

# VICINITY SAFETY VIETNAM

Precision Fire Safety for High-Density Data Centers





# Presentation Outline

A roadmap of what we'll cover today:

01	02	03
<b>The Stakes (Slide 3)</b>	<b>The Problem &amp; Why Now (Slides 4-5)</b>	<b>Market Opportunity (Slide 6)</b>
Understanding the critical importance of modern data center safety.	Addressing the gap between compliance and electronic reality, driven by market changes.	Exploring the Total Addressable Market (TAM), Serviceable Available Market (SAM), and Serviceable Obtainable Market (SOM).
04	05	06
<b>The Solution: VFEP Technology (Slides 7-9)</b>	<b>System Advantages &amp; R&amp;D (Slides 10-12)</b>	<b>Business Traction &amp; Team (Slides 13-16)</b>
Introducing our innovative approach and how it works.	Highlighting our competitive edge and strategic research and development.	Showcasing our validation, key metrics, and the expertise behind Vicinity Safety Vietnam.
07		
<b>The Ask (Slide 17)</b>		
Our vision for the future and how you can be a part of it.		



# The Stakes

- 1 Secondary damage from suppression exceeds primary fire damage
- 2 Destroys irreplaceable electronics and causes massive downtime
- 3 High-density racks make traditional suppression unacceptable
- 4 Vicinity enables safe, rapid-scale data center protection



# Core Focus: Who We Are

## Data Center Safety Specialization

VFEP Technology resolves the conflict between fire safety compliance and electronics protection.

## Registered R&D Firm

Committed to innovation in energy efficiency and physical cybersecurity for critical infrastructure.

# The Problem: Compliance vs Electronics Reality

Operators face a compliance nightmare. Strict VTCVN fire safety regulations combined with high-density racks create a nightmare for DC solution providers.

## Traditional Sprinklers

Destroy servers and critical infrastructure

## Gas Systems

Slow, complex, and costly to retrofit

## The Contradiction

Regulations demand aggressive suppression while electronics demand zero collateral damage

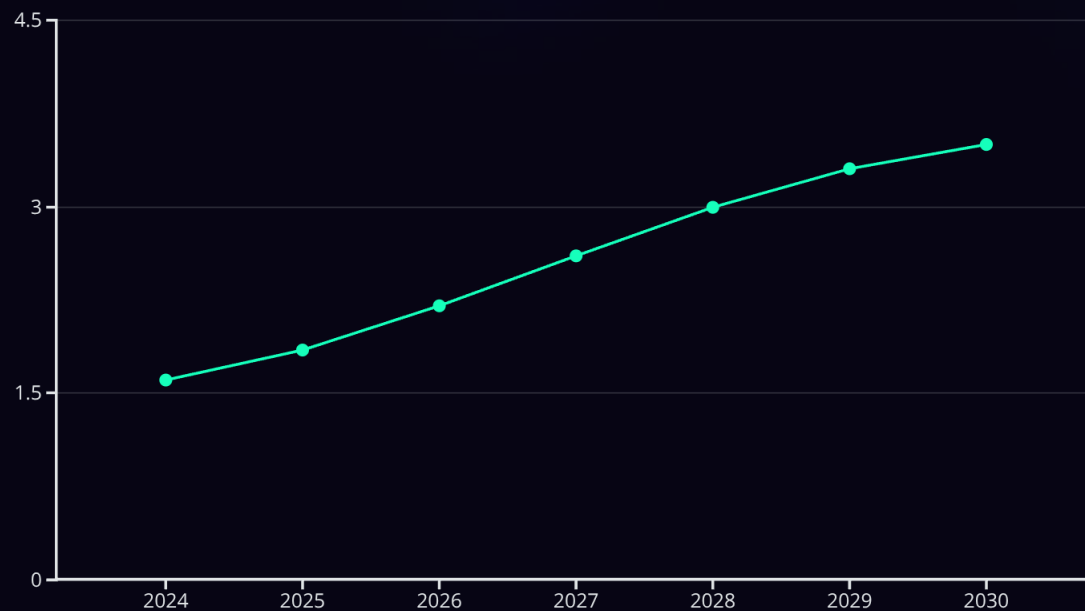


# Why Now: Perfect Storm of Market Drivers

Convergence of 15% CAGR DC growth and new regulatory pressure creates urgent demand.

## Key Drivers:

July 1, 2025: Decree 105/2025 New Fire Safety Law takes effect. 74.8% of fires are electrical (VN Fire Dept 2024). Market doubling to \$3.5B by 2030. Government strategy includes cost-reduction mandate: hiring local R&D (Vicinity) to replace costly imports.



# Market Dynamics

## ① Compliance Nightmare

Strict TCVN regulations +  
high-density racks =  
operational challenges

## ② Vietnam's Digital Surge

Cloud, AI, and fintech drive  
urgent demand for DC safety  
solutions

## ③ Mandatory Upgrades

New law + growth =  
immediate safety  
infrastructure improvements  
required

# Market Opportunity: TAM / SAM / SOM

Vietnam DC Fire Safety Market (2025 + 50% accessibility discount)

Metric	Low Range	Base Case	High Range
TAM	\$1.6M	\$4.2M	\$1.1B
SAM	\$0.24M	\$0.90M	\$2.23M
SOM	\$0.52M	\$0.80M	\$2.5M

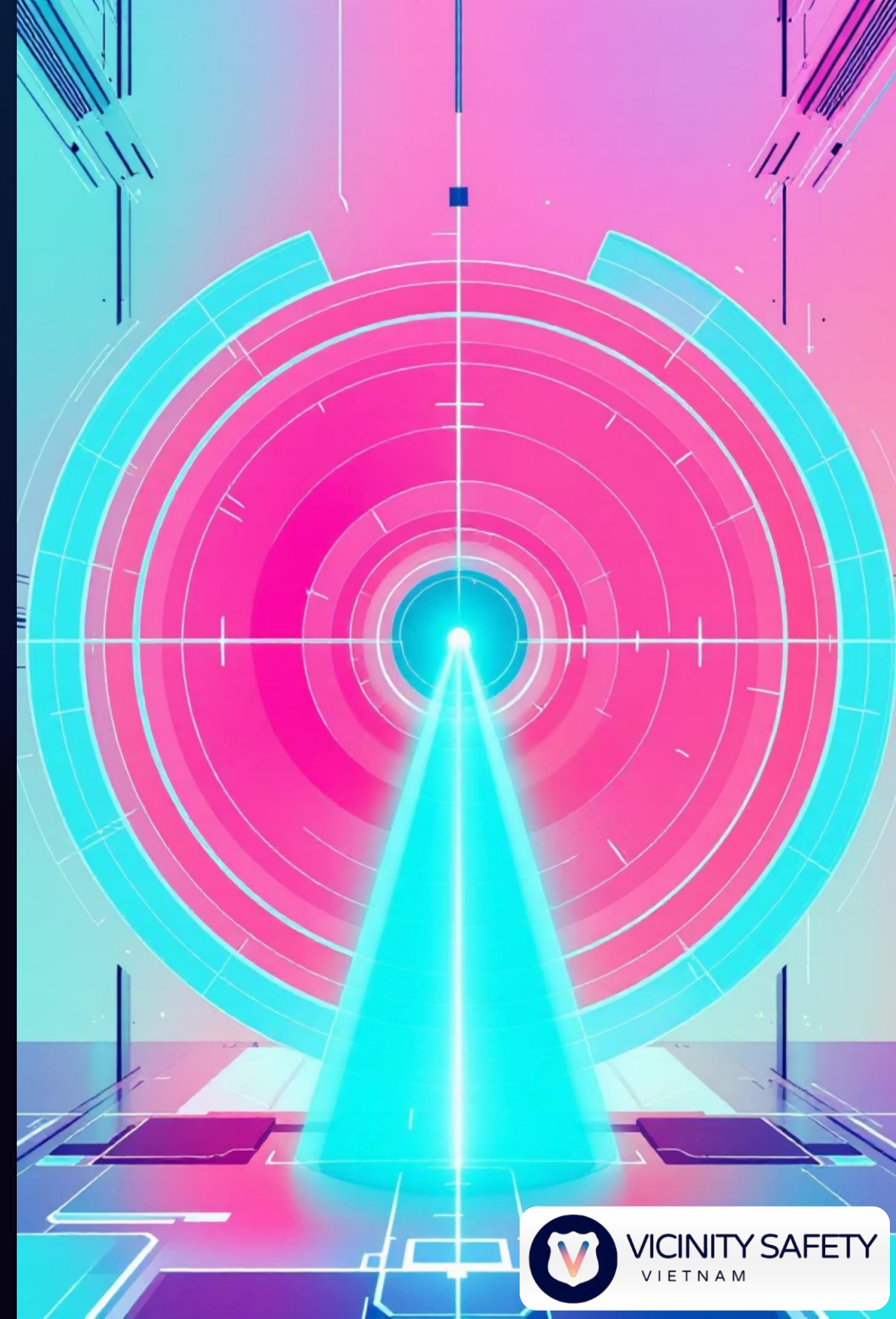
**Notes:** TAM = total DC fire safety spend. SAM = upgrade-eligible × accessible 50% margin. SOM = obtainable in 2–3 years via partners (5% margin). **Assumptions:** CapEx \$4–\$200–450M+; fire share 0.8–1.8%; upgrade-eligible 8.0–35%; 50% discount for competition/policy risk; SOM horizon 2025–2027.



The Key Insight

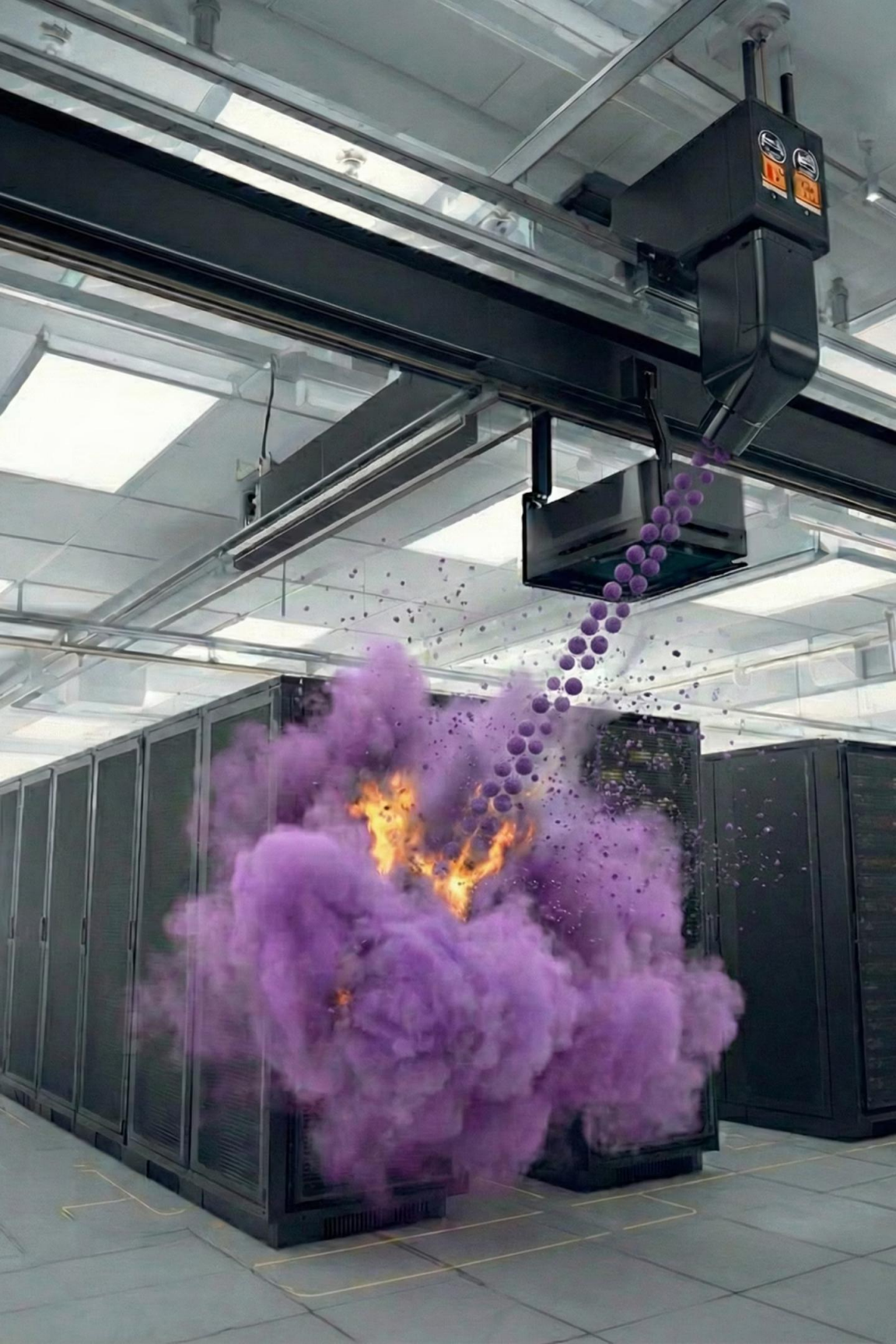
We don't need  
heavy suppression  
— we need  
effective **instant**  
and **precision**

Traditional blanket systems solve fire but kill electronics. Data center safety needs aerospace-grade precision heat targeting that meets compliance without collateral destruction or mass deployment.



VICINITY SAFETY  
VIETNAM





# The Solution: VFEP Technology

VFEP (Vacuum Fire Extinguishant Projectile) Technology is purpose-built for data centers. Resolves the conflict between strict fire safety compliance and protecting sensitive electronics with precision, government-aligned suppression.

# How VFEP Works: Core Technology

## Autonomous Rail System + Zero-Damage Projectile

01

### Autonomous Ceiling-Mounted Rail

Rapid, precise heat targeting with X-Axis navigation for immediate response

02

### Zero-Damage Projectile

Shatters on impact to create suppression cloud without collateral damage

03

### Precision Response

Targets heat source directly, minimizing downtime and maximizing speed



# System Advantages

## Agent Composition + Chemical Suppression

Purple-K dry chemical, non-corrosive and safe for electronics. Prevents water damage that can bankrupt data centers.

## Precision Overhead Rail Deployment

Faster, safer extinction with minimal collateral impact and rapid heat response.

## Electronics-Safe Suppression

Zero water damage, no corrosion, no secondary destruction. Meets compliance while protecting infrastructure.

# Competitive Reality / Traditional Limitations

## Water Sprinklers

Destroy servers and critical infrastructure. Secondary damage exceeds primary fire damage, causing massive downtime and financial loss.

## Gas Systems

Complex, costly to retrofit, and slow to deploy. Require extensive infrastructure changes and ongoing maintenance complexity.

## VFEP Advantage

Precision suppression safe for electronics while meeting strict compliance. Zero collateral damage, rapid deployment, and minimal operational disruption.

# Lean Business Canvas

Our "asset-light" model focuses on solving urgent, real-world problems with intellectual property (IP), not massive manufacturing capital (CAPEX).

## 1. Problems



- Secondary damage (from water/gas) is greater than the initial fire damage to equipment.
- Lithium-ion Battery Risk: Uncontrollable thermal runaway fires.
- Traditional suppression systems are slow and imprecise.

## 2. Solution



- Firefighting Bullet-VFEV® Projectile System.
- Ultra-fine, non-corrosive Potassium Bicarbonate (Purple K) agent.
- AI-driven precision targeting software.

## 3. Unique Value Proposition (UVP)



- "Micro" suppression: Affects only the fire source, no need for evacuation/shutdown.
- Non-corrosive and non-conductive, safe for electronics.
- Royalty-free government license, creating a market for OEM partners.

## 4. Unfair Advantage



- Patented design and manufacturing process (IP House).
- Proprietary agent formulation for optimal performance.
- Asset-light business model enabling high profit margins.

## 5. Customer Segments



- Large Industrial Fire Suppression OEMs / System Integrators (Licensing Partners).
- Government/Defense (Royalty-free user, Market-maker).
- Data Center & Battery Storage (UPS/ESS) Owners.

## 6. Channels



- Direct licensing to major OEMs and fire safety contractors.
- R&D partnerships with Defense/Aerospace firms.
- International fire safety tech expos and conferences.

## 7. Key Metrics



- Number of Patents & IPs filed/granted.
- Number of Active Licensing Deals.
- Gross Margin > 70%.
- Achieving certification (e.g., TCVN, UL) for MVP.

## 8. Cost Structure



- R&D and Prototyping costs in Vietnam.
- Global IP Filing/Protection costs (Singapore).
- High-caliber Engineering Personnel costs.

## 9. Revenue Streams



- Technology Licensing Fees (Upfront NRE).
- Royalty Payments: Recurring percentage per system unit sold by partners.
- Technical Support/Consulting Contracts.



# Cost Structure

## IP & Testing Investment

Heavy R&D investment in  
VFEP technology  
development and compliance  
validation

## Low Manufacturing Costs

Efficient production and  
supply chain optimization  
minimize per-unit expenses

## Partner Integration

Seamless integration with  
partner service packages  
maximizes value delivery

# Strategic R&D & IP Market Leverage

Our strategic presence across Vietnam, Singapore, and global markets is designed to optimize R&D, secure intellectual property, and maximize market reach.

## Vietnam: R&D & Consulting Hub

- Cost-efficient prototyping (~70% savings vs US)
- High-skill engineering talent
- Rapid iteration cycles
- Access to Southeast Asian manufacturing

## Singapore: IP Holding HQ

- Robust global IP protection laws
- 0% capital gains tax advantages
- Trusted by US/EU investors for stability
- Frictionless licensing environment

## Global Market: Licensing & Sales

- B2G & B2B licensing opportunities
- Targeting aerospace & defense sectors
- High-margin royalty streams
- Joint Development Agreements (JDAs) for market footholds

This integrated structure allows Vicinity to conduct efficient R&D in Vietnam while accruing significant value and protecting innovation through its Singapore IP entity, positioning us for global leadership.



# Business Traction & Validation

## HUTECH Research Partnership

Secured a laboratory research partnership with Vietnamese University (HUTECH) for agent testing, validation, and academic publication, establishing foundational credibility.

## Live Demonstrations Completed

Certified demonstrations at PCCC training centers effectively showcase the VFEP system's capabilities to key stakeholders and regulatory bodies.

## Pilot Program Data Validation

Thermal sensor data from local server room pilots rigorously validates system performance and drives iterative refinements based on real-world operational conditions.

## Innovation Award & Grant

Won a prestigious innovation competition, securing additional grant funding that reduces capital requirements and accelerates our commercialization timeline.

## Industry Benchmarking

Rigorous benchmarking against FAA, TCVN, and international data center standards ensures our system meets and exceeds industry-leading performance and safety requirements.



# Key Metrics

Our progress is measurable through key indicators that demonstrate both our intellectual property strength and strategic partnerships.

## Patents & IP Protection

Patents granted and filed secure our innovative VFEP technology, creating a strong barrier to entry and enabling future market expansion.

## Joint Development Agreements (JDAs)

Signed JDAs represent strategic collaborations, fostering shared value creation and aligning us with key industry players for accelerated development and market integration.



# Intangible Assets

Government relations and patents are rare and inimitable assets that establish strong competitive advantage and unlock official adoption pathways.

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## Strong Government Relations

Our established relationships with Vietnamese regulatory bodies facilitate compliance, smooth market entry, and official adoption, significantly de-risking our operations.

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## Robust Patent Portfolio

Securing intellectual property for VFEP technology creates a formidable barrier to entry for competitors and guarantees our market exclusivity and future licensing opportunities.

# Team, Workforce Development, and Hiring Narrative

Our commitment to talent extends beyond traditional hiring, focusing on cultivating a skilled workforce and fostering innovation from within Vietnam and globally.



## High-Value R&D Jobs

Vicinity creates impactful R&D roles in Vietnam, attracting individuals passionate about space and deep tech innovation.



## Ability Over Credentials

We prioritize demonstrated skills and capability, believing practical talent is more valuable than formal degrees.



## Future Engineer Training

We empower Vietnamese engineers to build world-class safety deep tech through real lab work, prototypes, and pilot projects.



## Local Talent Pipeline

We actively nurture a specialized talent pipeline within Vietnam, ensuring sustainable growth and expertise.




## Global Talent Attraction

We attract highly skilled individuals worldwide to contribute to Vicinity Safety's mission and technological advancements.




# Founder & The Ask

At the helm is **Karina Nguyen**, a visionary leader whose expertise spans technical excellence, humanitarian mission, and entrepreneurial drive, ensuring our solutions meet "space-grade standards" for Earth's critical digital infrastructure.




### NASA Minds Award Winner

Recognized for innovative thinking and problem-solving at the highest levels of technological challenge.



### Red Cross Leader

Demonstrated strong leadership in critical humanitarian efforts, highlighting a commitment to impact and reliability.

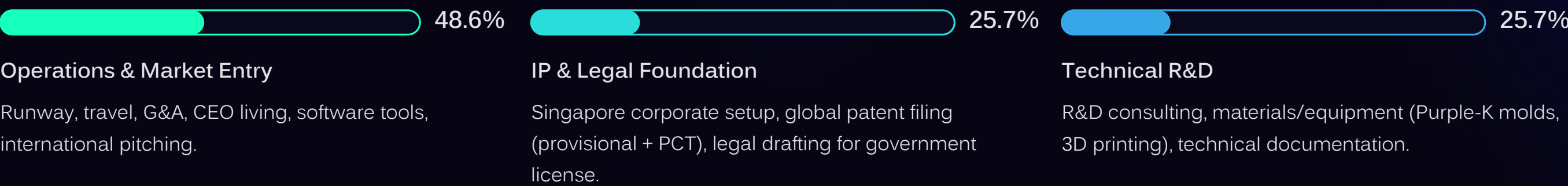


### "Space-Grade Standards"

Applying rigorous aerospace engineering principles to ensure unparalleled reliability and safety in all solutions.

## The Ask: \$70,000 Pre-Seed Investment

We are seeking **\$70,000** for a **20% equity stake** to secure critical runway, develop our IP foundation, and accelerate technical R&D over the next 6 months, creating a "Launch-Ready As



This investment will finalize our prototype, prepare for certification, establish a strong IP moat, and drive initial licensing traction in Vietnam with significant global aerospace/defense expansion potential.