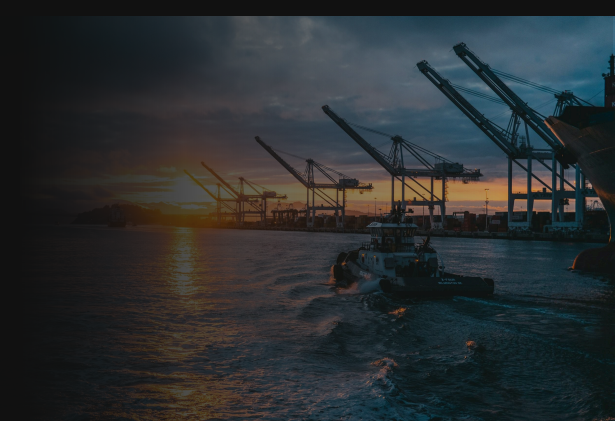


 Solid Hydrogen

# Next-Gen Hydrogen Storage



## THE PROBLEM

# Hydrogen Fuel would already be a \$2T+ Industry

but hydrogen storage is  
unsafe and inefficient.

## ↓ Gas

Low storage capacity  
Dangerously high pressure

## ↓ Liquid

Requires -253 °C storage  
Dangerous to transport





## THE SOLUTION

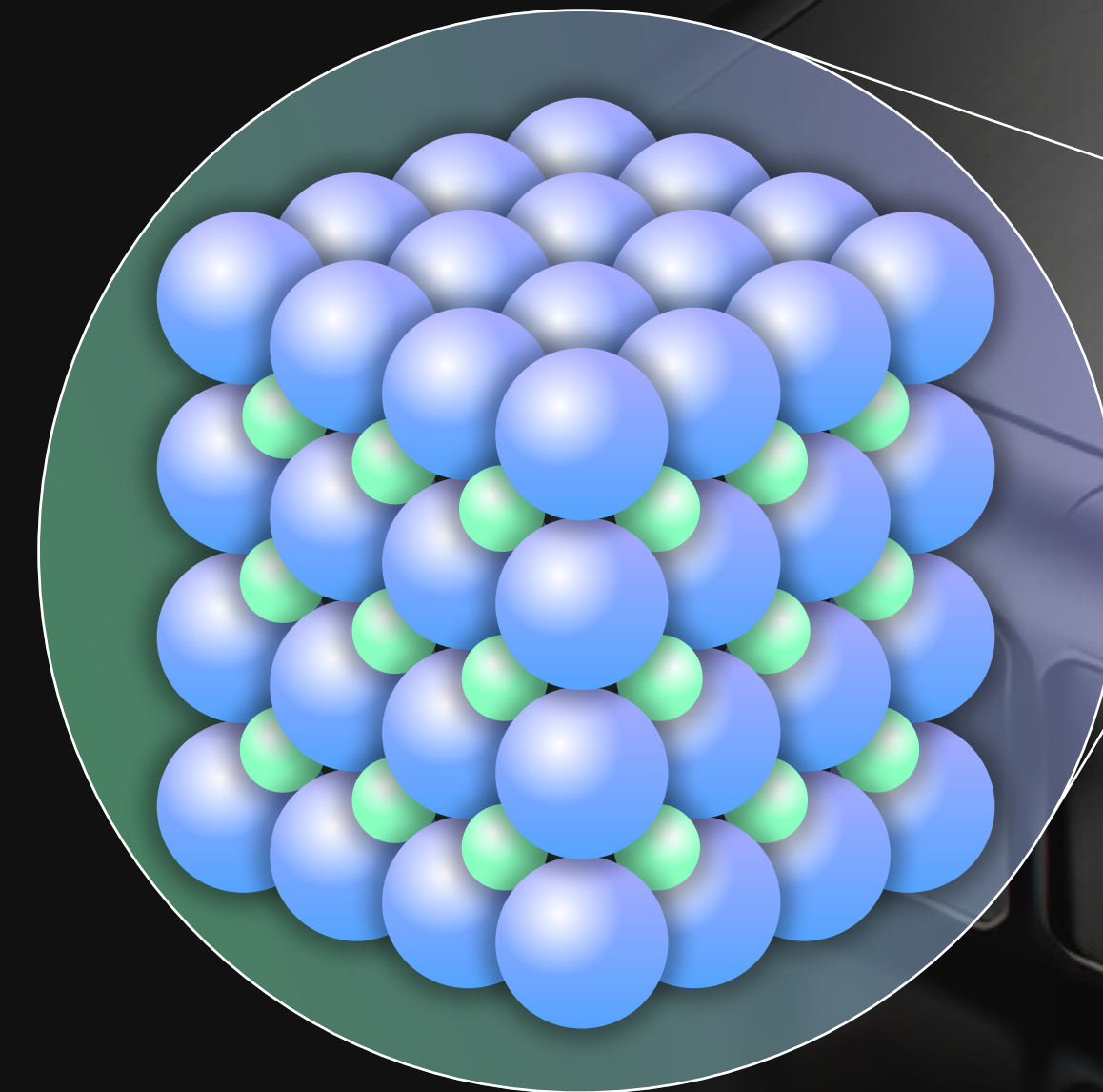
# Safer and more efficient Hydrogen storage

Magnesium boride acts like a metal sponge  
absorbing hydrogen stable at ambient temperature.

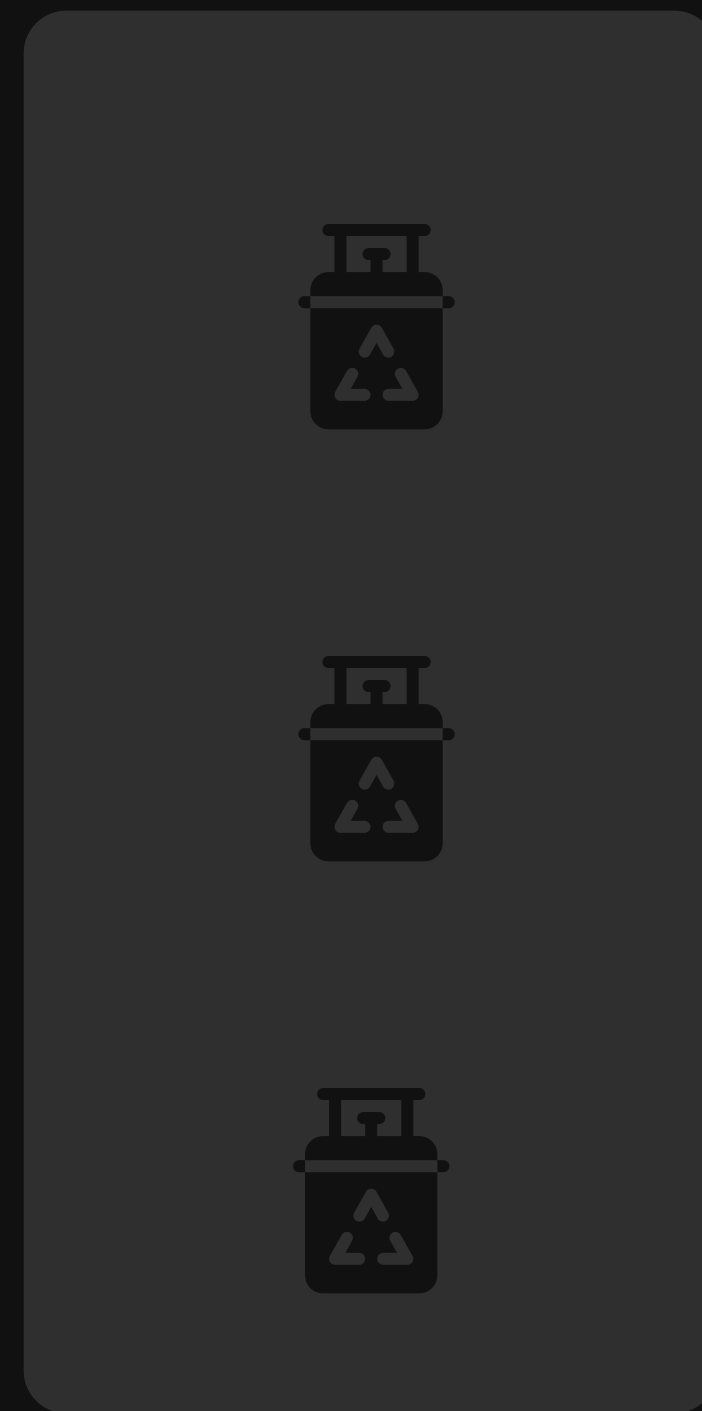
## ↑ Solid

Less pressure

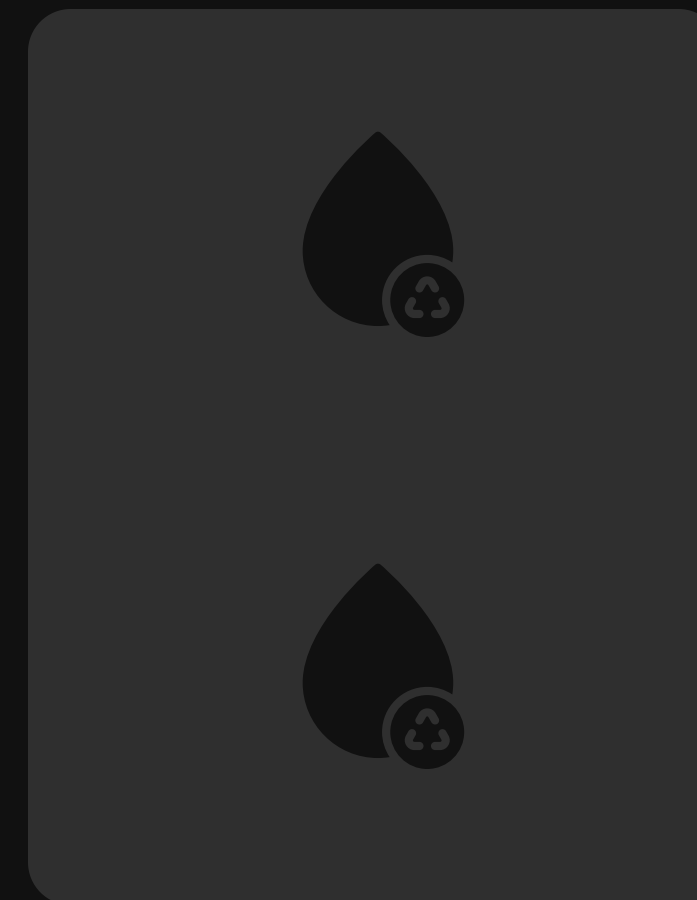
More dense



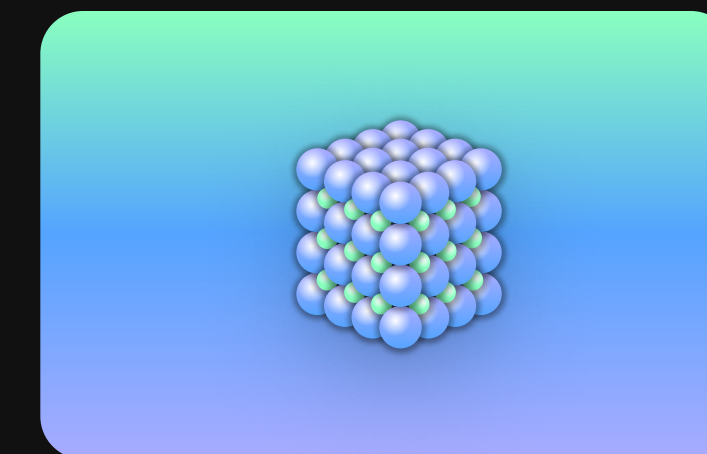
## 3x Less Space: Same Amount of Energy



**Gas H<sub>2</sub>**  
(700 bar)



**Liquid H<sub>2</sub>**  
(-253 °C)



**Solid-State**  
MgB<sub>2</sub>



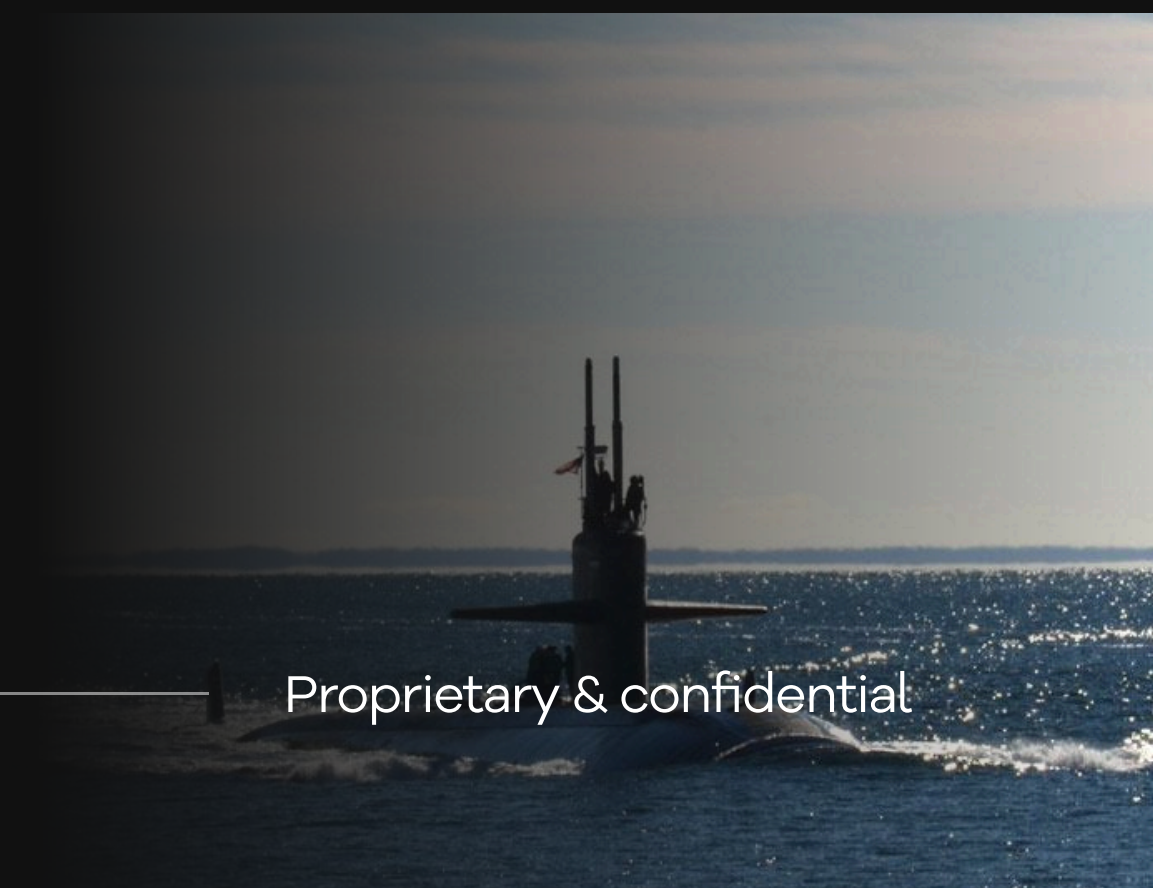
# Next-Gen Autonomous Navy Fleet

Tactical USVs, UUVs, and Submarine Applications

🚀 **Silent Propulsion**

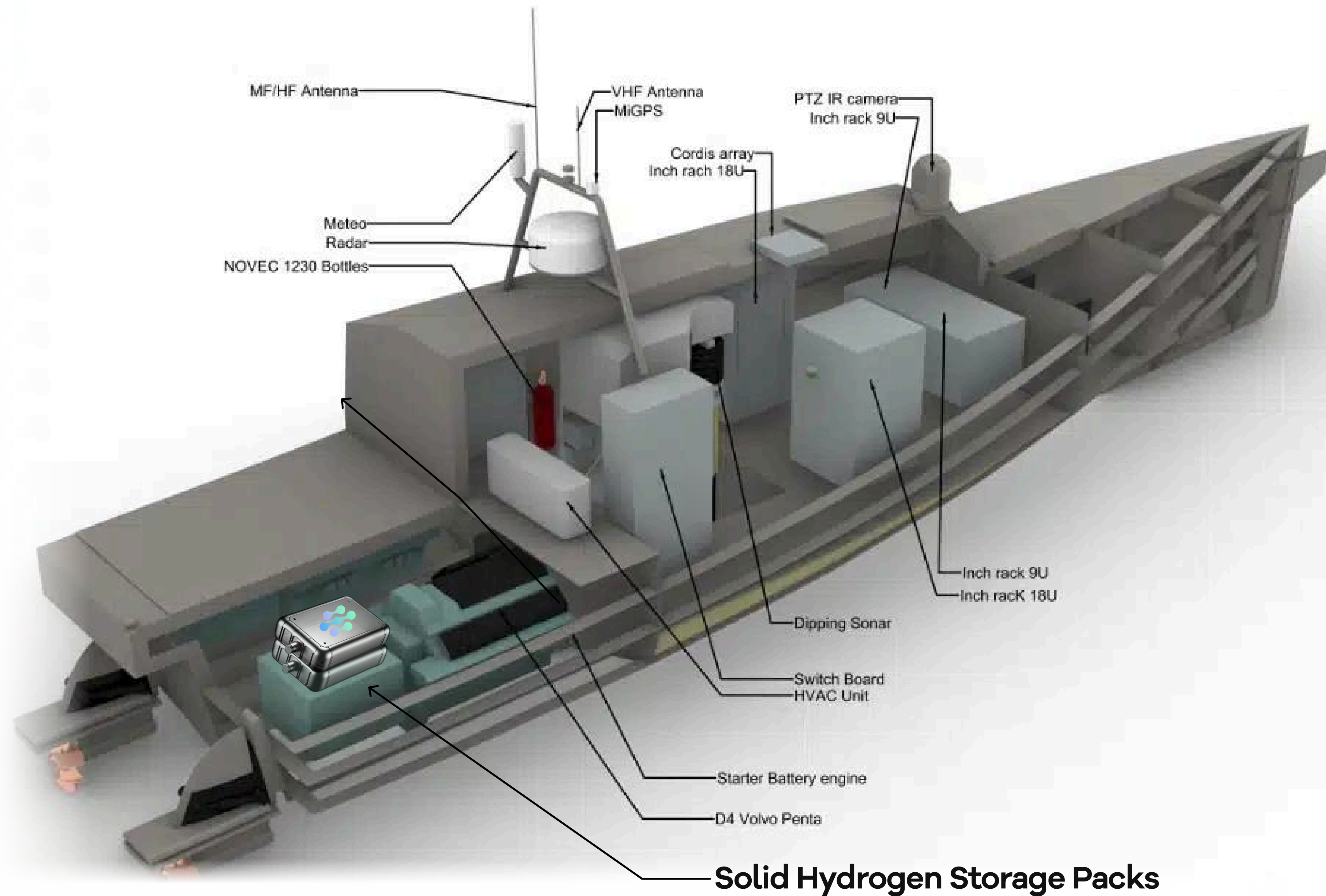
🔧 **Compact & Light Weight**

🛡️ **Safe Refueling While at Sea**





# Solid Hydrogen Powered USV



# Business model

Initial Pilot: Navy Small USVs

## PILOT PLATFORMS

- ✓ **MANTAS T12**  
(12 ft electric ISR USV)
- ✓ **Devil Ray T24**  
(24 ft multi-mission platform)

## SYSTEM CONFIGURATIONS

- ✓ 1–5 kg H<sub>2</sub> solid-state tank
- ✓ PEM fuel cell
- ✓ Electric drive retrofit

## OBJECTIVES

- ✓ Prove stealth, endurance, and modular deployment in Navy operational environments





# Best-in-Class Hydrogen Storage

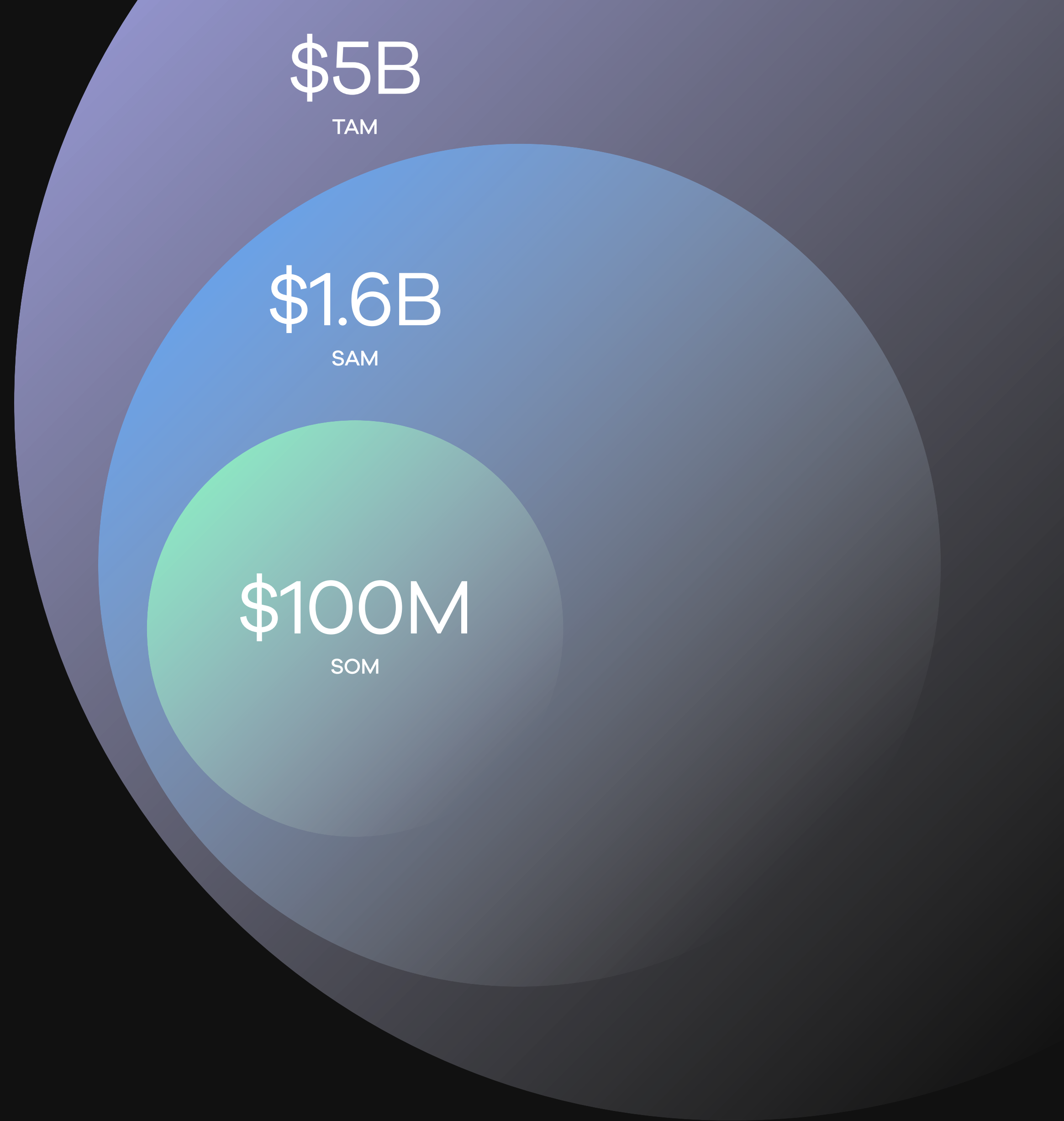
Magnesium boride patented technology from the University of Hawaii beats the competition.

Key Differentiators	 H2 MOF	 HYDREXIA	 H2 RNYSS The Power of Hydrogen	 GKN HYDROGEN	 Solid Hydrogen
High Energy Density	×	×	×	×	✓
High Volumetric Efficiency	✓	✓	×	×	✓
Stable Long-Term Storage	✓	×	✓	✓	✓
Fast, Controlled Release	×	×	✓	✓	✓
AI for Material Optimization	×	×	×	×	✓

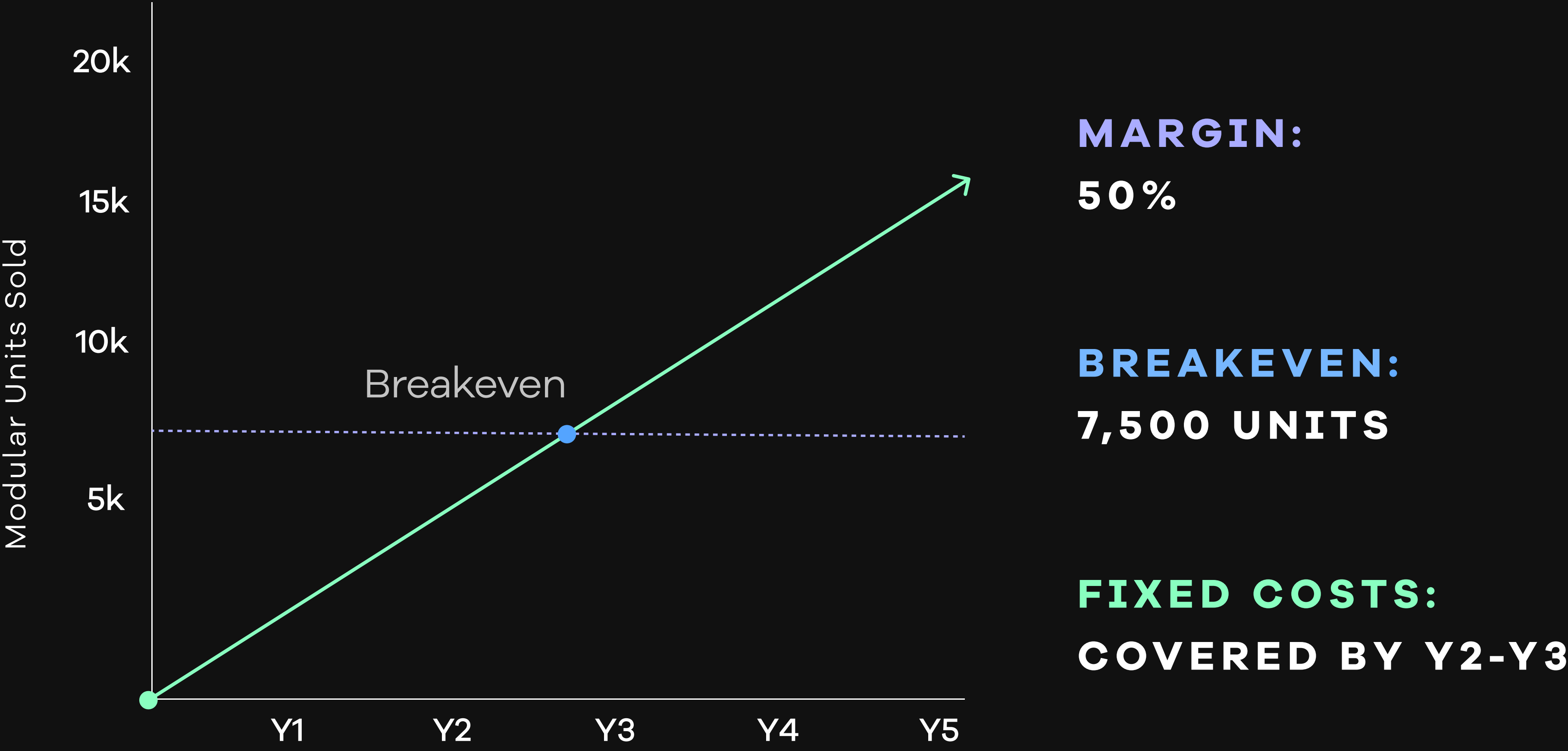
## GO-TO-MARKET PLAN

# Unlock the billion dollar naval fuel economy

Build hydrogen fuel cell USVs then scale into other unmanned naval vessels.

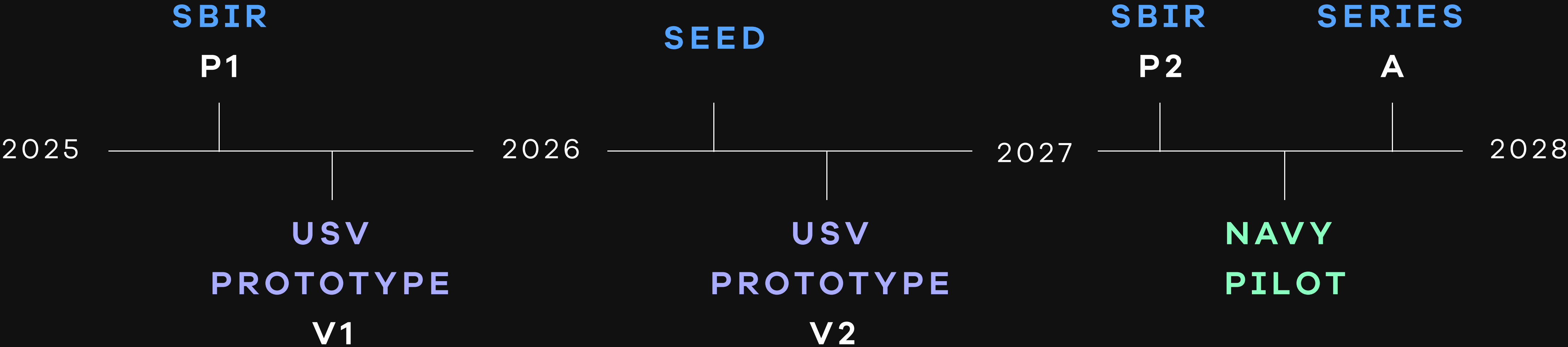


# Early Margin Strength Drives Breakeven at Fewer Units





# Timeline & Milestones



# Our Team

Industry experts with a combined 50+ years of diverse professional experience.

COACH

Gabe Hitchcock



INVENTOR

Godwin Severa



MENTOR

Ryan Margoles



LABORATORY

Vitalie Stavila



CIO | CO-FOUNDER

**Arun Thakur**

Explainable AI & Interpretable ML



COO | CO-FOUNDER

**Hasan Pasha Ph.D.**

Background in Clean Tech & Automotive



CMO | CO-FOUNDER

**Cam Bunker**

UX/UI Design Strategic Leader in Marketing





# Raising \$1M

Partially exclusive R&D license to test prototypes.  
AI aided research with University of Hawaii & Sandia National  
Laboratories testing hydrogen fuel cell powered US Navy USVs.

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