

eVTOL Air Vehicles – The “Killer App” for Hydrogen?

Everyday Air Mobility.
Fueled by Hydrogen.
Powered by Simplicity.

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The logo for Alakai Technologies, featuring the word "skai" in a lowercase, sans-serif font. The letter "s" is stylized with a vertical line extending upwards from its top, and the letter "i" has a dot above it. The logo is positioned in the lower right quadrant of the slide.

skai

Liquid Hydrogen – Fuel Cell Powertrain eVTOL



Topics



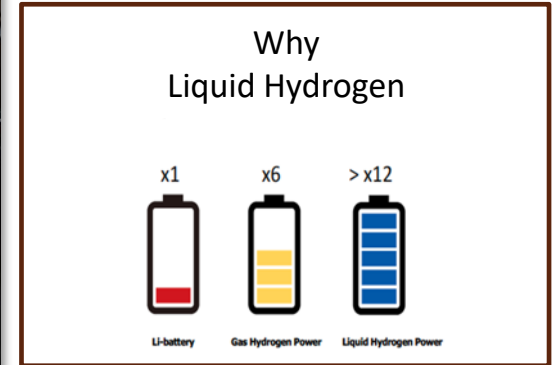
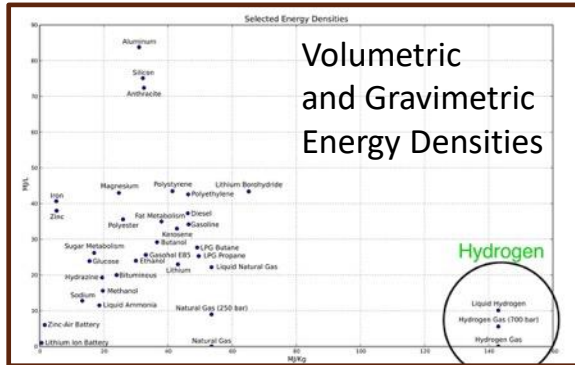
The state of the art for electric fuel cell VTOL aircraft.



Air-Portals as energy stations.



Technology gaps and collaborative R&D opportunities to raise Technology Readiness Levels.



KEY TECHNOLOGY DIFFERENTIATORS:

RANGE + PAYLOAD

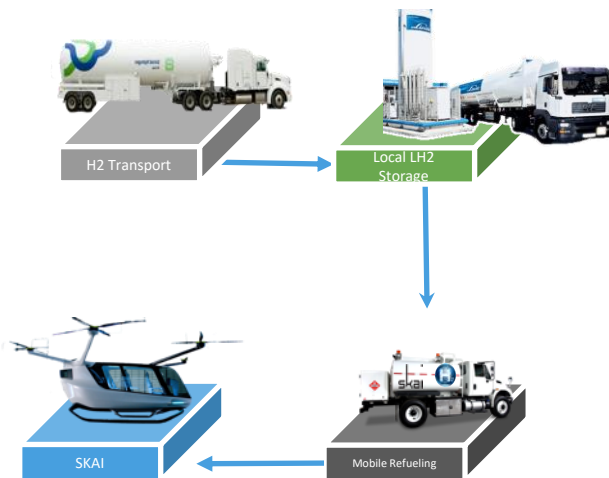
FUELING TIME, LIFE-CYCLE IMPACT, LOW OPEX, MISSION FLEXIBILITY

On-Site H2 Generation



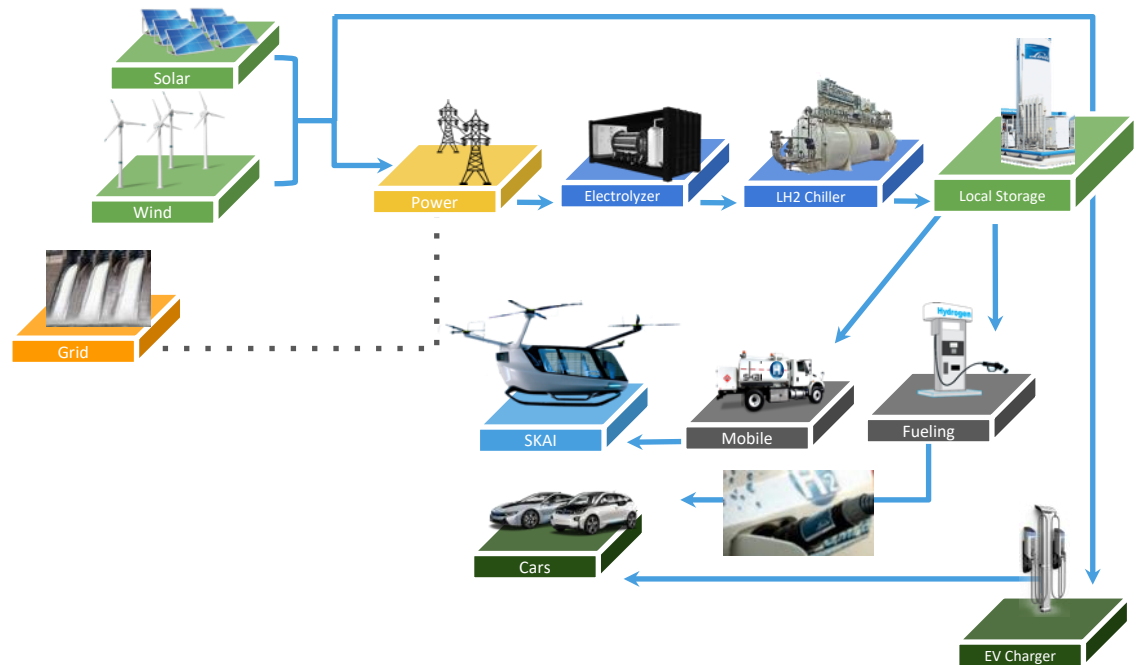
Near Term Plan Flight Testing & Certification

- Liquid H2 from commercial suppliers
- Local storage tank
- Mobile storage tank and refueling nozzle



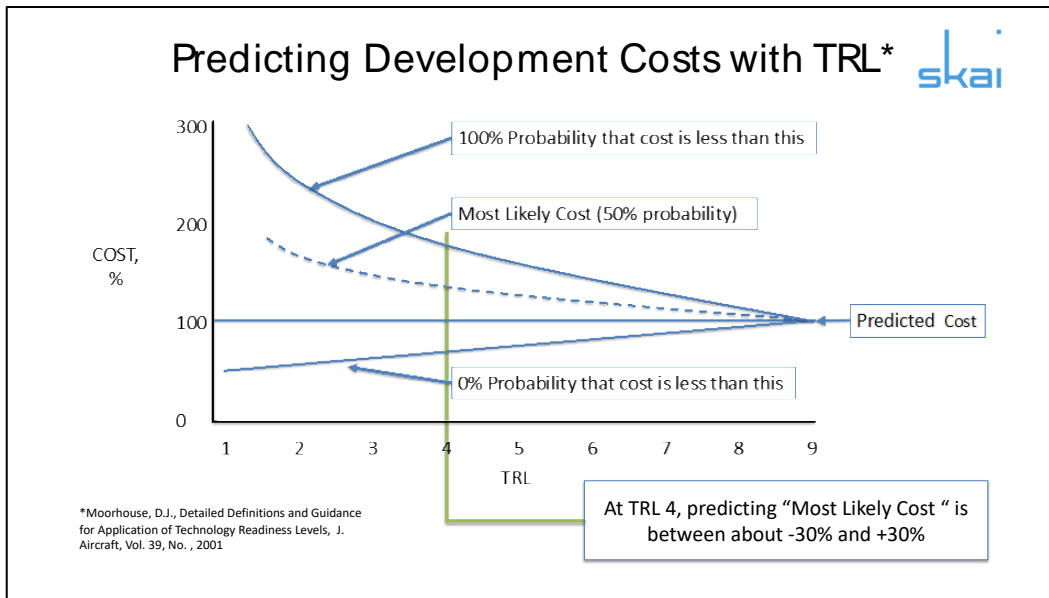
Long Term Plan

- Onsite LH2 Generation
- LH2 & GH2 storage tanks
- Automated fuel dispensers for hydrogen cars & buses



The Skai H2 Ecosystem

Technology Readiness Levels (TRL)



HFC Systems R&D:

- Electro-Chem-Physics modeling
- Stack efficiencies
- Balance of Plant optimization
- Fuel Cell Plate materials
- Life cycle modeling and testing
- FAA compliance for certification
- Stack instrumentation
- Digital twin systems
- LH2 crash dynamics and design
- PPE-free fueling system safety
- GH2 and LH2 storage systems

Aeronautical Industry
Pre-Competitive Collaboration needed to accelerate pace of Aeronautics applications commercialization and share risks.

Hydrogen

Clean. Power.



Backup Slides

What is SKAI?

Skai is Alakai's Advanced Air Mobility (AAM) system built with a core focus on reliability and simplicity. The first hydrogen fuel-cell powered vertical take-off and landing air vehicle.

Skai is comprised of patent protected technology, air mobility services, and innovations in power and redundancy. Its unique brand position and market entry strategy ensures it is ready for long term leadership, with broad application and mass accessibility.



All Electric Vertical
Take-Off and
Landing



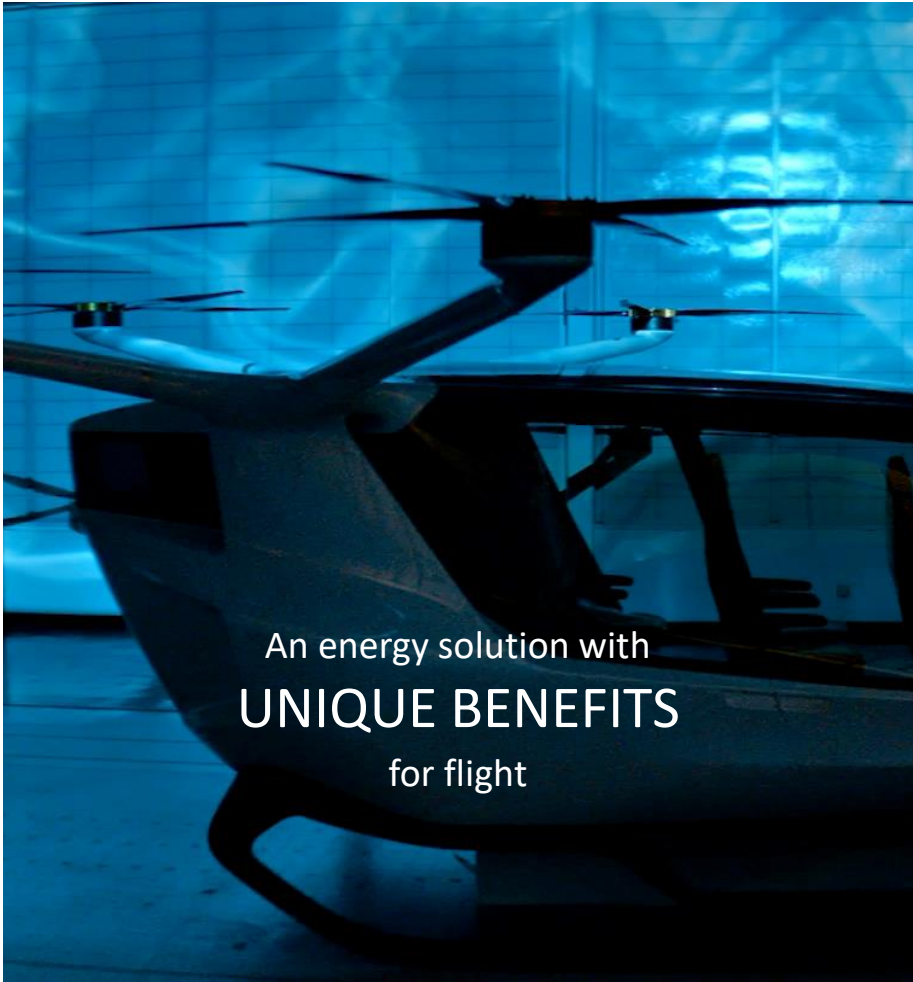
Hydrogen fuel cell
powered, with zero
pollution



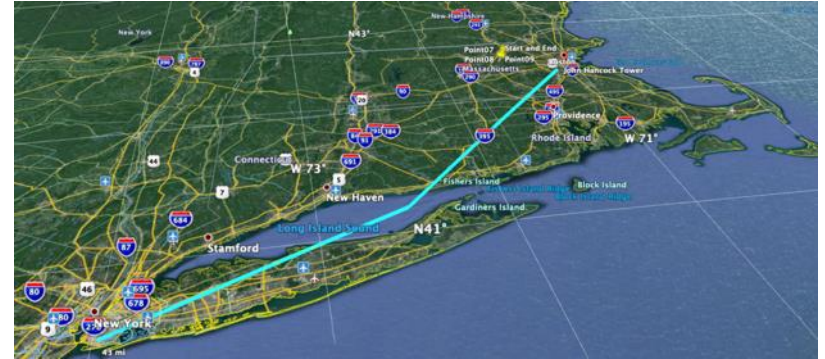
Piloted, Ground-Piloted
and Fully Autonomous
Versions



Point-to-
Any-Point
Transportation



An energy solution with
UNIQUE BENEFITS
for flight



Boston to Manhattan, 196 miles by Skai

Hydrogen fuel cells have
8X TO 12X THE
DISTANCE AND DURATION
of today's best battery technologies

Hydrogen Coming Of Age

- Ten nations have committed to advancement toward hydrogen economies over the coming years.
- Primary drivers are environmental sustainability and Total Cost of Ownership (TCO).
- Aeronautical H2 ecosystem includes OEMs and suppliers across the enterprise.





skai – the advanced air mobility system.

Powered by Hydrogen. Driven by Simplicity.

Skai is an air mobility system built with a focus on simplicity. The first hydrogen fuel cell powered e-VTOL

Skai's ambition is to solve one of the most pressing global challenges, transportation (gridlock and traffic), while simultaneously reducing its impact on the environment.

Skai is now working to certify this dream...

...by making a simple and safe air mobility system accessible for everyone.

...by implementing a truly clean end to end solution on a global scale.

Key Facts & Differentiators

- **First filer for FAA certification**
- **Simplest:** an ultra smart platform with low complexity
- **Safest:** airframe parachute, fault tolerant systems
- **Cleanest:** Hydrogen fuel cells - zero emission, recyclable
- **Management:** Experienced aerospace team
- **IP Protection:** over 40 patents
- **Design:** by BMW Designworks
- **Rapid Scale:** automotive approach to volume manufacturing

One Platform, Many Applications



SkaiMed



SkaiCargo



SkaiCraft



SkaiCab