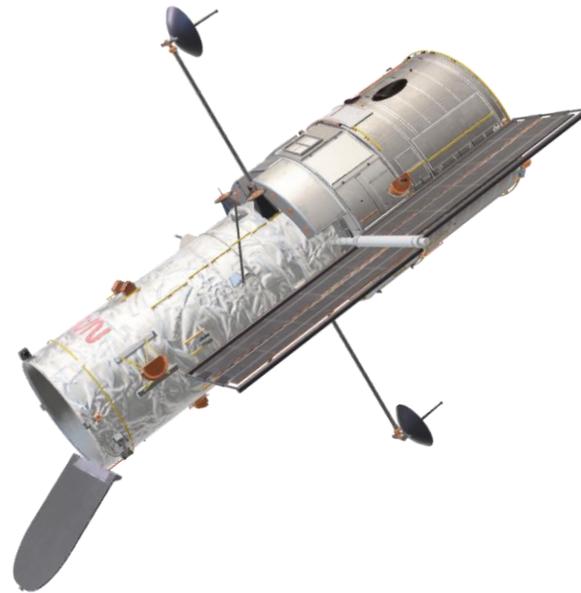
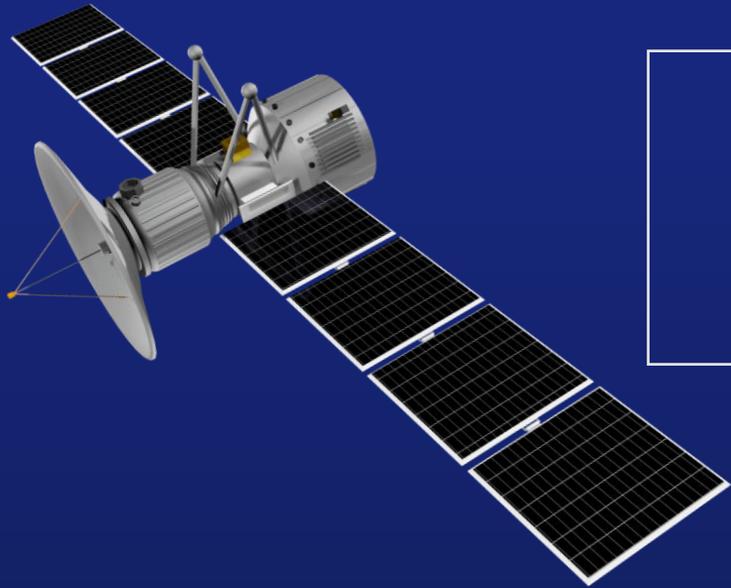




Powering Dreams,
Propelling Innovation.

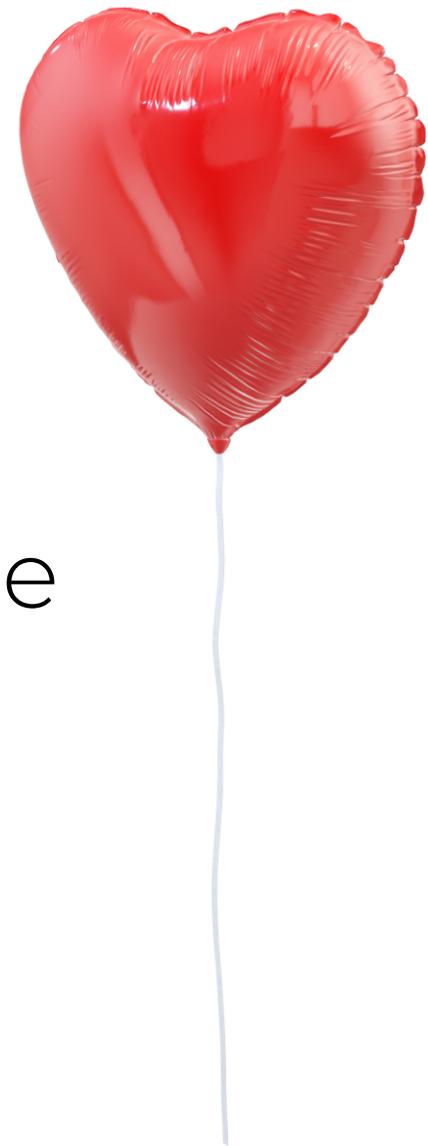
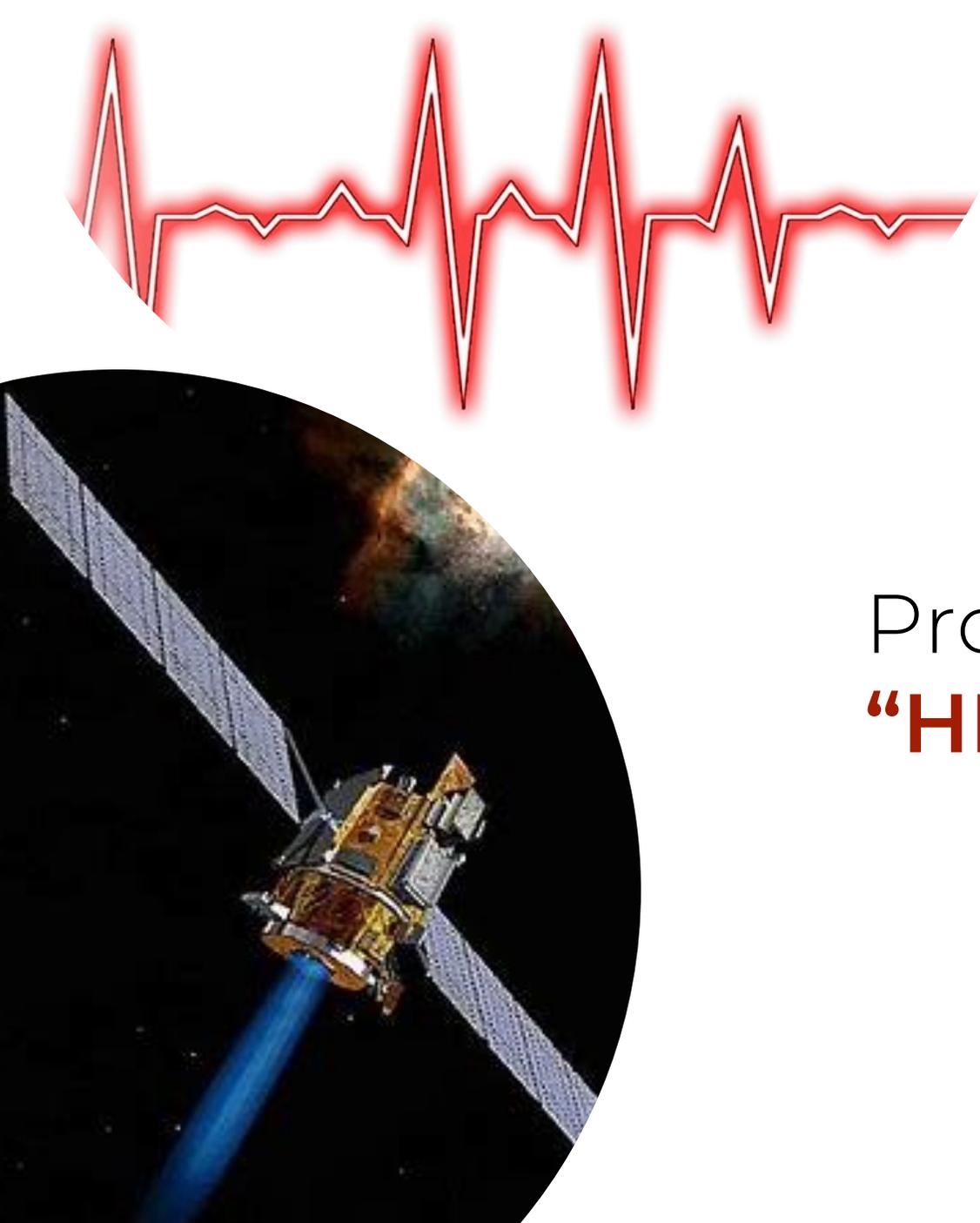




55000+

2500+ Satellites launched in 2024.

This includes satellites for various purposes like navigation, weather forecasting, communication etc.



Propulsion system is the
“HEART” of satellites.

Why Propulsion Module?



1. Post orbit corrections
2. Orbit maneuvering



3. Orbit rising operation



4. Debris avoidance

PROBLEM



Toxic, highly carcinogenic, and non-compliant with UN Sustainable Development Goals (SDGs).



Handling toxic propellants raises safety, regulatory and operational costs.

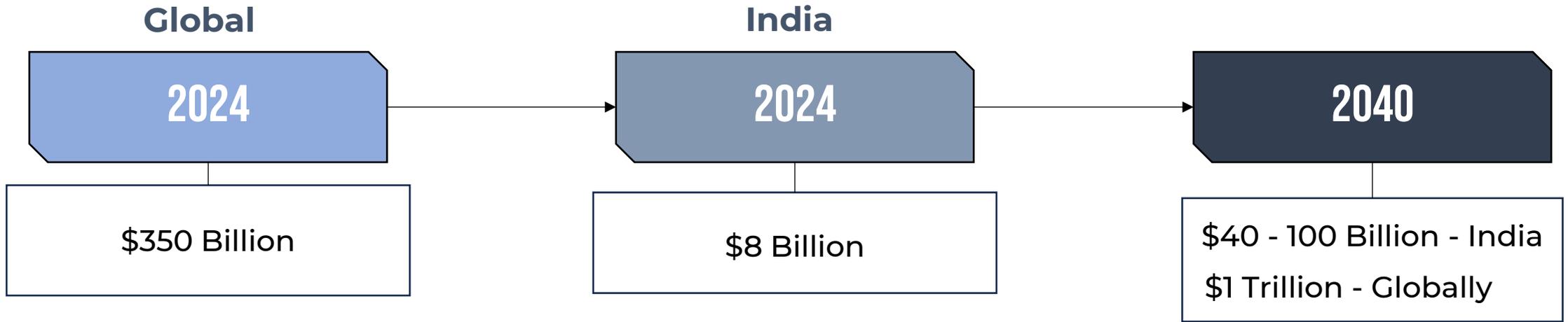


Cannot be used in manned missions.



The accumulation of Space debris has become a critical problem, threatening the safety and longevity of satellites and space missions.

WHY NOW?



Space market is opening up and, on a rise

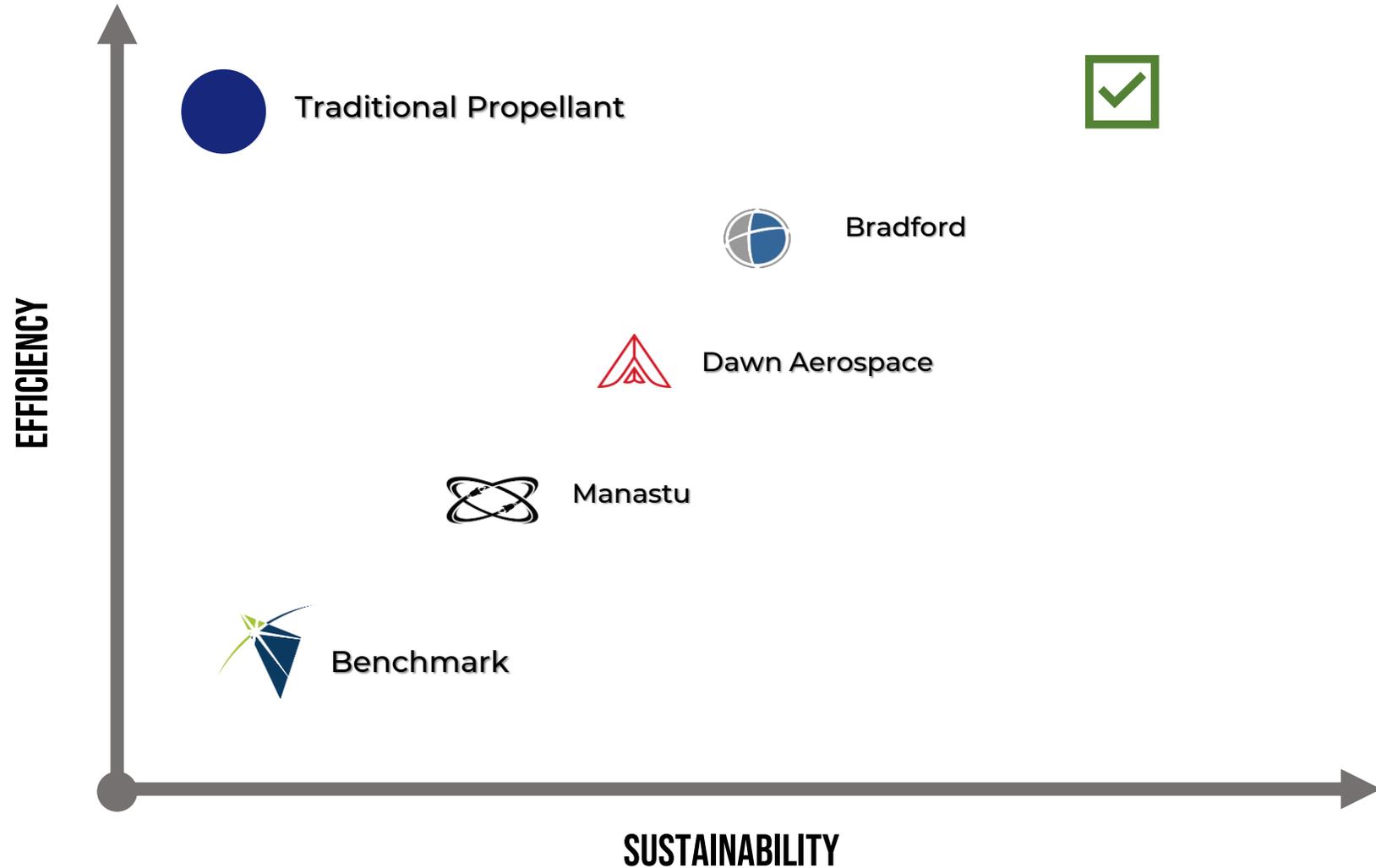
Government initiatives



Reference:
indbiz.gov.in

[Axios](#)

Analysis of existing players tackling a similar problem, showed a clear gap in the market.



COMPETITIVE LANDSCAPE OF SATELLITE THRUSTER COMPANIES

Parameter								Max Rating
1. Performance	☆☆☆	☆☆☆☆	☆☆☆☆☆	☆☆	☆☆☆	☆	☆☆☆☆☆	☆☆☆☆☆
2. Cost	☆☆☆	☆☆	☆☆	☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆☆☆
3. Manufacturing Complexity	☆☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆	—	☆☆	☆☆☆☆☆
4. Versatility	☆☆	☆☆☆☆☆	☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆	☆☆☆☆	☆☆☆☆☆
5. Reliability	☆☆☆☆	☆☆☆☆	☆☆	☆☆☆☆	☆☆☆☆☆	—	☆☆☆☆	☆☆☆☆☆
6. Customization	☆☆	☆☆	☆☆	☆☆☆☆	—	☆☆☆☆	☆☆☆☆	☆☆☆☆☆
7. TRL (Technology Readiness Level)	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆	☆	☆☆	☆☆☆☆☆

Check Evaluation Criteria:



OUR INNOVATIONS

RH521



RH521 — Proprietary Catalyst and HAN based propellant

ATOM



ATOM Thruster Series (IN-20N) — India's first HAN-based thruster

MOLECULE



MOLECULE — India's First N_2O – Propane based Bi-Propellant Thruster

DBOT



DBOT — enabling on-orbit servicing and modular assembly

ATOM



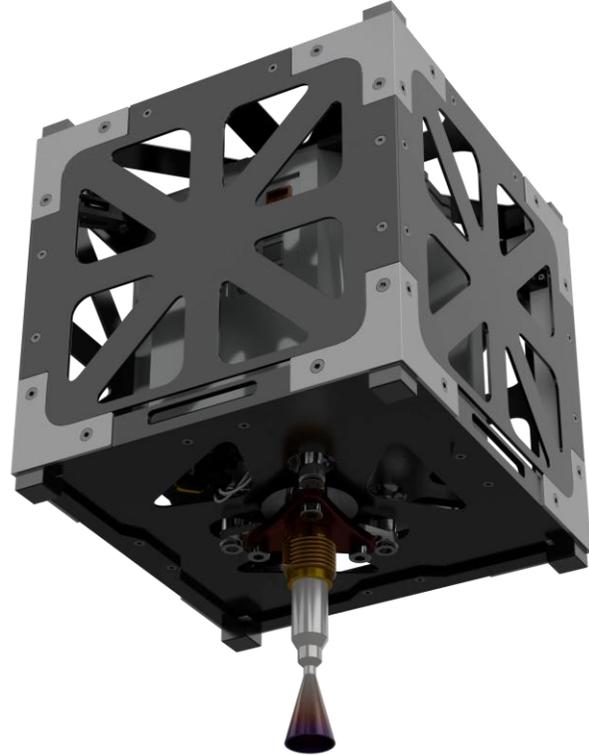
ATOM is specifically designed to work with our game-changing proprietary propellant

Propellant	RH-521
Thrust	From 1N
Specific Impulse	260 – 320 S
Minimum Impulse Bit	50 mNS
Survival Temperature	-30 °C to 40 °C
Total Impulse	>10000 NS
Valve	2-way Normally closed solenoid valve

It can also be used for a wide range of CUBESATS starting from 1U to 26U+



CUBEHOOD



CUBEHOOD is the complete propulsion module for CubeSats.

Dimension	2 U (100mm x 100 mm x 200mm)
Thrust	From 1N
Mass	700g (Wet), 500g (Dry)
Tank	Metallic 3D Printed
Operational Temperature	-30 °C to 40 °C
Data Interface	RS485/CAN Bus
Supply Voltage	Digital 5-5.2VDC, Valves & Other 28VDC

Though we are providing a standard module. Customization can be made based on the mission requirement.



MOLECULE

BI-PROPELLANT THRUSTER

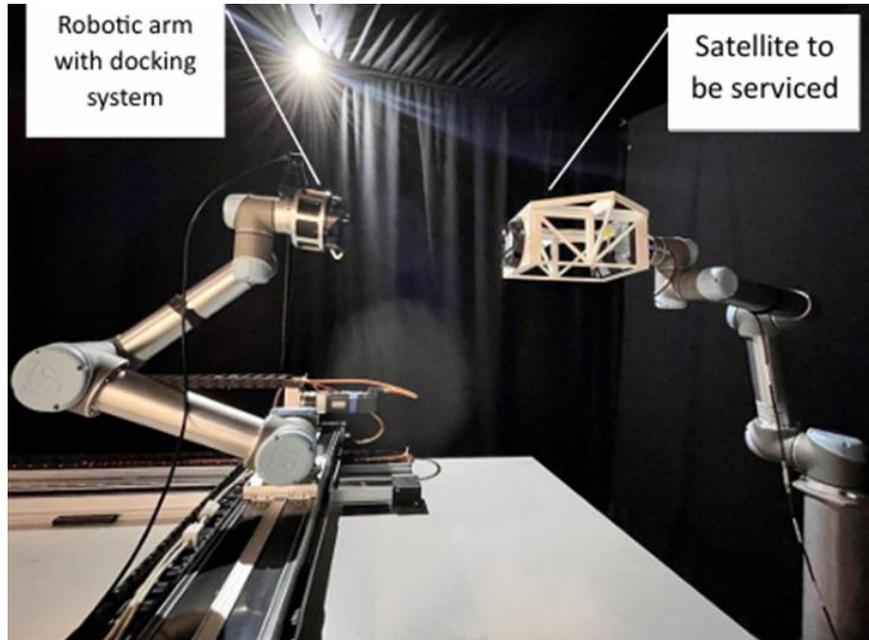


SPECIFICATIONS

Fuel	Propane
Oxidizer	Nitrous oxide
Thrust range	200-500N
ISP	290 sec
Pressurizing System	Pressure Fed System
Operational Temperature	-30 °C to 80 °C
Ignition	Spark based ignition

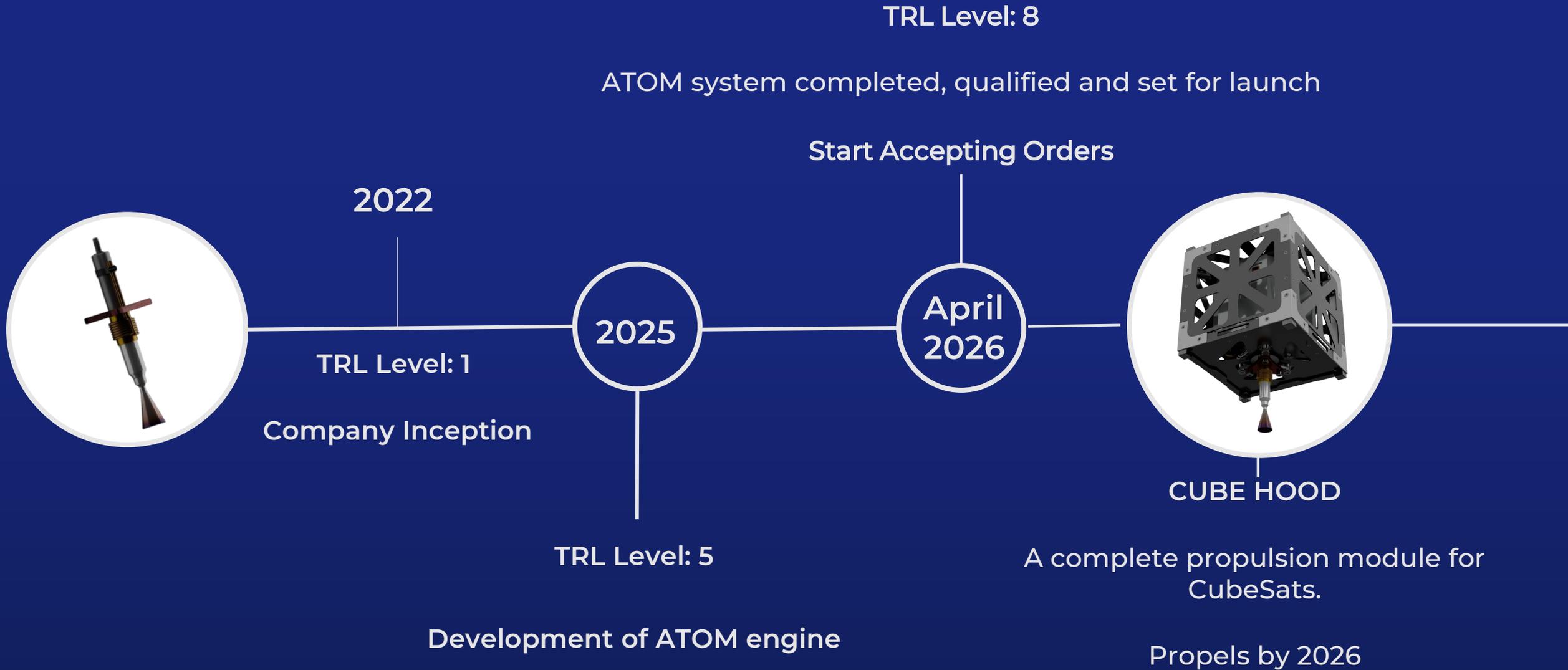
DBOT- AUTONOMOUS DOCKING MECHANISM WITH ROBOTIC ARM

SPECIFICATIONS



Parameter	Specification
Application	On-Orbit Servicing & Modular Assembly
Mounting	3U Satellite Platform
Degrees of Freedom	6 DOF
Payload Capacity	Up to 3 kg
Docking Interface	48 mm Diameter Mechanism
Sensors	IMU, Encoders, Force/Torque, Vision Camera
Accuracy	± 5 mm (position), $\pm 0.5^\circ$ (orientation)
Control Modes	Tele-operated / Semi-Autonomous / Autonomous
Power Consumption	3–120 W (Idle–Active)
Future Upgrade	Aruco Marker System for Visual Docking

ATOM - PRODUCT ROADMAP



Provide Propulsion Solutions for CubeSat

Enabling next-gen on-orbit refueling and servicing through intelligent propulsion and robotics.

3 Years

5 Years

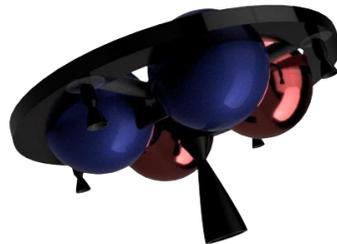
10 Years

Provide complete in-space propulsion solution



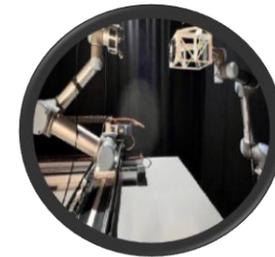
MOLECULE

Bi-propellant thruster for heavy satellite



SAT HOOD

A complete propulsion module for heavy satellites



Robotic Refueling

Performing autonomous docking using robotic arm and refuelling the satellite

VALUE PROPOSITION (SATELLITE THRUSTERS)



Customizable

Our thrusters can be customized according to the mission requirement.



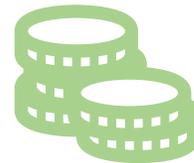
Greater Performance

Our propellants has lower crystallization point, higher density and volumetric impulse.



30X more Agile

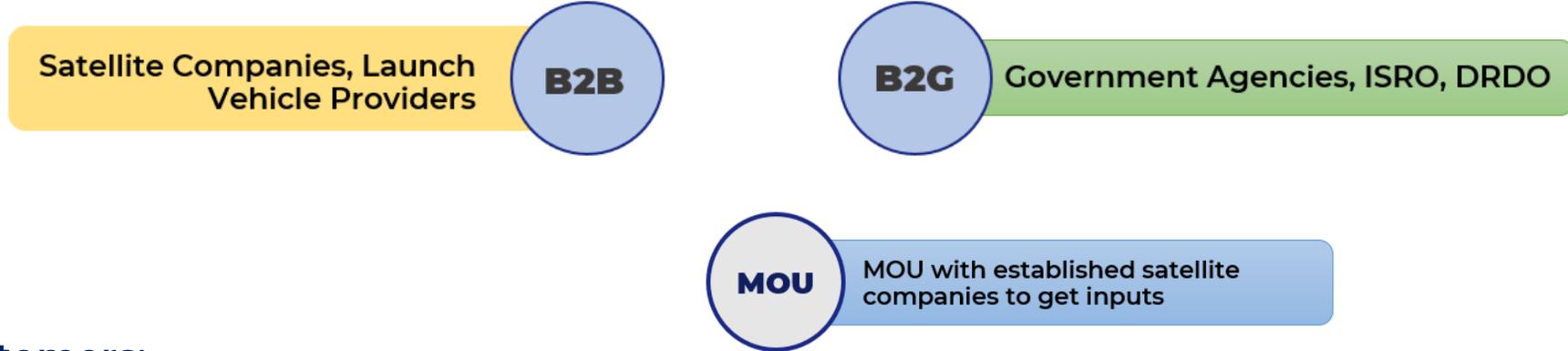
Agile System due to ability to produce higher thrust compared to Electric Propulsion.



Green & Affordable

Propellant is safe and nontoxic. So, Less infrastructural cost.

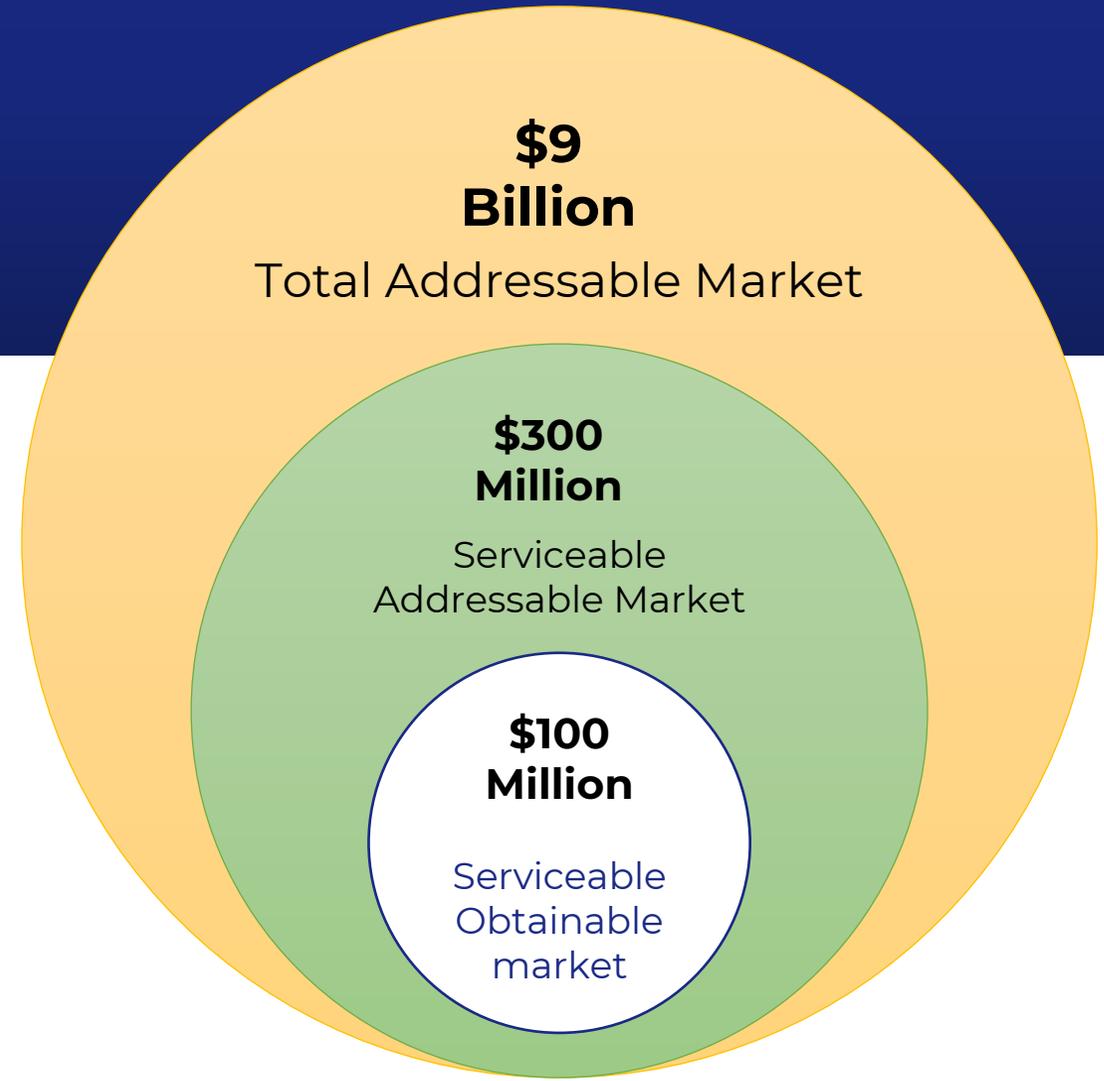
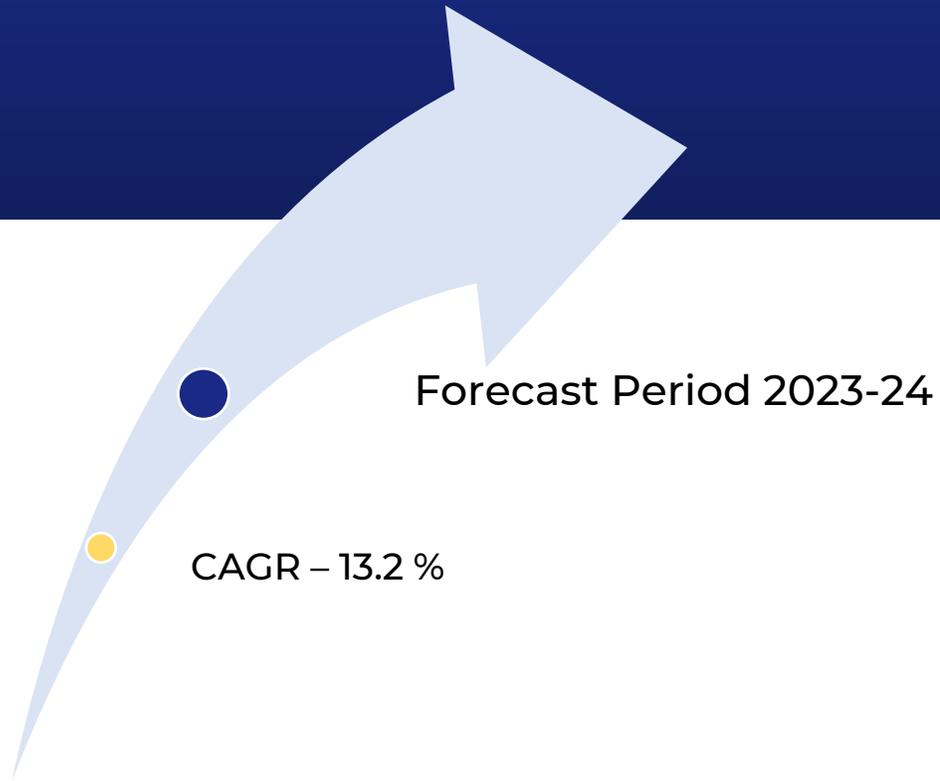
BUSINESS MODEL & PLAN



Potential Customers:



MARKET STUDY



COST STRUCTURE

Market



50K – 1000K US \$

1 U MODULE



60 – 80 K US \$



Our Price

40 – 45 K US \$

PROJECTED INCOME STATUS

SALES						
Product	Year 1	Year 2	Year 3	Explanation (Year 1)	Assumptions (Year 2)	Assumptions (Year 3)
SATHOOD (Qty)	1	3	7	Prototype delivery for qualification testing and demonstration. (L&T, Defence idex)	After first missions or prototypes succeed, orders increase, repeat customers, some export or institutional.	
SATHOOD (Selling Price)	₹ 4,00,00,000	44000000	48400000			
SATHOOD (Revenue)	₹ 4,00,00,000	₹ 13,20,00,000	₹ 33,88,00,000			
CUBEHOOD (Qty)	3	6	12	Pilot sales to early adopters and demonstration missions through startup partnerships. (HEX 20, Pixxel, Dhruva)	Post successful flight heritage; entering into small commercial orders and international collaborations.	
CUBEHOOD (Selling Price)	₹ 40,00,000	44000000	48400000			
CUBEHOOD (Revenue)	12000000	26400000	58080000			
OTHER PROJECTS (Qty)	4	7	10	Currently in discussion with partners for a gas generator for high-altitude balloons, a small rocket motor for UAVs, and a cold-gas thruster for rockets; steady growth is anticipated in Years 2 and 3 as these projects mature.		
OTHER PROJECTS (Avg Cost)	₹ 15,00,000	₹ 15,00,000	₹ 15,00,000			
OTHER PROJECTS (Revenue)	₹ 60,00,000	₹ 1,05,00,000	₹ 1,50,00,000			
Total Revenue	₹ 5,80,00,000	₹ 16,89,00,000	₹ 41,18,80,000			

Particulars (CUBEHOOD)	Cost
Tank	₹ 1,50,000
Valve	₹ 1,00,000
Avionics	₹ 6,00,000
Propellant (RH521,Catalust,N2)	₹ 1,00,000
Adaptors	₹ 1,00,000
Pressure Transducer	₹ 2,00,000
FVV & FDV	₹ 4,50,000
Feedlines and Filter	₹ 50,000
Thruster	₹ 2,50,000
Heater	₹ 3,00,000
Thermocouple and Heaters	₹ 1,00,000
Strucutre, Sheild and Insulation	₹ 1,60,000
Total	₹ 25,60,000

Total Cubehood	21
Total Sathood	11
Total Projects	21

ACHIVMENTS

- 2022- Selected as a finalist for SAIA (Sharjah Advanced Industry Accelerator)
- 2022- Got TANSEED Award of 10 Lakhs from Tamil Nadu Government.
- 2023- Selected for the Chunauti 5.0 Program.
- 2023- Received 10 Lakh INR grant from NIDHI.
- 2023- Secure 12.5 Lakh INR grant from SIL
- 2023- Dream Aerospace Ranked top 6 out of 200 Student startup from India in Together 4.0.
- 2024- Secure 3Cr INR funding from IPV (Inflection Point Ventures).
- 2023- Dream Aerospace awarded 1st position and cash prize on 1.25 Lakh INR at EUREKA IIT Bombay.
- 2023- Received Best Student Startup Award from Indian Mobile Congress 2023.

CERTIFICATE OF APPRECIATION



ACHIEVEMENTS

- Dream Aerospace attended the 76th International Astronautical Congress (IAC 2025) from 29th Sept – 3rd Oct 2025 in Sydney, Australia.
- Dream Aerospace Technologies successfully concluded participation in the Indian-ASEAN Scale-up 2025- a dynamic 3-day event hosted in Bali, Indonesia.
- 2024- Dream Aerospace Secures 1st Special Award at TGS 2024 - TiE Global Summit , Bangalore.
- 2024-25- Dream Aerospace Strengthens Ties with India's Top Defense Leaders Across Key Events.
- Selected for ISRO PIE programme for the Bi Propellant development



OUR TEAM

Leadership Team



Hari Krishnan KJ
(Co-Founder & CEO)



Rogith S
(Co-Founder & COO)



Rohit Nikam
VP

Technical Advisor



Srinivas Dharavat
Professor, IIT Kanpur



P Kanakaraju
Group Director,
LPSC ISRO



Dr. Abhijith Kushari
Professor, IIT Kanpur

Strategic Advisor



Dr. A. Sivathanu Pillai
Distinguished Scientist, Founder & Former
CEO BrahMos Aerospace

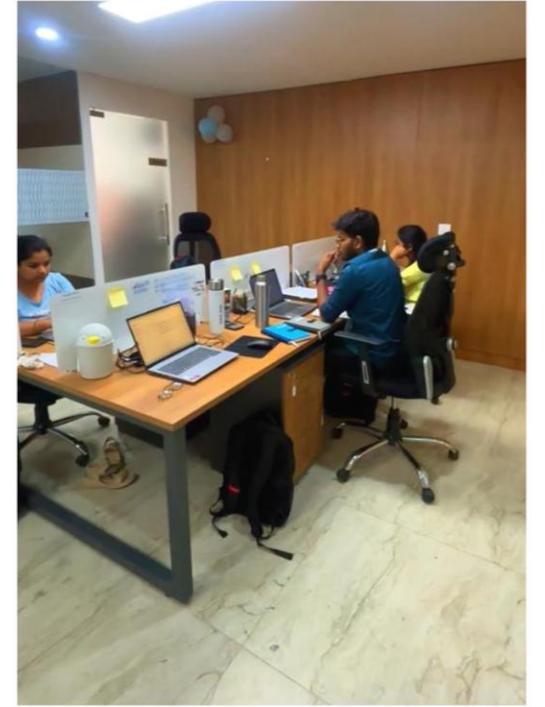
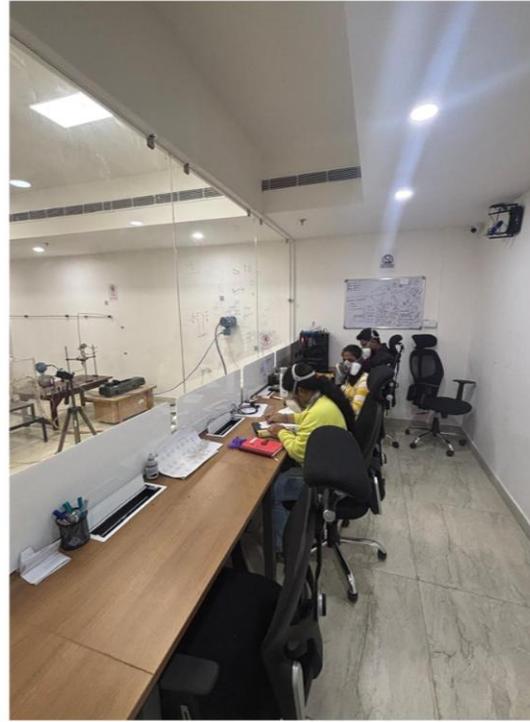


Dr. PV Venkitakrishnan
Prof Satish Dhawan Scientist,
Distinguished Scientist and Director (Rtd.)
ISRO HQ, Bangalore.

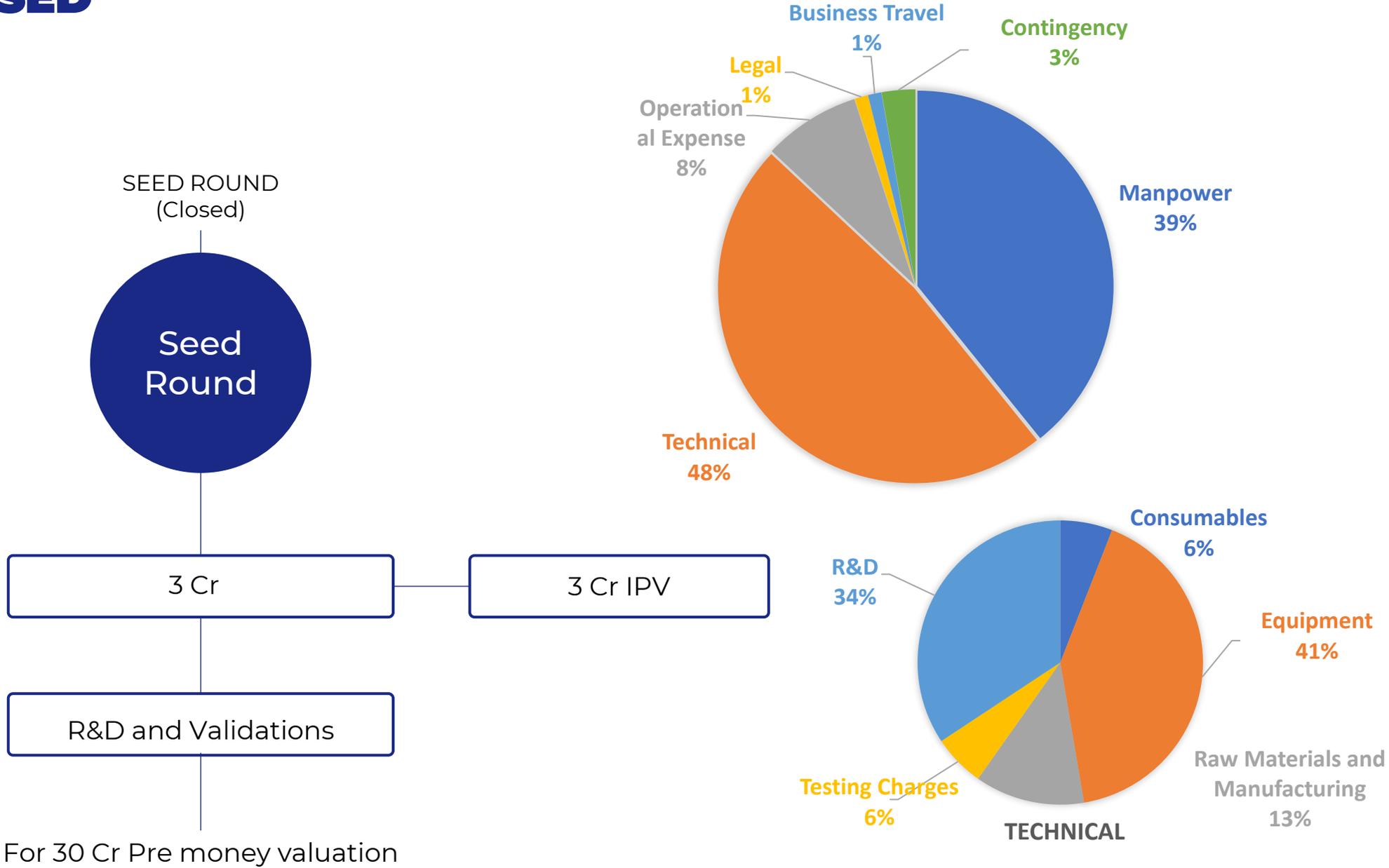
OUR TEAM



We are a team of 10 plus experienced professionals



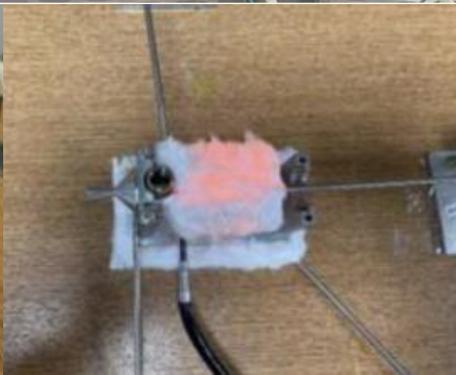
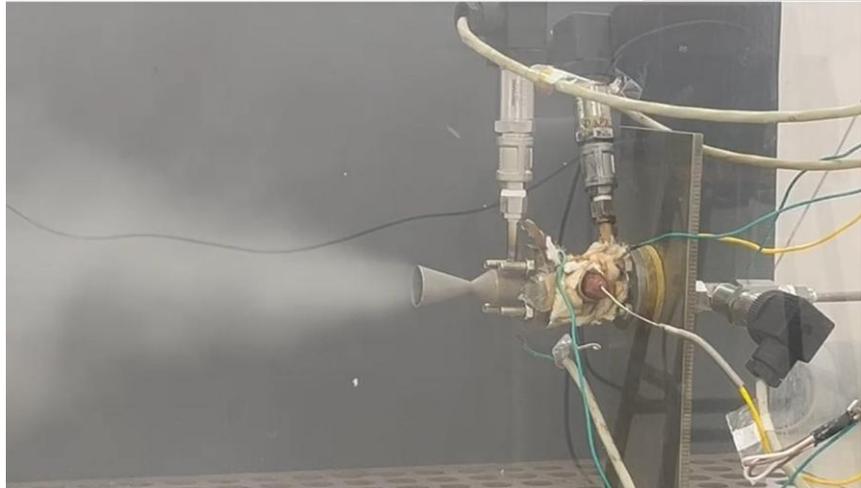
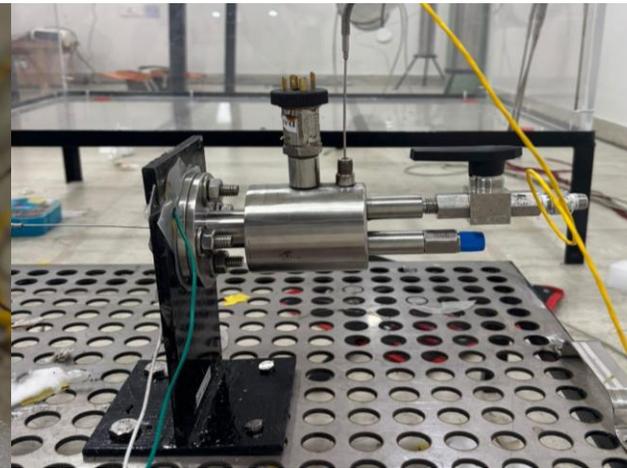
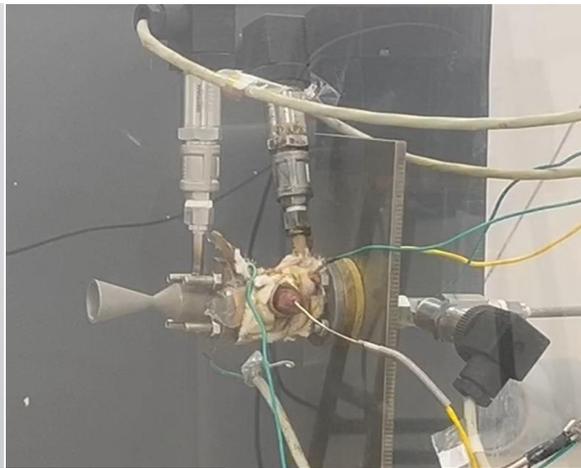
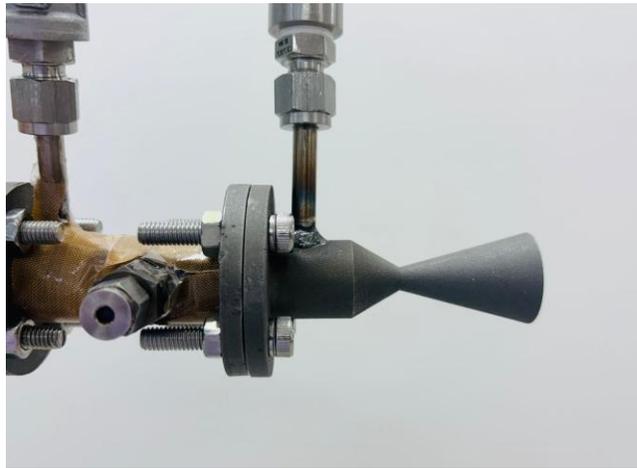
FUND RAISED



OUR NEW OFFICE & TESTING FACILITY AT IIT KANPUR



THRUSTER R&D HIGHLIGHTS



RECENT MILESTONE & STRATEGIC COLLABORATIONS

Dream Aerospace Technologies Pvt. Ltd. has signed an **MoU with IN-SPACE and ISRO** to advance the qualification and in-space validation of its **IN ATOM Thruster (CubeHood Module)**.

Through this collaboration, Dream Aerospace will conduct:

- **High Altitude Testing**
- **Vacuum Performance Testing**
- **Qualification Tests** to confirm flight readiness and reliability

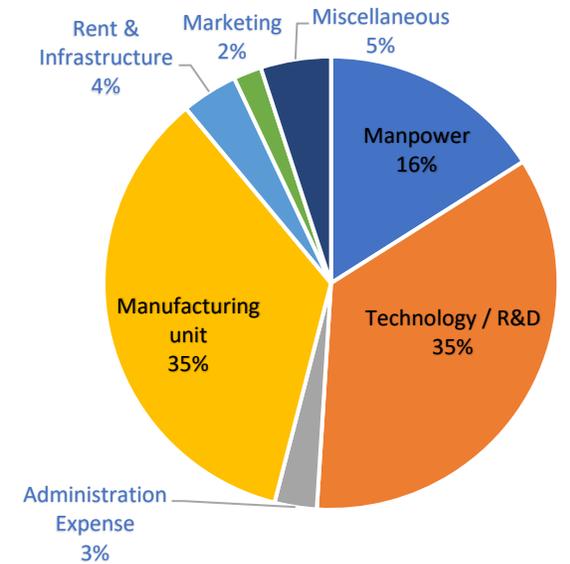
This partnership reinforces Dream Aerospace's commitment to **developing next-generation, eco-friendly propulsion systems for small satellites.**



Pre-Series
A

10 Cr INR

1. Dedicated satellite missions.
2. Building manufacturing unit.
3. Qualification of MOLECULE (bi-propellant thruster) for higher thrust options.
4. Market entry



THANK YOU

Address

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Kanpur, UP 208016

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8637635903

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