH	\$329	\$175
Cost of upgrades like power backup or direct use of renewable power	High	Low

## Illustration for Hydrogen Compression

1000 Nm3/hr H2 Compression 30-300 bars		All Costs in \$ Millions	
Compressor	Annual Power Costs (2)	CapEx	Annualized TCO (3)
Today (1)	\$ 1.47	\$ 0.29	\$ 1.53
Liq watts	\$ 0.98	\$ 0.14	\$ 1.01
Savings	\$ 0.49 33%	\$ 0.16 53%	\$ 0.52 34%
Payback 0-32 Years			

(1) Diaphragm Compressor  
(2) Power @ \$120/MWH  
(3) Discounted at 8% p.a. Includes 10% and 8% annual maintenance respectively (Today vs LW)



# Datacenter Solution Suite

## 24 Hour Renewable Power

Firm dispatchable zero carbon energy at grid scale for partial or full DC power



## Power Backup

Eliminate diesel gensets



## Time Shifting

Peak charge avoidance, demand abatement premiums



## Local Generation

Avoid Buildout Cost and Time

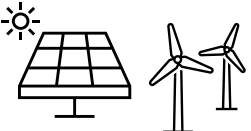
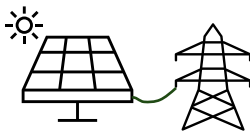



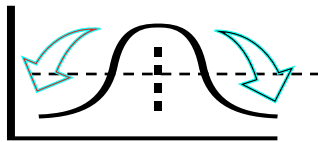
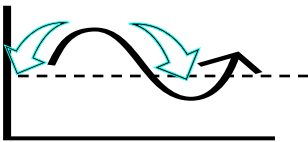
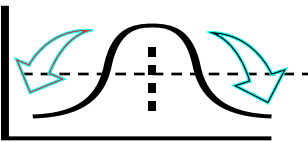



## Datacenter Cooling

Lower PUE, reduce water loss, de-couple cooling load from critical load

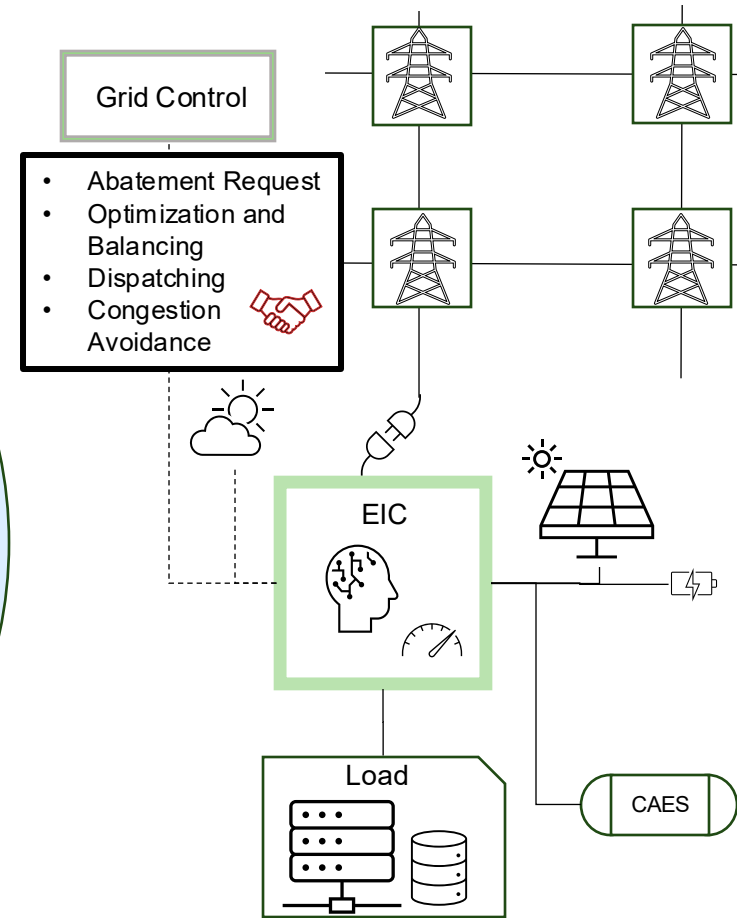
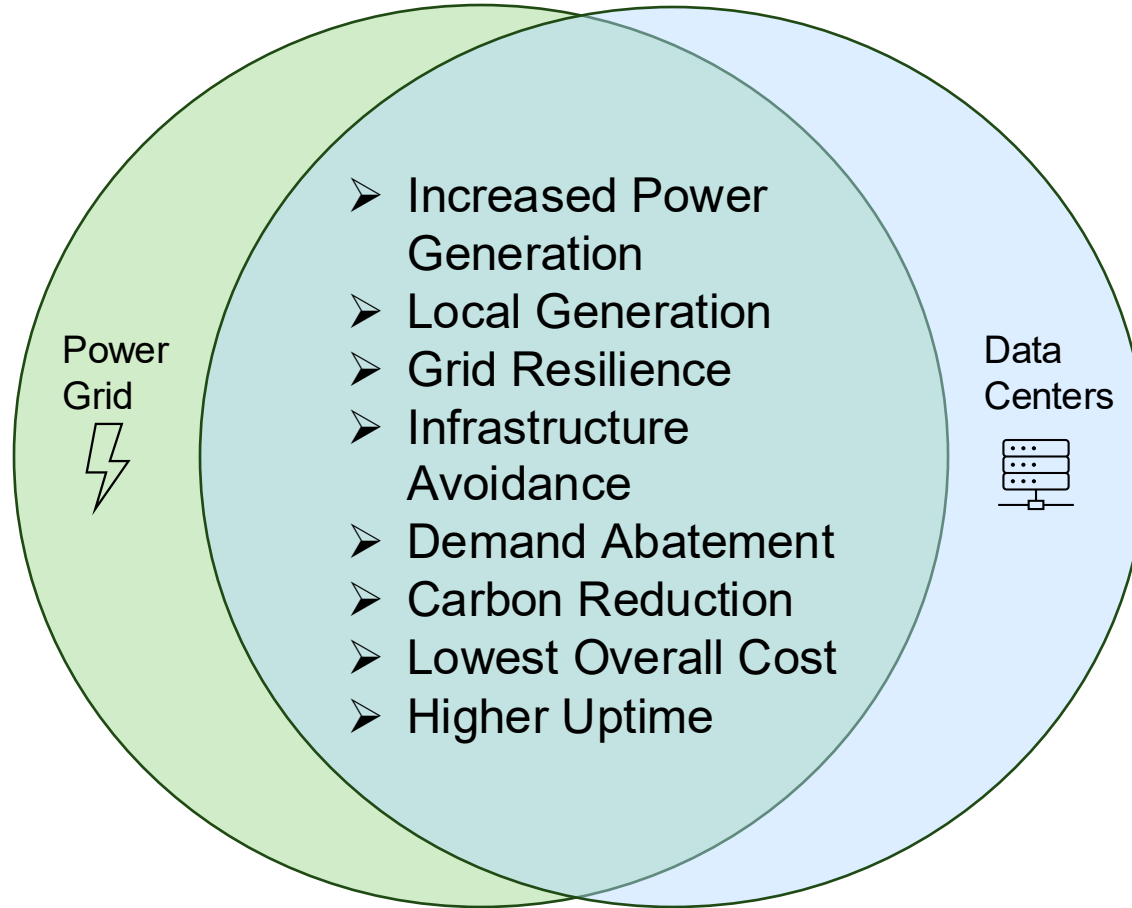


# Renewable Energy Data Centers

								
Type	Behind The Meter Variable Solar or Wind	PPA or Matching Variable Solar or Wind	Steady Nuclear or Geothermal		Semi-variable Hydropower or Ocean		Fuel Cell or E-fuel Genset	
Example	Moha DC Dubai	Google DC Mesa Arizona	Amazon DC Susquehanna PA, Meta DC (TBD)		Green Mtn DC SVG-Renesoy		Microsoft Plug Power Trials	
EIC Solution	Hourly to Weekly Storage			Avoid Peakers and Run at Higher Capacity Factor		Seasonal Storage		Gas Compression and Storage
								



# EIC System Solutions





# Use Case Economics

## Example 1: **100MW Datacenter Grid Connected**

10 hours daily peak avoidance or Demand Abatement Request

22 hours backup power

	EIC	Battery
Capital	\$767 mm	\$1019 mm (Present Value of 2 batteries and recycle cost)
Opex	\$8 mm/yr	\$6 mm/yr
LCOE premium	\$.053/KWh	\$.078/ KWh

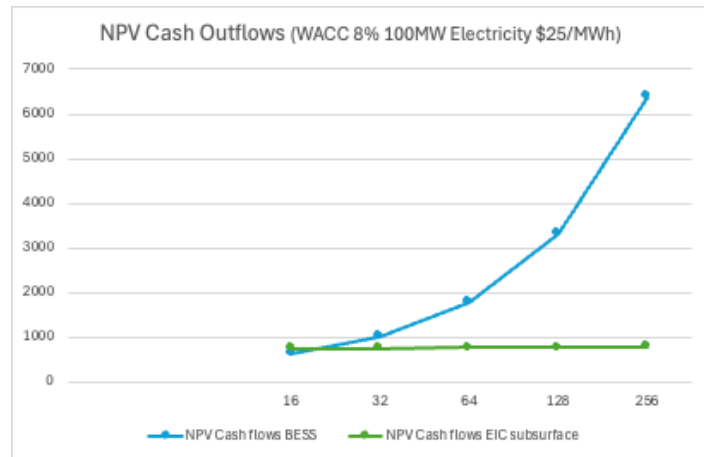
## Example 2: **100MW Datacenter Solar Behind The Meter**

16 hours nightly power from storage

84 hours backup power

	EIC	Battery
Capital	\$770 mm	\$2654 mm (Present Value of 2 batteries and recycle cost)
Opex	\$8 mm/yr	\$19 mm/yr
LCOE premium	\$.053/KWh	\$.244/ KWh

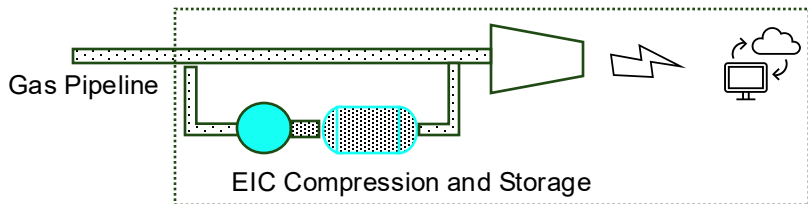
## Subsurface I-CAES vs Li-ion



# Datacenter Solutions with Partner Supported Alternative Fuels

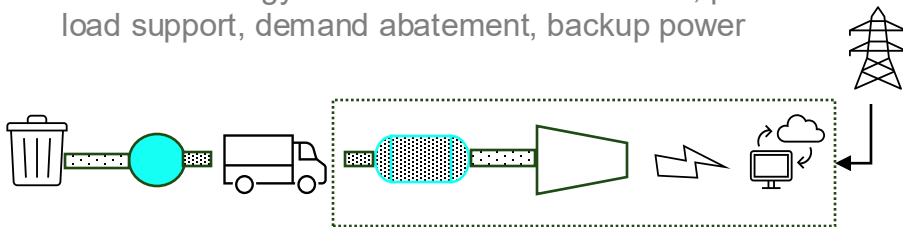
## 1. Storing natural gas at point of generation to avoid pipeline constraints during peak

Peak load cannot be supported by NG pipeline flow rate, bank NG for local generation or for backup instead of diesel



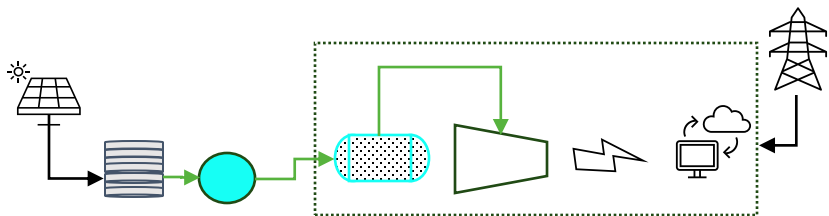
## 2. Remote gaseous e-fuel (e.g. Bio-Methane from waste) with on-site storage and generation

Alternate energy source for carbon reduction, peak load support, demand abatement, backup power



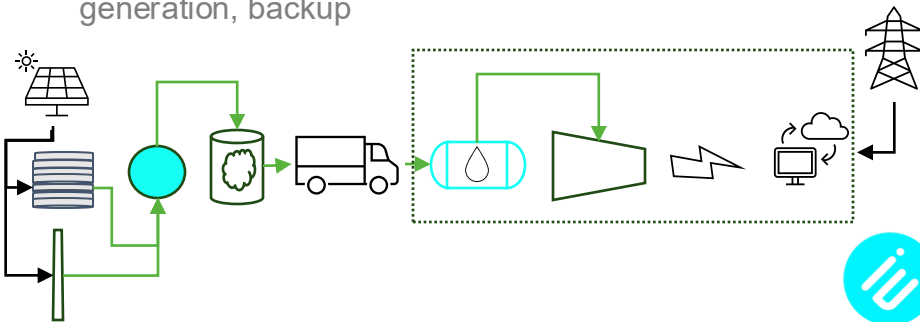
## 3. On-site hydrogen generation for backup

Alternate energy source for carbon reduction, on-site generation, backup



## 4. Remote liquid e-fuel (eg. Green Ammonia) with on-site storage and generation

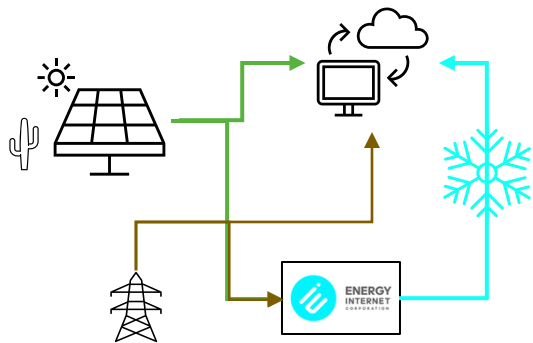
Alternate energy source for carbon reduction, on-site generation, backup



# Datacenter Cooling Solutions

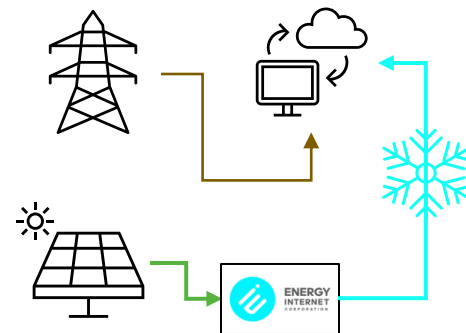
## 1. Small DC Standalone Refrigeration Cooling

Higher PUE, Location Flexibility



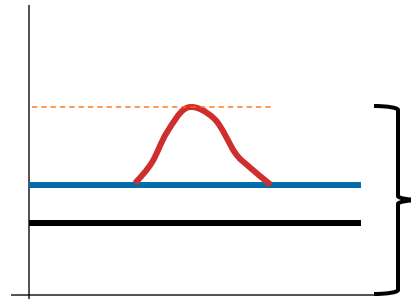
## 2. Large or HyperScale Refrigeration Cooling

Lower PUE, Lower Feeder and Backup Infrastructure



Daily/Seasonal Refrigeration Boost

Base Cooling Load  
Critical Load

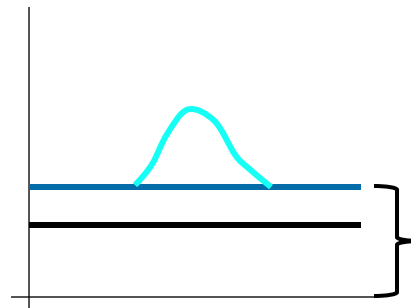


Peak drives feeder and backup size and cost



Daily/Seasonal **EIC** Refrigeration Boost

Base Cooling Load  
Critical Load



Peak decoupled from feeder and backup size and cost



# Intellectual Property

AttorneyRef	Title	Status	ApplicationNum	FilingDate	PublicationNum	PatentNum	IssueDate
EIC-001	ENERGY MANAGEMENT WITH MULTIPLE PRESSURIZED STORAGE ELEMENTS	Issued	16/118,886	8/31/2018	20190064757	10725441	7/28/2020
EIC-002	MODULARIZED ENERGY MANAGEMENT USING POOLING	Issued	16/377,511	4/8/2019	20190235457	11392100	7/19/2022
EIC-003	ENERGY STORAGE AND MANAGEMENT USING PUMPING	Issued	16/378,243	4/8/2019	20190234305	10947899	3/16/2021
EIC-004	POWER MANAGEMENT ACROSS POINT OF SOURCE TO POINT OF LOAD	Issued	16/423,245	5/28/2019	20190280483	10998727	5/4/2021
EIC-011	DESALINATION USING PRESSURE VESSELS	Issued	17/072,061	10/16/2020	20210032129	11261107	3/1/2022
EIC-011C1	LIQUID PURIFICATION WITH PRESSURE VESSELS	Issued	17/681,889	2/28/2022	20220274854	12157685	12/3/2024
EIC-012	CONTROLLED LIQUEFACTION AND ENERGY MANAGEMENT	Issued	17/184,644	2/25/2021	20210180860	11566839	1/31/2023
EIC-013	ENERGY TRANSFER USING HIGH-PRESSURE VESSEL	Issued	17/351,523	6/18/2021	20210313835	12155205	11/26/2024
EIC-014	CONTROLLED REFRIGERATION AND LIQUEFACTION USING COMPATIBLE MATERIALS FOR ENERGY MANAGEMENT	Issued	17/366,142	7/2/2021	20210333029	11906224	2/20/2024
EIC-023	SOFTWARE-DEFINED MODULAR ENERGY SYSTEM DESIGN AND OPERATION	Published	17/980,600	11/4/2022	20230054705		
EIC-024	ENERGY STORAGE WITH COMPRESSED GAS USING HYDRAULIC TRANSFORMERS	Pending	19/039,873	1/29/2025			
EIC-024W	ENERGY STORAGE WITH COMPRESSED GAS USING HYDRAULIC TRANSFORMERS	Pending	PCT/US25/13488	1/29/2025			
EIC-026P	ENERGY TRANSFER WITH A LIQUID GAS SYSTEM WITH INCOMPATIBLE LIQUIDS AND GASES	Pending	63/645,306	5/10/2024			
EIC-027Q	MONOLITHIC MANIFOLD JOINING USING INTEGRATED CASTING	Pending	63/698,590	9/25/2024			

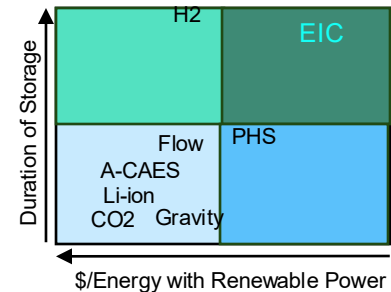
15 Patents

4 + New Patents 2025



# Competitive Landscape

At Grid Levels	Max Duration	Levelized Total Cost	Life	Enviro-Impact
EIC I-CAES	✓	✓	✓	✓
Li-ion Battery	✗	✗	✗	✗
Flow Battery	✗	✗	✗	✗
Pumped Hydro	✗	✓	✓	✗
Gravity	✗	✗	✓	✓
Carbon Dioxide	✗	✗	✓	✗
Hydrogen	✓	✗	✗	✗
A-CAES	✗	✗	✓	✓



Scarce Material, End of Life Impact, Degradation, Lifespan

Scarce Material, End of Life Impact, Degradation, Footprint

Footprint, Geography, Water

Scalability, Footprint

Scalability, Footprint

Cost, Scarce Material, Life

Scalability, Duration

