



The Future of Intercity Mobility

Hydrogen-Electric Aircraft

Transforming 100–300 km regional air routes with clean, high-endurance hydrogen-electric aviation.

ROUND

Series A

TARGET RAISE

\$23.8M

Date

December 2025



Executive Summary

PUSHPAK O2 SERIES A

Transforming Regional Mobility

Pushpak O2 is building hydrogen-electric aircraft optimized for intercity air mobility, solving the range limitations of battery eVTOLs.



300+ km Range

Enables critical intercity routes that battery eVTOLs cannot serve (vs 100km limits).



Superior Economics

Hydrogen-electric propulsion offers significantly lower operating costs vs conventional helicopters.



Market Demand

Large demand from operators seeking clean, cost-efficient regional mobility solutions.



Execution Progress

Early certification consultation and engineering progress completed. Pilot ops target: 2026–2027.

SERIES A ASK

\$23.8M

To reach Pilot Operations

USE OF FUNDS

Certification & Testing 35%

Prototype Manufacturing 28%

Pilot Routes Launch 20%

Team & Operations 17%

TARGET RUNWAY

24 Months

NEXT MILESTONE

Type Cert.



The Problem

BARRIERS TO GROWTH

Regional aviation is Broken & Inefficient

Current solutions for 100–300 km intercity routes face fundamental technological and economic barriers that prevent scalable adoption.

THE MARKET GAP

Missing a clean, long-endurance aircraft optimized specifically for intercity corridors.



Range Anxiety

Battery Limits

Current battery eVTOLs are restricted to **30–60 minutes** flight time, making them viable only for intra-city hops, not regional travel.



High OpEx

Costly Helicopters

Legacy helicopters are prohibitively expensive at **\$170–\$220/hour** operating cost, limiting access to wealthy elites.



Sustainability

Emission Pressure

Conventional aviation faces increasing regulatory pressure and fuel cost volatility, with mandates for zero-emission alternatives tightening.



Gridlock

Intercity Congestion

Ground infrastructure is saturated. Demand for fast regional mobility between cities (100–300km) is outpacing road capacity.

The Pushpak O2 Hydrogen-Electric Hybrid

A clean-sheet design optimized for the "missing middle" of aviation: 100–300 km intercity routes that batteries can't reach and helicopters can't serve efficiently.

RANGE

300+ km

ENDURANCE

5+ hours

EMISSIONS

Zero

OPEX SAVINGS

40%



Hybrid Powertrain

Hydrogen fuel cell for high-efficiency cruise power + battery system for peak power during takeoff/landing. Redundant, safe, and powerful.



Future-Proof Sustainability

Zero-emission platform aligned with 2030+ aviation mandates. Water vapor is the only exhaust byproduct.



Multi-Role Versatility

Modular cabin design ideal for diverse applications: intercity passenger shuttle, premium tourism, medical logistics, and government inspection.



Economic Viability

Significantly lower maintenance and energy costs compared to turbine helicopters, enabling profitable regional routes.



Why Hydrogen

The Density Advantage

Hydrogen offers massive specific energy density compared to batteries, unlocking true regional flight.



Operational Breakthroughs



Endurance & Uptime

Enables multi-hour, multi-flight operations without long charging downtimes.



Rapid Refueling

Refuel in minutes, similar to conventional aviation, maximizing asset utilization vs battery charging.



Global Momentum

Increasing global investment in hydrogen infrastructure supports medium-range aerial mobility scale-up.

"Hydrogen is the only viable path for zero-emission medium-range aviation."

Intercity Air Mobility

100-300 KM RANGE FOCUS

Our hydrogen-electric platform unlocks specific high-value use cases that battery eVTOLs cannot serve due to range limitations.



Tourism & Charter

Premium eco-tourism and private charter for intercity hops.



Regional Shuttles

Scheduled connections between tier-2 cities and major hubs.



Emergency & Gov

Air ambulance, organ transport, and disaster response.



Logistics

Time-critical cargo and infrastructure inspection missions.





Hybrid Electric Powertrain

Optimized for safety and endurance, combining hydrogen steady-state efficiency with battery peak power response.



Hydrogen Fuel Cell Stack

Primary power source for steady-state cruise. High efficiency PEM technology optimized for altitude performance.



High-Power Battery Pack

Handles peak loads during takeoff/landing and emergency reserve. Charges via regen or ground power.



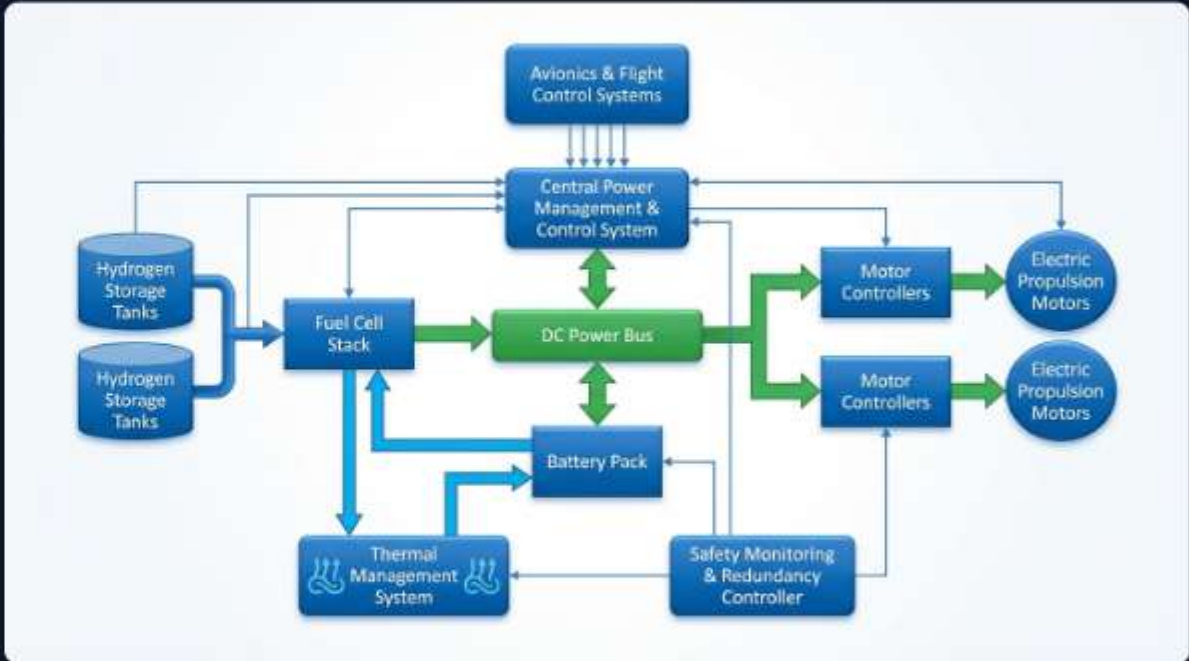
Dual-Redundancy

Independent power buses ensure single-point failure tolerance. System architecture designed for certifiability.



Regenerative Recovery

Captures energy during descent and braking, extending range and improving overall system efficiency.



H2 STORAGE

FUEL CELL

BATTERY

PROPULSION

System Architecture v2.4

● System Status: **OPTIMIZED**

Proprietary Hybrid Management System



Development Status

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Completed

MILESTONES ACHIEVED



Conceptual Design

Full aircraft configuration locked



Aerodynamic Modelling

Preliminary CFD analysis completed



Hydrogen Safety Framework

Storage and handling protocols established



Certification Consultation

Early engagement with DGCA/FAA advisors



Preliminary Safety Assessment

Initial risk and hazard analysis



Supply Chain Mapping

Key component suppliers identified

In Progress

CURRENT FOCUS



Prototype Engineering

65%



Fuel Cell Integration

40%



System-Level Validation

30%



Type Certification Roadmap

80%

Target Submission: 2025



"Engineering velocity is accelerating as we move from design to integration phases."



Certification Roadmap

Regulatory Path with DGCA + FAA Advisory Support

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Phase 1



2024–25

FOUNDATION & DESIGN

- ✓ Conceptual Design Review
- ✓ Preliminary Safety Assessment
- 🌀 Powertrain Bench Testing

Phase 2



2025–26

VALIDATION & GROUND TEST

- 🌀 Detailed Design Review
- 🌀 Component Qualification
- 🌀 Ground Test Program

Target



2026–27

FLIGHT & CERTIFICATION

- 🌀 Flight Test Campaign
- 🌀 Certification Evaluation
- 🚩 **2027 Milestone**
Type Certification + Commercial Ops Approval



Note: Timelines are strategic targets based on current engineering velocity. No percentages or guaranteed dates — realistic and credible execution plan.



Competitive Landscape

Intercity vs. Urban Mobility Solutions

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COMPANY

TECHNOLOGY

ENDURANCE

RANGE

MARKET FOCUS

Pushpak 02

Hydrogen-Electric

5+ hrs

300+ km

INTERCITY ROUTES

Joby Aviation

Battery eVTOL

~1 hr

~150 km

URBAN

Archer Aviation

Battery eVTOL

~40 min

~60 km

URBAN

Helicopters

Jet-A Fuel

2-4 hrs

300-500 km

GENERAL AVIATION



The Pushpak Advantage

Hydrogen enables **longer range** and **zero emissions** for intercity routes — a massive market segment completely underserved by battery eVTOL limitations and priced out by helicopter operations.



Business Model

Diversified Revenue Streams for Scale & Stability

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CORE REVENUE

Aircraft Sales

Direct sales of Pushpak O2 aircraft to fleet operators, specifically targeting segments underserved by battery eVTOLs.

- Tourism & Charter Companies
- Government & Defense Agencies
- Logistics Providers



HIGH MARGIN

Operational Services

Establishing and managing intercity shuttle routes through strategic operator partnerships and revenue-sharing models.

- Intercity Shuttle Routes (100-300km)
- Route Planning & Optimization
- Pilot Training & Certification



RECURRING

Maintenance & Support

Long-term service contracts ensuring fleet reliability, generating steady recurring revenue over the 20+ year aircraft lifespan.

- Aftermarket Parts & Spares
- Predictive Maintenance (AI-driven)
- Digital Fleet Monitoring Subscriptions



ECOSYSTEM

Infrastructure Partnerships

Catalyzing the ecosystem by facilitating hydrogen fueling deployments at regional airports and vertiports.

- Fueling Deployment Consulting
- Strategic Supply Agreements
- Airport Infrastructure Integration



Unit Economics

Operator Profitability Model (Conservative)

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Key Operating Assumptions

Based on regional shuttle service profile.



Utilization

6–8 flight hours per day

High asset turnover model



Schedule

250 operating days / year

Accounts for maintenance & seasonality



Energy Cost

Hydrogen Supply Agreements

Wholesale pricing secured via partnerships



Maintenance

PBH (Power-by-Hour)

Based on flight hours + propulsion cycles

Per Flight Hour Economics

✓ Profitable at scale

BASE CASE

REVENUE / HOUR

~\$140

Avg ticket yield @ 80% load

DIRECT OPEX

~\$70–

90

Fuel, Crew, Maintenance

GROSS MARGIN

30–40%

Target Range

ECONOMICS BREAKDOWN

● Cost ● Margin



ⓘ Note: Figures are illustrative based on projected energy prices. Actuals depend on route mix, fleet utilization, and local hydrogen supply agreements.

Slide 12



Traction & Key Milestones

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Commercial Momentum & Strategic Partnerships



Government MoU

Strategic partnership with state government to establish the first 200km pilot corridor for hydrogen aviation.

✓ SIGNED & ACTIVE



H2 Infrastructure

Supply agreements under discussion with major energy providers for airport-side refueling stations.

IN DISCUSSION



Supply Chain

Key prototype suppliers identified for fuel cell stack, high-density batteries, and composite airframe.

PARTNERS IDENTIFIED



Operator Interest

LOIs from regional charter and tourism operators seeking zero-emission fleet upgrades.



Advisory Board

Former DGCA officials and aerospace powertrain experts onboarded to guide certification.



Template Note: This slide contains placeholder examples. Please replace these cards with your actual LOIs, MoUs, partnerships, and signed agreements to demonstrate real traction to investors.



Go-To-Market Strategy

Phased Rollout: Certification to Global Scale

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01

2025–2027

Prototype & Cert

Laying the foundation for safe, certified hydrogen flight.

- ✂ Build & validate full-scale prototype
- 🏗 Secure hydrogen infrastructure partnerships
- 📅 Execute flight testing & certification roadmap

STATUS

IN PROGRESS



02

2027–2028

Pilot Routes

Initial commercial operations with strategic partners.

- 👤 Launch with tourism & charter operators
- 🗺 Establish regional shuttle networks
- 🚒 Deploy for emergency & utility missions

FOCUS

MARKET ENTRY



03

2028 Onwards

Scale & Global

Mass production and global market expansion.

- 🏭 Fulfill multi-aircraft commercial orders
- ✈ Full fleet operations & support services
- 🌐 Expansion to APAC & global markets

GOAL

DOMINANCE



Strategy: Leverage **early pilot routes** to validate economics before scaling manufacturing capital.



Leadership Team

Deep Tech Engineering Meets Operational Scale

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Aneerudh Kumar

FOUNDER & CEO

Vision & Technology Architecture

- ✓ Expert in Hydrogen Fuel Cell Technology
- ✓ Background in Autonomous Flight Systems
- ✓ Aerospace Engineering Pedigree



Aditya Shrivastava

COFOUNDER & COO

Operations & Scale Execution

- ✓ 15+ Years in Operations & Strategy
- ✓ Specialist in Strategic Partnerships
- ✓ Proven Track Record in Venture Scaling

CORE ENGINEERING DOMAINS



Hydrogen Systems

Fuel cell integration & thermal mgmt



Aerodynamics

Airframe design & CFD analysis



Avionics

Flight control & embedded systems



AI & Autonomy

Path planning & situational awareness



Series A Ask

Capital Requirement & Allocation Strategy

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TOTAL RAISE AMOUNT

\$23.8M

To achieve Type Certification and launch pilot commercial operations.

Use of Funds



ALLOCATION BREAKDOWN

Certification & Testing

DGCA/FAA compliance, flight tests

\$8.3M

35%

Prototype & Mfg

Tooling, supply chain, assembly

\$6.7M

28%

Pilot Routes & Launch

Ops setup, partner integration

\$4.8M

20%

Team & Operations

Engineering talent, G&A

\$4.0M

17%



24+ Months Runway

Funds secure operations through critical milestones including prototype completion, ground testing, and regulatory submissions.

Primary Objective

Achieving Type Certification readiness and initiating first revenue-generating pilot routes.



Financial Projections

Conservative Growth Trajectory & Path to Profitability

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2027



Prototype & Testing

Focus on R&D burn, certification testing, and pre-production validation.

2028



Pilot Programs

Limited commercial pilots generating initial revenue.

2029



Initial Fleet Ops

First commercial fleet deployment. Revenue ramp-up begins.

2030-2032



Scale & Profit

Multi-aircraft sales + recurring support revenue.



KEY DRIVER

Unit Sales Scaling

Revenue shift from pilot services to aircraft sales.

RECURRING REVENUE

~25% of Total

Maintenance & support stabilizes long-term cash flow.

Disclaimer: These projections are directional estimates based on current market assumptions and engineering timelines. Actual results depend on regulatory certification timelines (DGCA/FAA) and market adoption rates. Figures shown are for illustrative purposes to demonstrate business model viability.



Risks & Mitigation

Proactive Management Strategy

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RISK-01

Technology Risk

Integration challenges with hydrogen fuel cell systems in aviation environments.

MITIGATION STRATEGY

- > Phased testing approach (bench → ground → flight)
- > Adherence to emerging hydrogen aviation standards
- > Dual-redundancy architecture in all critical systems



RISK-02

Certification Risk

Regulatory delays or changing compliance requirements for new propulsion types.

MITIGATION STRATEGY

- > Advisory board with former DGCA/FAA officials
- > Early & active regulator engagement (pre-application)
- > Conservative timeline buffers built into roadmap



RISK-03

Hydrogen Infrastructure

Limited availability of aviation-grade hydrogen refueling at regional airports.

MITIGATION STRATEGY

- > Strategic partnerships with industrial gas suppliers
- > Deployment of modular/mobile refueling units
- > Focus on point-to-point routes with base hub fueling



RISK-04

Capital Intensity

High upfront costs for development and manufacturing scaling.

MITIGATION STRATEGY

- > Staged funding linked to clear milestones (Series A/B)
- > Asset-light model leveraging operator partnerships
- > Government grants and non-dilutive funding sources

SERIES A OPPORTUNITY

Building the Future of Sustainable Flight

Pushpak O2 is building the first hydrogen-electric aircraft in the APAC region designed specifically for intercity mobility — a segment underserved and growing.

 **Clean Aviation** +  **Long Endurance** =  **New Category of Regional Mobility**

AK

Aneerudh Kumar
FOUNDER & CEO

AS

Aditya Shrivastava
COFOUNDER & COO

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✉ legal@pushpako2.com

🌐 www.pushpako2.com

📍 Bangalore, India