



# PwC Challenge 7.0

# ClimateX: Global Expansion Strategy

A Strategic Roadmap for Market Entry into India

SUBMITTED BY  
RAZEEN P H

## The Problem

**Objective:** Recommend the optimal market for ClimateX's first major international expansion and outline a strategic roadmap

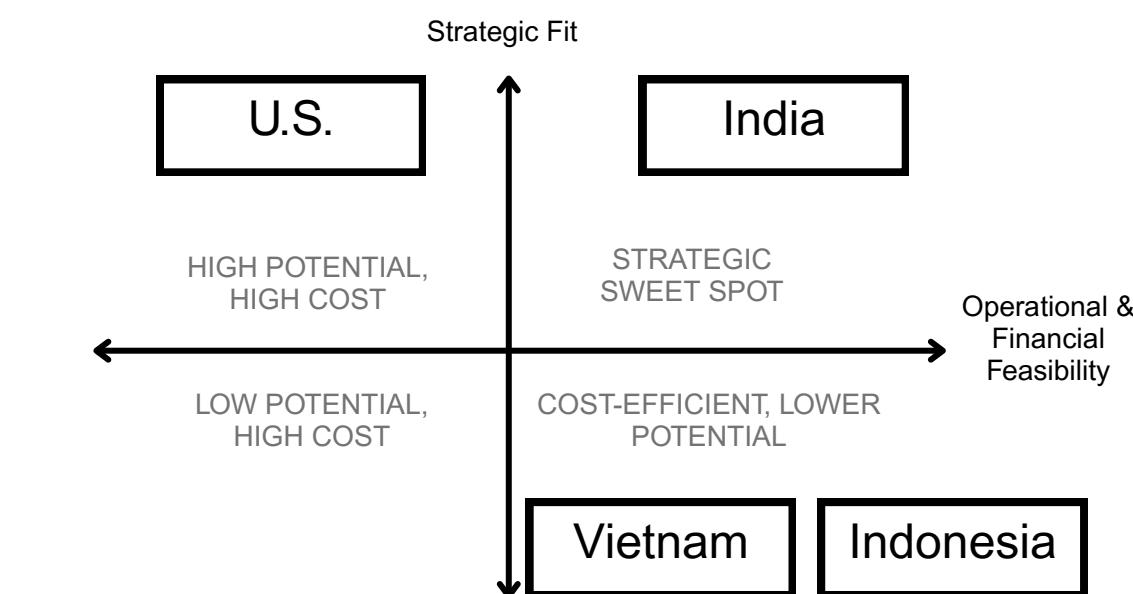
## The Answer

### Core Recommendation

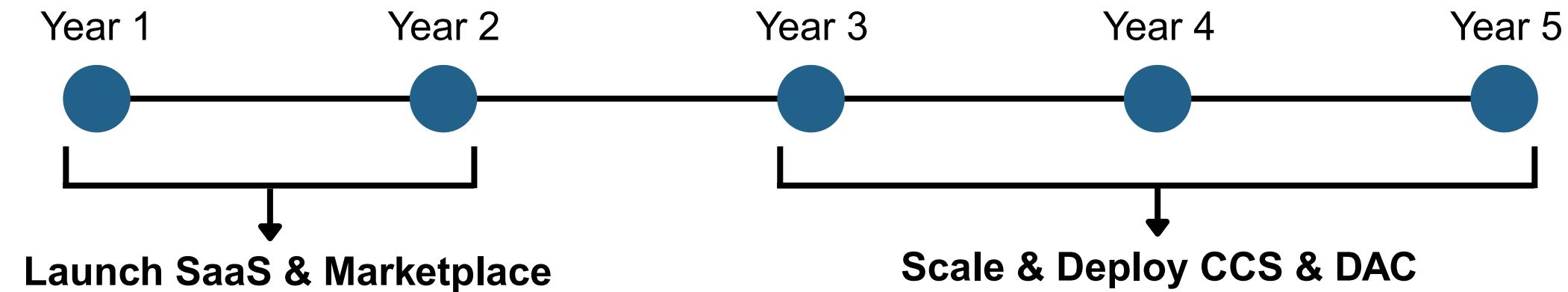
Prioritize India for our first international expansion

### Key Rationale

- Fastest-growing climate tech market in APAC (20.9% CAGR)
- Low CapEx/OpEx and a strong domestic supply chain for key components
- Access to a large, cost-effective talent pool (1M engineers/year)



## The Plan



## Financial Outlook

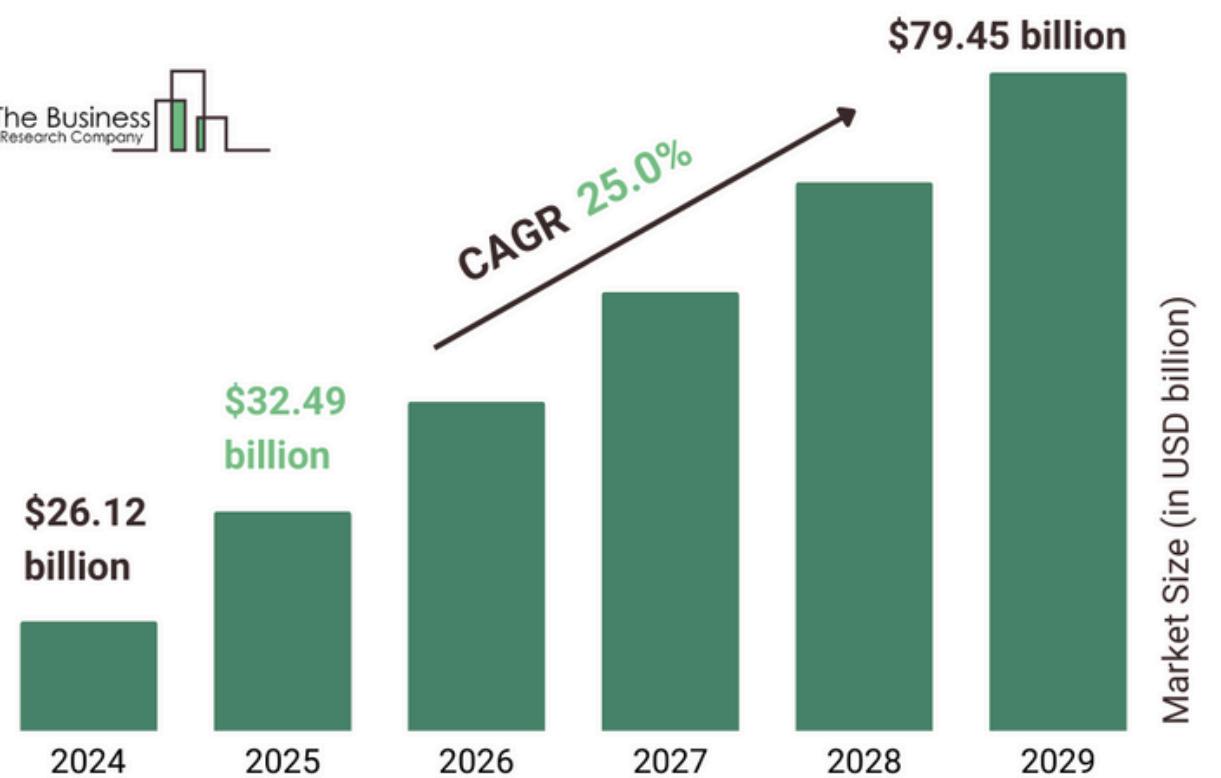
Use \$60M funding to cover initial losses

Unit Economics:  
Carbon Price > OpEx

**Path to Profitability**  
Our 5-year forecast shows profitability by Year 4



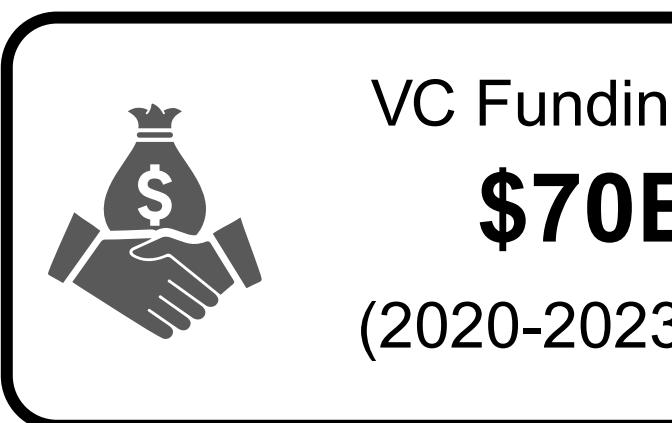
## Climate Tech Global Market Report 2025



The Climate Tech industry is booming, but regulations in the APAC region are still evolving, creating a "greenfield" opportunity.

## Key Players

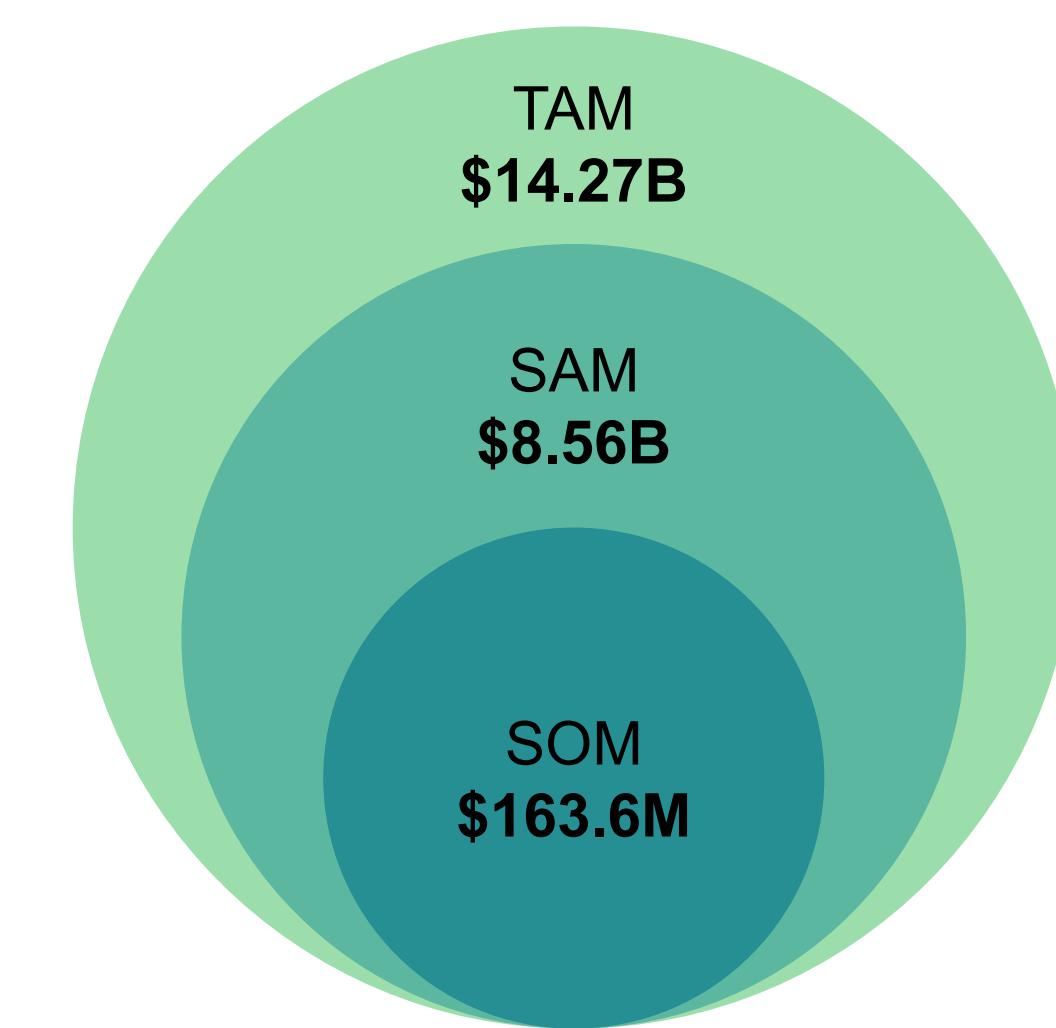
(focussed in  
US/Europe)



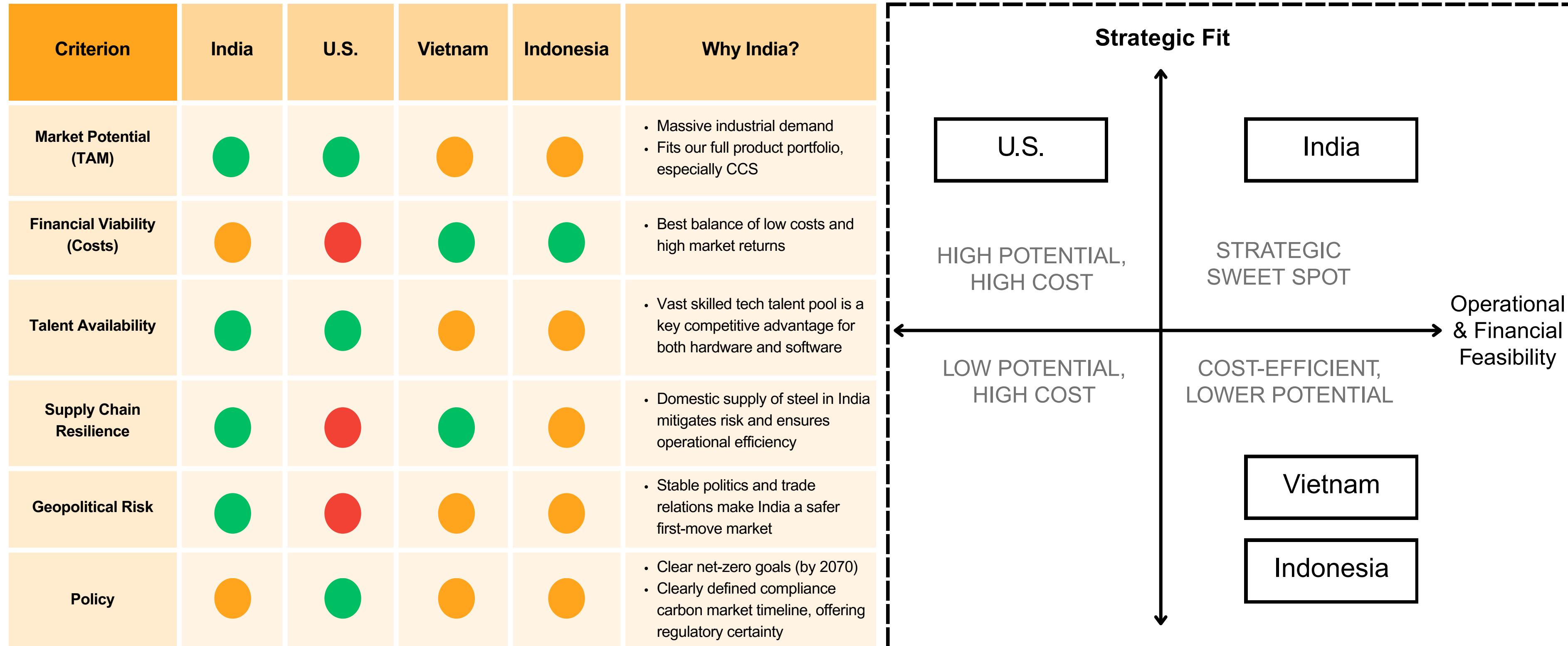
**Driven by:**  
Net-zero commitments  
Regulatory mandates

**GHG Sub-sectors:**  

- Emissions Verification
- CCS
- DAC
- Carbon Marketplaces



# Market Prioritization Framework



## The Macro View

**P**

Pro-business policies  
& "Make in India"

**E**

Low-cost talent  
& Low CapEx

**S**

Rising corporate ESG  
commitments

**T**

Large, skilled tech  
talent pool

**E**

Need to reduce emissions  
in heavy industries

**L**

Emerging compliance  
carbon market

## The Industry View

**Buyers (High)**  
Clients demand high-integrity  
solutions

**Suppliers (Medium)**  
Diversified sourcing, especially for  
steel, mitigates power

**Rivalry (High)**  
Crowded market with significant VC  
funding

**New Entrants (High)**  
High for SaaS, low for hardware

**Substitutes (High)**  
Many alternatives exist; our focus  
is on hard-to-abate sectors

## Our Strategic Position

- Dual-track product portfolio
- Domestic supply chain for steel

- Geopolitical risks in other regions
- Talent scarcity

**S****W****T****O**

- High CapEx for hardware
- Competition from local SaaS players

- First-mover advantage in a nascent regulatory market

## Market Requirements

### Measurement & Reporting



## ClimateX Product Portfolio

### VeriScope™ EVaaS

Measure and track how much GHG an organization emits



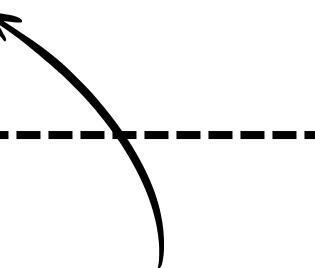
### CaptureLink™ CCS

Captures CO2 from industrial sources and power plants



### AtmosCore™ DAC

Removes CO2 directly from the atmosphere



### OffsetX™ Marketplace

Carbon credits are traded to reduce GHG emissions

**Hardware + SaaS synergy**



*Full-spectrum decarbonization partner*

## Why It Fits

### SaaS-First Approach

- Generate revenue with low CapEx
- India's high tech adoption
- Growing ESG mandates

### Policy-Driven Hardware

- CCTS (Compliance Carbon Trading Scheme)
- Policies - key driver for CCS

### Monetization & Financing

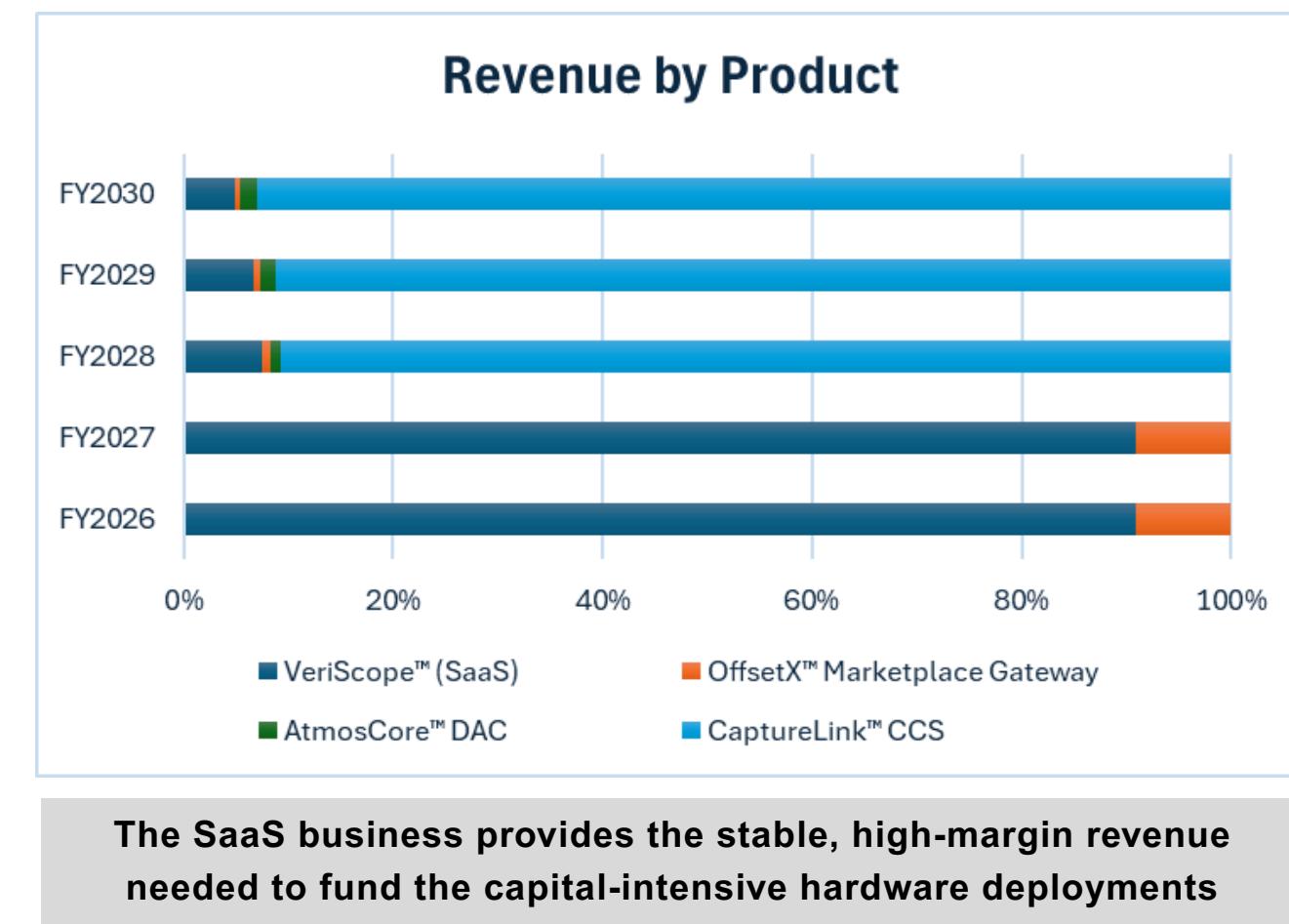
- Rising ESG bond market in India
- Potential financing avenue

## 5-Year Financial Projections (Values in \$M)

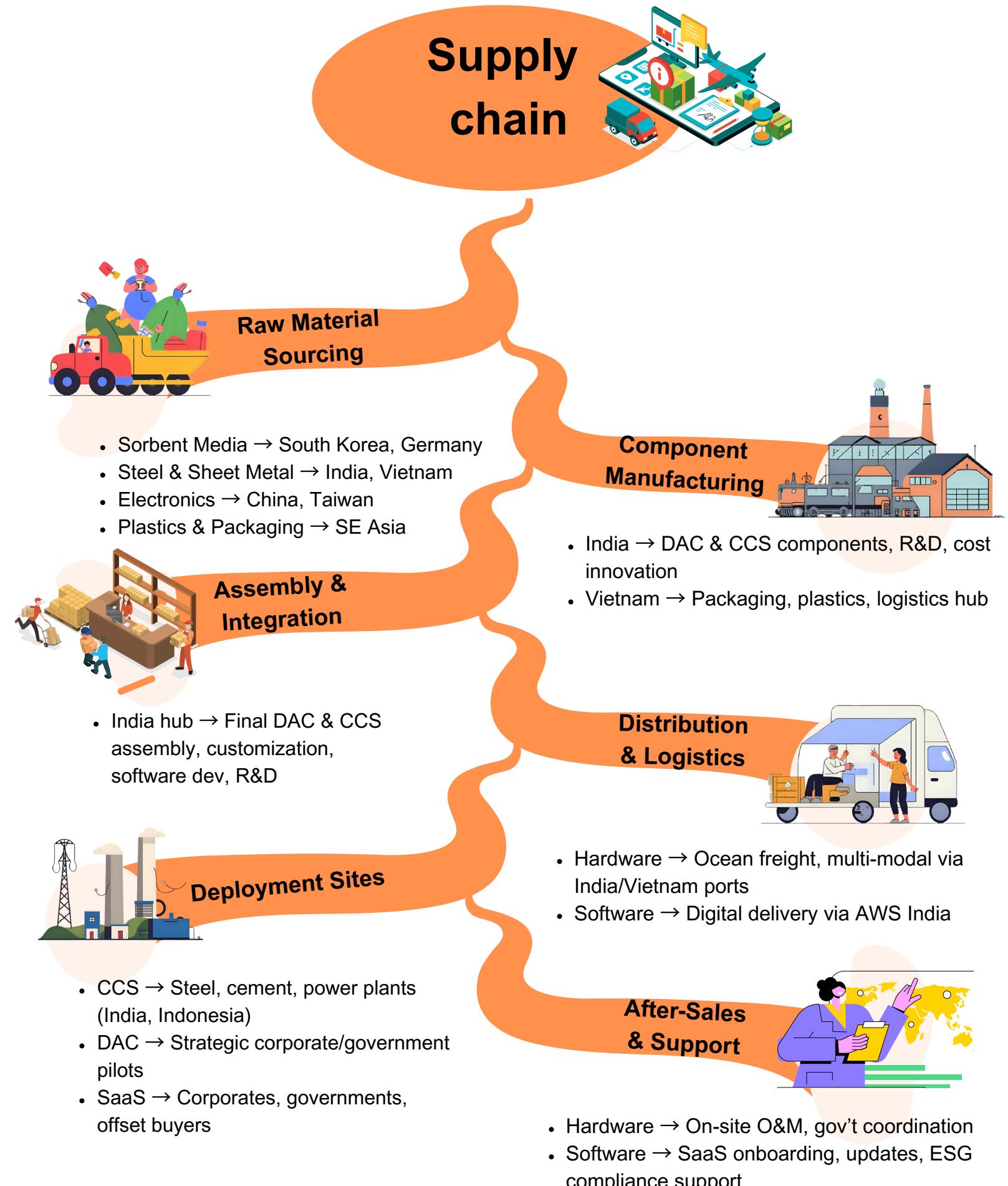
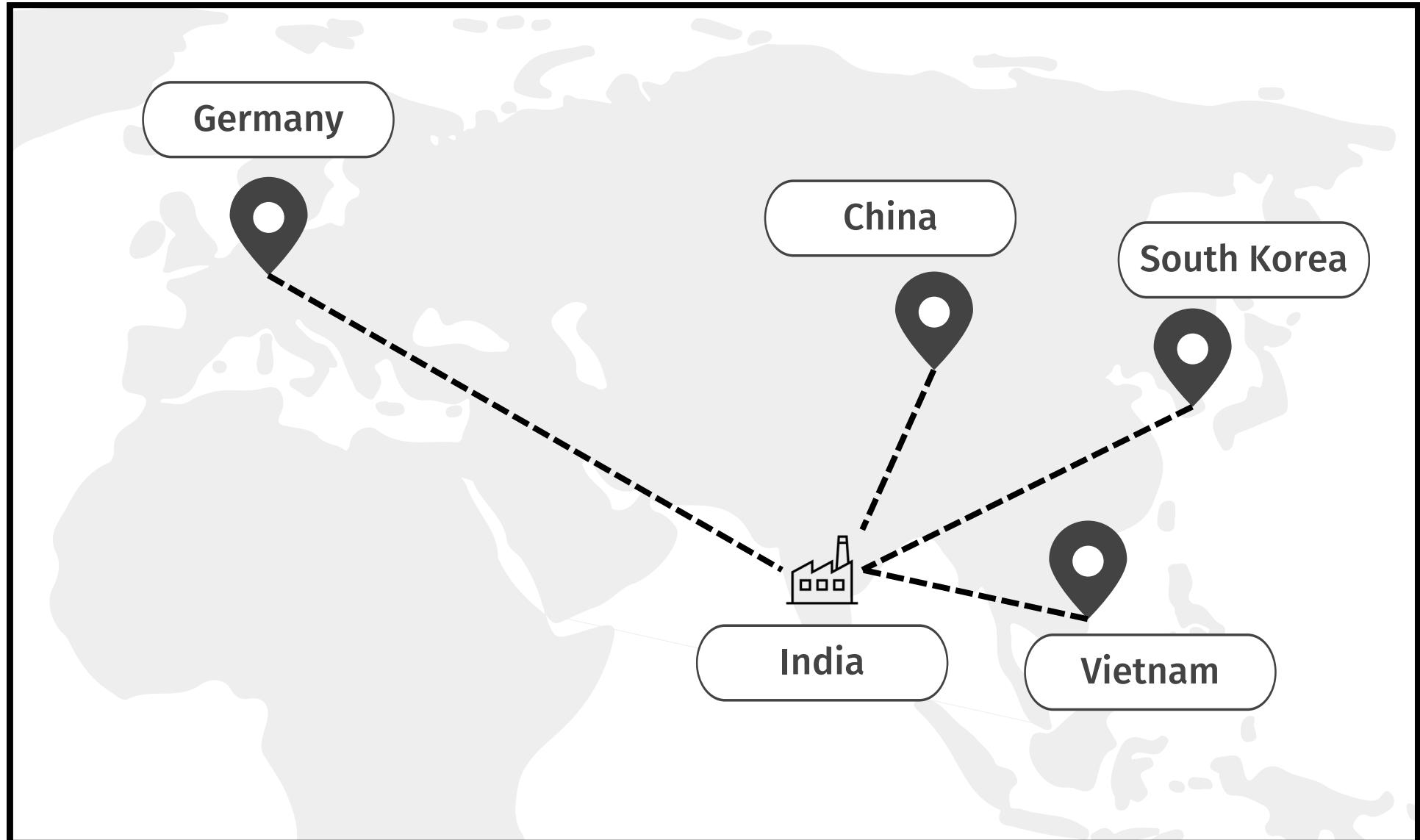
Metric	FY2026	FY2027	FY2028	FY2029	FY2030
<b>Total Revenue</b>	0.17	0.35	8.75	18.27	37.65
VeriScope™ EVaaS	0.15	0.32	0.66	1.22	1.82
OffsetX™ Marketplace	0.02	0.03	0.07	0.12	0.18
CaptureLink™ CCS	0	0	7.94	16.67	35.01
AtmosCore™ DAC	0	0	0.08	0.26	0.64
<b>Total Capital Expenditure (CapEx)</b>	0	0	17.5	18.75	37.5
DAC Unit CapEx	0	0	1.25	2.5	5
CCS Unit CapEx	0	0	16.25	16.25	32.5
<b>Total Operating Expenditure (OpEx)</b>	0	0	6.91	13.89	27.85
DAC OpEx	0	0	0.07	0.21	0.49
CCS OpEx	0	0	6.84	13.68	27.36
G&A/Other Overheads	0.8	1.11	1.98	2.36	2.76
<b>Net Profit/Loss (EBITDA)</b>	-0.64	-0.76	-0.15	2.02	7.04
<b>Cumulative Cash Flow (from \$60M)</b>	59.37	58.6	40.96	24.22	-6.24



ClimateX becomes profitable by Year 4



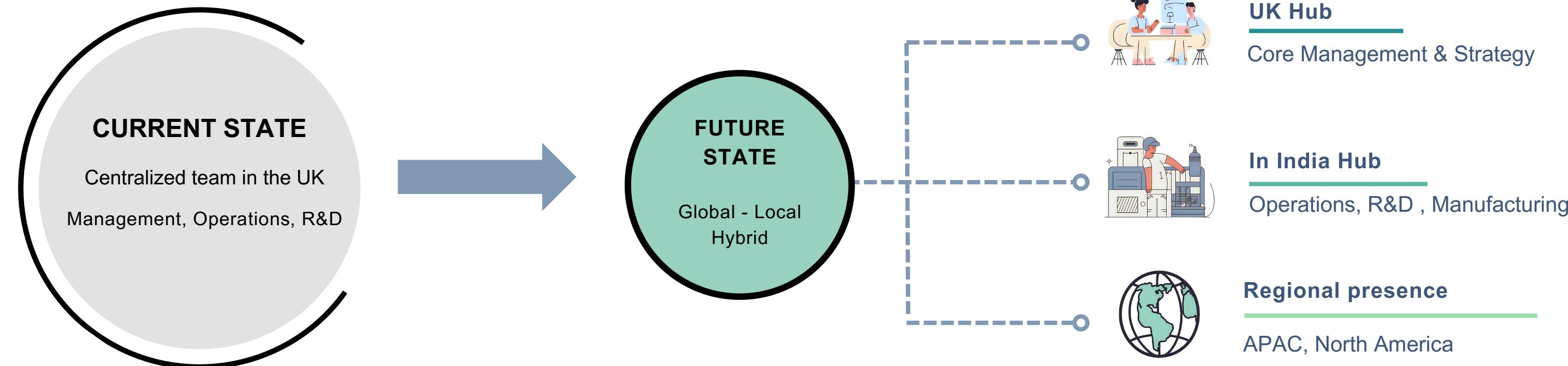
# Strategic Hubs & Sourcing



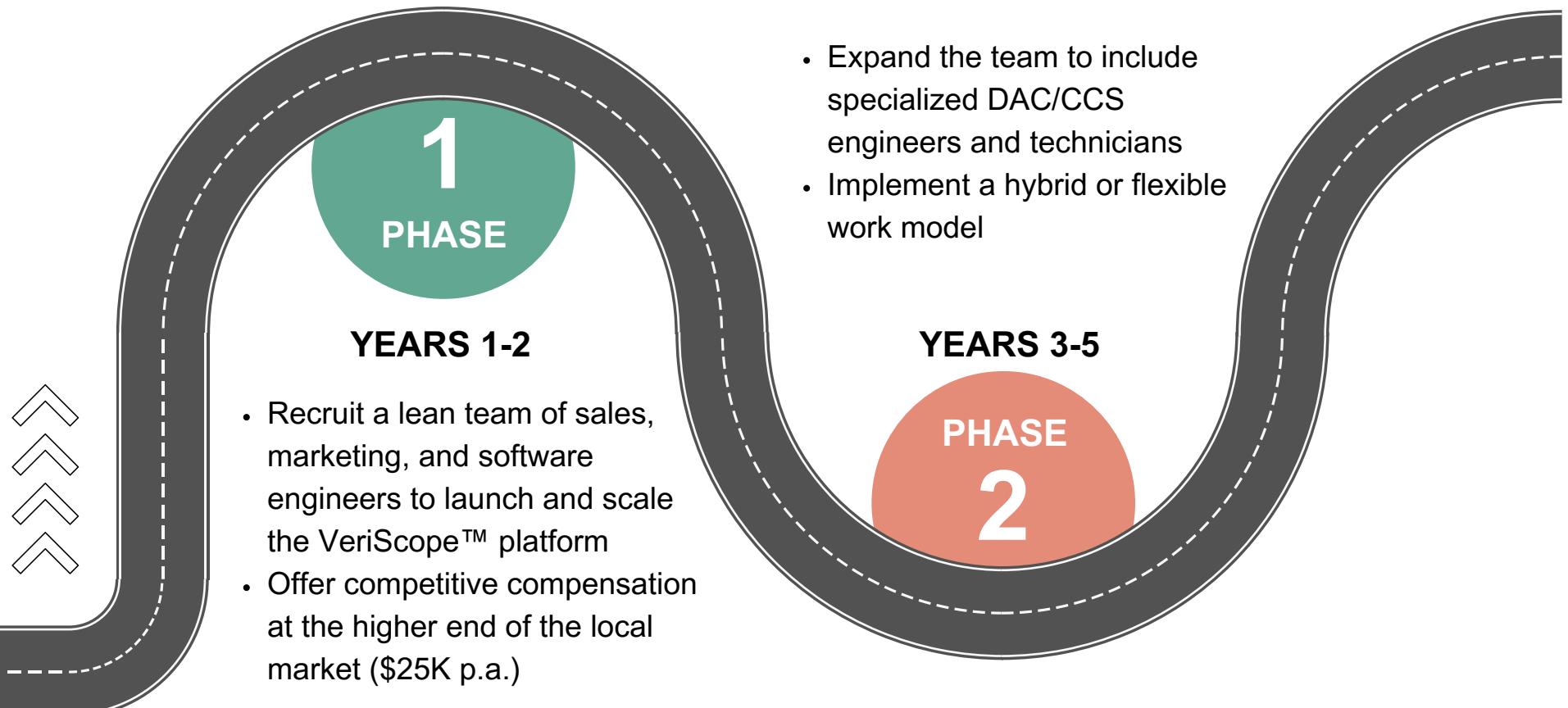
## Risk Mitigation

- Geopolitical Risk:** Mitigated by our dual-hub model and domestic supply chain for steel
- Supply Chain Risk:** Diversifying suppliers for key components like sorbent media and electronics

## ORGANIZATIONAL MODEL



## HIRING & RETENTION ROADMAP



## KEY HR METRICS

- Attrition Rate:** Track monthly and quarterly attrition rates to identify and address issues. (Icon: Bar chart with arrow)
- Employee Engagement:** Conduct regular surveys to gauge employee satisfaction and well-being. (Icon: Two hands clasped)
- Time-to-Hire:** Monitor the efficiency of the hiring process for different roles. (Icon: Sign reading "NOW HIRING")

## Product Portfolio

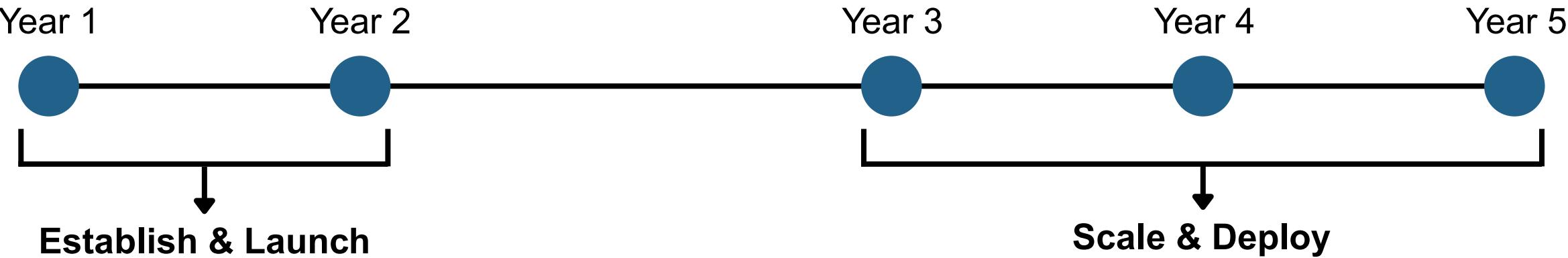
### VeriScope™ (SaaS)

- Lead product for initial market entry
- Scalable, digital emissions verification platform
- Low deployment costs
- Can quickly generate revenue
- Build ClimateX's brand presence with a wide client base

### AtmosCore™ DAC & CaptureLink™ CCS (Hardware)

- Long-term growth drivers
- Capital-intensive solution
- Target: India's growing steel and cement sectors
- Low CapEx (\$16.25M) in India
- Availability of low-cost energy, water, labour

## Market Entry Strategy & Roadmap



## GTM Channels

- Digital marketing
- Direct sales to large corporations' sustainability officers

- Strategic partnerships and joint ventures with industrial clients in power, steel and cement

## Pricing Strategy

### Annual subscription fee

- Essential Tier (for mid-sized companies): \$10,000 - \$15,000 per year
- Enterprise Tier (for large corporations): \$40,000 - \$60,000 per year

### Long-term "carbon removal-as-a-service" agreements with a fixed price per ton of CO<sub>2</sub>

- DAC: \$800 - \$1000 per year
- CCS: \$1000 - \$1250 per year

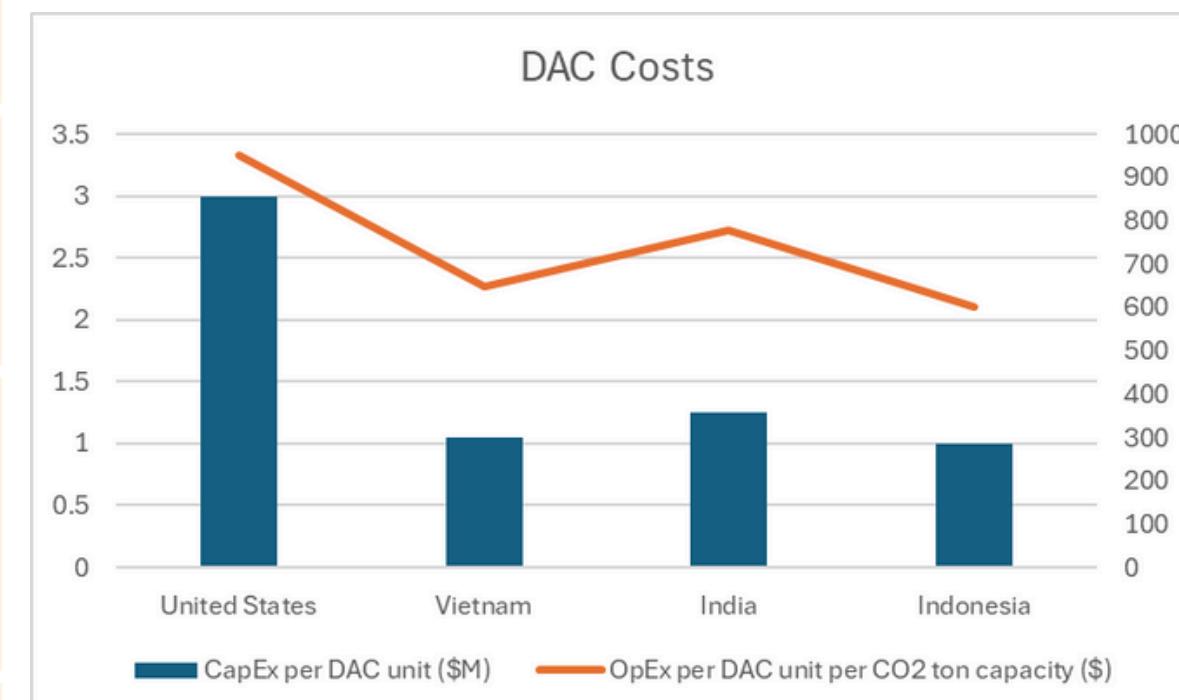
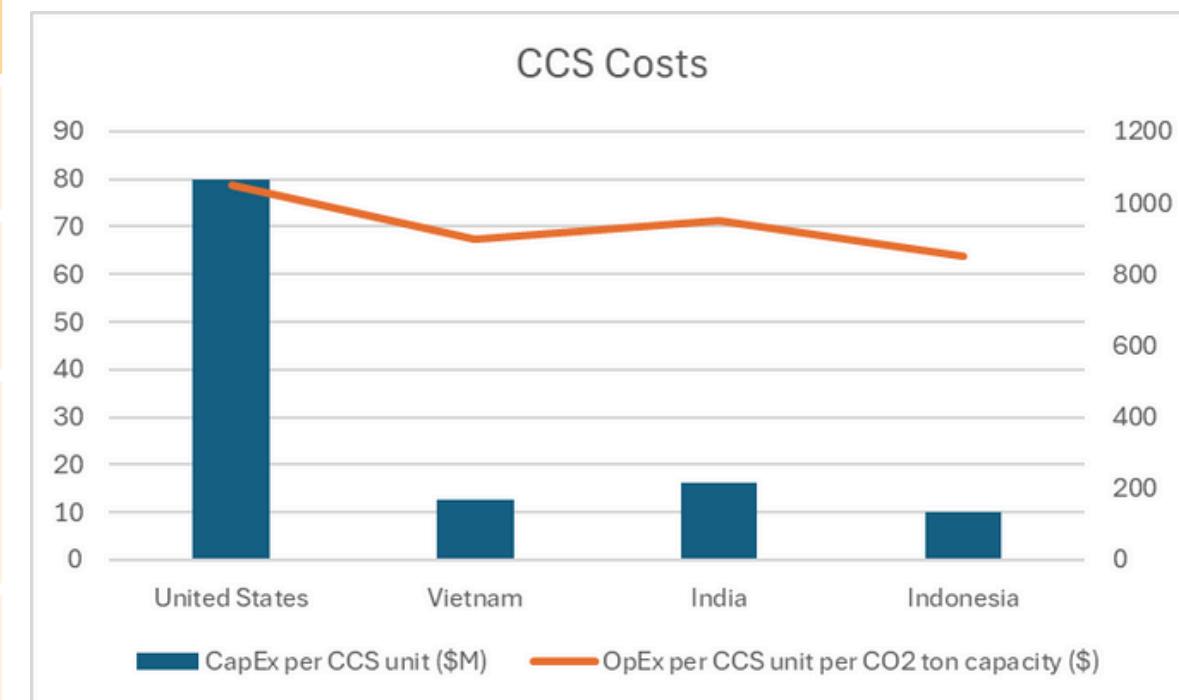
## KPIs to Track

- Number of VeriScope™ clients
- Lead generation for hardware projects

- Number of Hardware unit deployments
- Total CO<sub>2</sub> captured (tons)
- Project profitability

# APPENDIX

Criterion	India	U.S.	Vietnam	Indonesia
<b>Population (approx.)</b>	≈1.43B	≈342M	≈100M	≈279M
<b>2022 CO<sub>2</sub> Emissions (approx.)</b>	2.69 Gt	4.85 Gt	0.33 Gt	0.69 Gt
<b>Climate Tech Market Growth (CAGR 2025-2030)</b>	Fastest in APAC (20.9%)	North America (25.19% for US)	Promising, nascent	Digital economy (19.44%) , RE (21.44%)
<b>Voluntary Carbon Market by 2030</b>	\$1.158B (38.4% CAGR)	\$95.4B (44.8% CAGR)	Nascent, \$2-4/ton current	\$384.8M (37.3% CAGR)
<b>Compliance Carbon Market Status</b>	CCTS operational by 2026	Mature (e.g., RGGI, CA Cap-and-Trade)	ETS pilot Aug 2025, full by 2029	IDX Carbon launched Sep 2023 , carbon tax 2025
<b>Key Policy Stance</b>	Net-zero 2070; Draft carbon-market regs; CCTS operational by 2026	Net-zero by 2050 , IRA subsidies (\$85-\$180/t 45Q)	Net-zero by 2050 , JETP , ETS pilot 2025	Net-zero by 2050 (accelerated) , JETP , Carbon tax/ETS rolling out
<b>Supply Chain/Trade Risks</b>	Regulatory complexity, power infrastructure limits , US tariffs (potential 50%)	Geopolitical (China tariffs) , policy shifts , non-tariff attacks	Smaller market size, reliance on imported inputs , US tariffs (20-40%)	Deforestation emissions , policy uncertainty , local content requirements
<b>Key Risks</b>	Regulatory complexity, power infrastructure limits	Geopolitical (China tariffs), policy shifts	Smaller market size, reliance on imported inputs	Deforestation/land-use emissions, policy uncertainty



## PESTEL ANALYSIS

	Political	Economic	Social	Technological	Environmental	Legal
India	<ul style="list-style-type: none"> <li>Push for 'Make in India' and sustainability goals, including an official net-zero target by 2050.</li> <li>National CCUS Mission being developed to provide policy and regulatory frameworks for scaling CCS.</li> </ul>	<ul style="list-style-type: none"> <li>The voluntary carbon market in India is projected for substantial growth, expected to reach \$1.158 billion by 2030 with a 38.4% CAGR.</li> </ul>	<ul style="list-style-type: none"> <li>There is growing public and corporate awareness of climate change, alongside rising ESG commitments, supported by regulations like SEBI's BRSR Core framework.</li> </ul>	<ul style="list-style-type: none"> <li>India possesses a vast, highly skilled tech talent pool, producing approximately 1.0 million engineering graduates per year.</li> </ul>	<ul style="list-style-type: none"> <li>India is the third-largest GHG emitter globally (approximately 2.69 Gt in 2022), with significant emissions from hard-to-abate sectors like steel, cement, and power generation.</li> </ul>	<ul style="list-style-type: none"> <li>Draft carbon-market regulations are in progress, with the CCTS to be fully operational by 2026.</li> <li>Growing corporate-disclosure regulations provide opportunities for SaaS.</li> </ul>
Vietnam	<ul style="list-style-type: none"> <li>Committed to net-zero by 2050 and has signed a Just Energy Transition Partnership (JETP) for coal phase-out.</li> </ul>	<ul style="list-style-type: none"> <li>Offers cheapest unit economics for DAC (OpEx ≈\$650/ton) and lower CapEx/OpEx for DAC/CCS.</li> <li>Faces U.S. tariffs (initially up to 46%, reduced to 20%).</li> </ul>	<ul style="list-style-type: none"> <li>Increasing public awareness of air pollution and climate impacts, especially in urban centers.</li> <li>Government-led environmental campaigns and school-level sustainability education</li> </ul>	<ul style="list-style-type: none"> <li>Produces over 100K engineering graduates per year.</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions were approximately 0.33 Gt in 2022.</li> </ul>	<ul style="list-style-type: none"> <li>Work visa processing takes approximately 4 months.</li> </ul>
Indonesia	<ul style="list-style-type: none"> <li>Plans net-zero by 2050 and aims to retire coal plants by ~2039.</li> <li>A carbon tax/ETS is being rolled out, and a Presidential regulation No. 14/2024 on CCS was enacted in January 2024.</li> </ul>	<ul style="list-style-type: none"> <li>Offers cheapest DAC unit economics (OpEx ≈\$600/ton) and lower CapEx/OpEx for DAC/CCS compared to India.</li> <li>Average compensation is around \$18K per annum.</li> </ul>	<ul style="list-style-type: none"> <li>Rising societal concern over deforestation, peatland fires, and their health impacts.</li> <li>Strong community-driven initiatives for renewable energy and coastal protection.</li> </ul>	<ul style="list-style-type: none"> <li>Produces over 100K engineering graduates per year.</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions were approximately 0.69 Gt in 2022.</li> <li>Significant deforestation and land-use emissions (≈1 GtCO<sub>2</sub>/yr).</li> </ul>	<ul style="list-style-type: none"> <li>Work visa processing takes approximately 5 months.</li> <li>Faces policy uncertainty despite new commitments.</li> <li>Has local content requirements.</li> </ul>
U.S.	<ul style="list-style-type: none"> <li>Offers strong incentives through the IRA, including \$85–\$180/ton tax credits under 45Q for carbon capture.</li> <li>However, it presents high regulatory and supply-chain risk due to trade tensions and tariffs.</li> </ul>	<ul style="list-style-type: none"> <li>The climate tech market is the largest globally (37% share in 2024)</li> </ul>	<ul style="list-style-type: none"> <li>High consumer and corporate demand for carbon-neutral products and services.</li> <li>Widespread climate activism and NGO engagement influencing corporate strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Graduates approximately 250K engineers per year.</li> <li>Possesses a strong R&amp;D ecosystem.</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions were approximately 4.85 Gt in 2022.</li> </ul>	<ul style="list-style-type: none"> <li>Work visa processing takes approximately 6 months.</li> <li>Faces geopolitical risks (e.g., China tariffs).</li> </ul>

### Bargaining power of Buyers

**High**

- High-Value Investments: Clients are making multi-million-dollar, long-term investments and will demand rigorous due diligence and favorable terms.
- Price Sensitivity: The economics of these projects are often dependent on policy support and tax credits, giving buyers strong leverage to negotiate prices.
- Focus on Differentiation: ClimateX must overcome this by highlighting its VeriScope™ platform, which provides verifiable and high-integrity solutions that justify a premium price.

### Bargaining power of Suppliers

**Medium**

- Specialized Materials: Suppliers of key components like sorbent media hold some power due to the specialized nature of their products.
- Commodity Materials: This power is mitigated for commodity inputs like structural steel, which can be sourced from multiple locations (India and Vietnam).
- Strategic Sourcing: ClimateX's plan to build a hub in India allows it to leverage a domestic supply chain, reducing supplier power and logistical risks.

### Threat of New Entrants

**Medium to High**

- High for software: The SaaS market for emissions verification has lower barriers, as digital platforms can be developed and scaled more quickly with less initial capital.
- Low for hardware: High capital requirements, complex technology, and significant regulatory hurdles create a strong barrier to entry for new DAC and CCS players.

### Threat of Substitutes

**High**

- Range of Solutions: The market is filled with substitutes for decarbonization, including renewable energy, green hydrogen, and carbon offset marketplaces.
- Internal Competition: ClimateX's own OffsetX™ gateway is a direct substitute, as it offers a different way for companies to meet their net-zero goals.
- Strategic Positioning: ClimateX must position its DAC and CCS solutions as essential for "hard-to-abate" industrial emissions where other methods are not viable.

### Competitive Rivalry

**High**

- Crowded Market: The climate tech industry is in a high-growth phase, with over \$70 billion in venture capital invested, attracting numerous well-funded competitors.
- Key Players: Major players like Climeworks and 1PointFive (Occidental) are already established in the DAC and CCS spaces.
- Talent Scarcity: Fierce competition for specialized engineers and technical talent also contributes to high rivalry.

## PRODUCT PORTFOLIO ASSESSMENT &amp; FUTURE STRATEGY BY MARKET

Product	India	Vietnam	Indonesia	U.S.
VeriScope™ (SaaS)	Huge ESG reporting push via SEBI's BRSR mandate; scalable to 1,000+ firms	Limited demand, low maturity	Emerging demand, low digital readiness	Strong ESG culture; saturated MRV space
AtmosCore™ DAC	Low-cost manufacturing; \$1.25M/unit CapEx; growing climate finance	Cheaper CapEx, but lower domestic demand	Low CapEx; weak infra to support DAC	Advanced infra but high CapEx (\$3M)
CaptureLink™ CCS	Huge demand from steel, cement, and power; India aims net-zero 2070	Lacks large-scale industrial base	Emerging CCS interest (esp. coal plants)	Strong but highly competitive market
OffsetX™	Growing carbon credit ecosystem (Energy Act 2022)	Low current demand	Under development	Mature offset markets, but regulated heavily

## MARKET ENTRY STRATEGY FOR CLIMATEX IN INDIA

Principle	Approach
Low-Cost Entry + Fast Revenue	Launch VeriScope™ early to gain brand visibility and monetization
Local Manufacturing Advantage	Set up hardware production in India (low CapEx/OpEx)
Target Hard-to-Abate Sectors	Focus on steel, cement, power – where DAC/CCS is most viable
De-Risked CapEx	Phase manufacturing based on demand; use modular units
Partnership-Driven Deployment	Leverage local EPC firms, corporates, and climate finance channels

## MARKET ENTRY ROADMAP

### Year 1–2: Market Validation & Pilot

- Open India HQ & R&D center in Pune/Gurgaon.
- Build primary assembly plant for CCS/DAC modules in Gujarat.
- Deploy 2 CCS pilots (steel, cement) + 1 DAC pilot in metro city.
- Start SaaS onboarding for 10 industrial clients.

### Year 2–3: Commercial Rollout

- Scale CCS to 5 major industrial clusters.
- Expand DAC installations to 3 metro regions.
- Launch OffsetX™ marketplace targeting Indian voluntary credit buyers.

### Year 3–4: Scale-up

- Double manufacturing capacity.
- Expand SaaS client base to 50+ companies.
- Begin exports of India-made DAC modules to SEA markets.

### Year 4–5: Market Leadership

- 20+ industrial CCS deployments, 10+ DAC urban hubs.
- SaaS market share leader in India for MRV compliance.
- Begin local R&D on low-energy sorbent materials.

## KEY PLAYERS

Segment	Company	HQ	Core Focus	Notable Projects / Strengths	Relevance to ClimateX (India Focus)
DAC – Direct Air Capture	Climeworks	Switzerland	Modular solid-sorbent DAC + MRV	Orca & Mammoth plants; premium removal pricing; high MRV standards	Benchmark for MRV integration & premium pricing positioning
	Carbon Engineering / 1PointFive	Canada / USA	Large-scale liquid-solvent DAC	Backed by Occidental; large-scale Texas plant; cost target ~\$100/t (long-term)	Model for JV with industrial/fossil partners in India
	Heirloom	USA	Mineralization DAC	Limestone-based capture; lower energy	Shows alternative low-cost tech pathways
	Global Thermostat	USA	Sorbent-based DAC	Early mover; scaling challenges	Competitive tech in DAC space
	Carbfix	Iceland	DAC + in-situ mineral storage	Permanent storage in basalt formations	Demonstrates DAC+storage integration
Industrial CCS	Carbon Clean	India–UK	Low-cost CCS for industry	Tata Steel blast furnace CCS; Global Innovation Centre in Navi Mumbai	Direct competitor in India industrial CCS
	Aker Carbon Capture	Norway	Amine-based CCS	Multiple EU projects; modular Just Catch units	Model for scalable industrial CCS
	Svante	Canada	Adsorbent-based CCS	Compact rotary contactor units; industrial retrofits	Modular integration opportunity in India
	Linde Engineering	Germany	CCS process engineering	End-to-end capture solutions for multiple industries	Large-scale EPC partner option
	Shell CANSOLV	Netherlands	CCS solvent technology	Power & industrial capture	Example of chemical process integration
MRV / Carbon SaaS	Watershed	USA	Emissions data platform + marketplace	Fortune 500 clients; fast scaling	Benchmark for VeriScope™ GTM and feature design
	Persefoni	USA	Carbon accounting SaaS	SEC-compliant GHG disclosures	SEC-like compliance mapping to SEBI BRSR
	Sweep	France	Supply chain carbon data	EU enterprise focus	Supply-chain integration model
	Planety / OneTrust	Germany/USA	ESG SaaS	Part of OneTrust ESG stack	Shows acquisition potential in space
Offset Marketplaces & Verification	Pachama	USA	AI-verified forest carbon credits	Satellite MRV; high buyer trust	Model for OffsetX™ verification
	Sylvera	UK	Credit rating platform	Third-party quality assessment	Adds credibility to offsets
	South Pole	Switzerland	Offset project developer	Global carbon projects	Partnership opportunity
	Verra	USA	Carbon credit registry	Verified Carbon Standard	Registry integration necessity
	Gold Standard	Switzerland	Offset certification	SDG-linked credits	For premium offset positioning
CCU / Utilization	CarbonCure	Canada	CO <sub>2</sub> in concrete	Widely deployed in construction	Local CO <sub>2</sub> utilization route
	Charm Industrial	USA	Bio-oil sequestration	Corporate buyers like Google	Diversification of removal portfolio

# PRODUCT PORTFOLIO AND GO-TO-MARKET STRATEGY FOR INDIA

## Product Portfolio

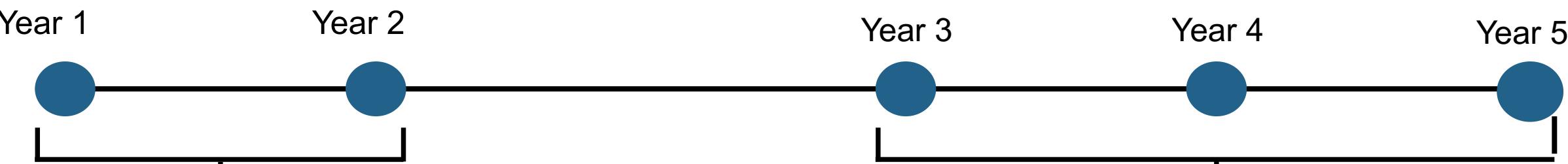
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### AtmosCore™ DAC & CaptureLink™ CCS (Hardware)

- Long-term growth drivers
- Capital-intensive solution
- Target: India's growing steel and cement sectors
- Low CapEx (\$16.25M) in India
- Availability of low-cost energy, water, labour

## Market Entry Strategy & Roadmap



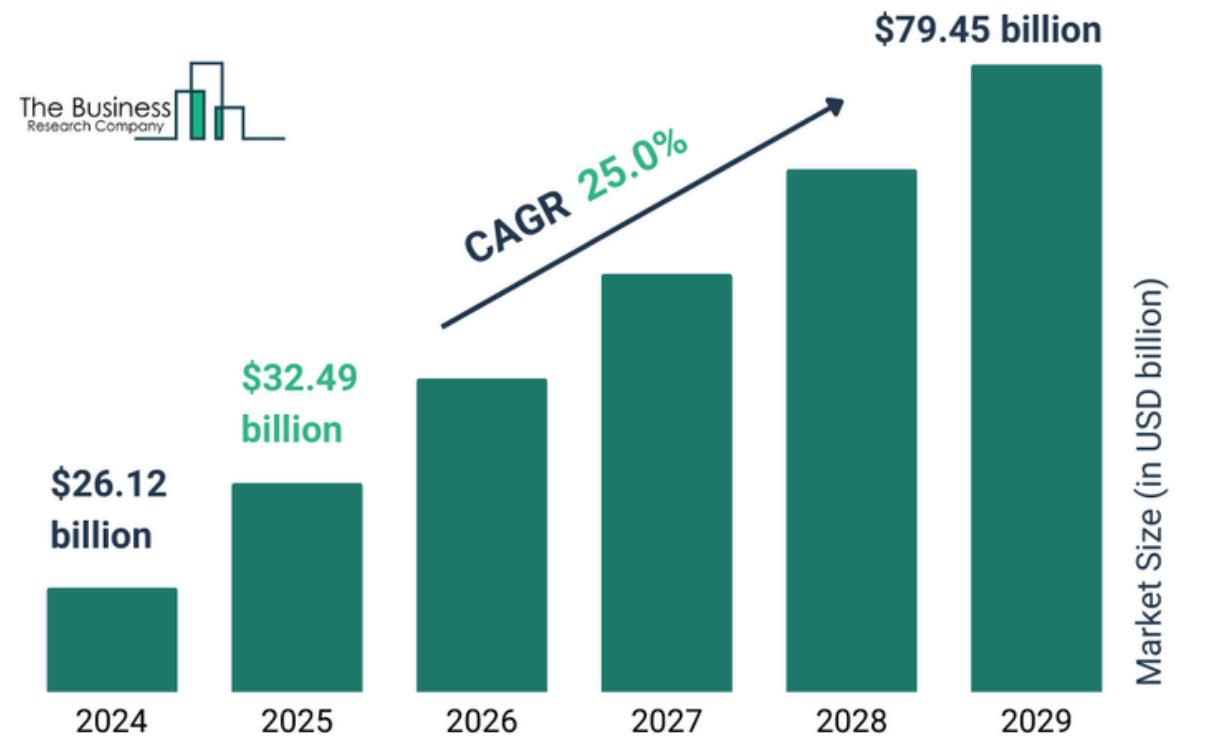
### Establish & Launch

- Establish regional headquarters and secure a primary production hub location.
- Hire a core team of sales, marketing, and software engineers from the local talent pool.
- Aggressively launch and market the VeriScope™ platform to major corporations and industrial players.
- Form strategic partnerships with local steel, cement, and power companies to build a pipeline for future CCS projects.

### Scale & Deploy

- Scale up the production hub to begin manufacturing AtmosCore™ DAC and CaptureLink™ CCS units.
- Execute on the partnerships established in the initial phase, deploying our hardware solutions to key industrial clients.
- Continuously optimize the supply chain, leveraging the secondary hub in Vietnam as a logistics gateway to other APAC markets.
- R&D efforts focused on increasing product efficiency and reducing costs will continue in the new hub.

## Climate Tech Global Market Report 2025



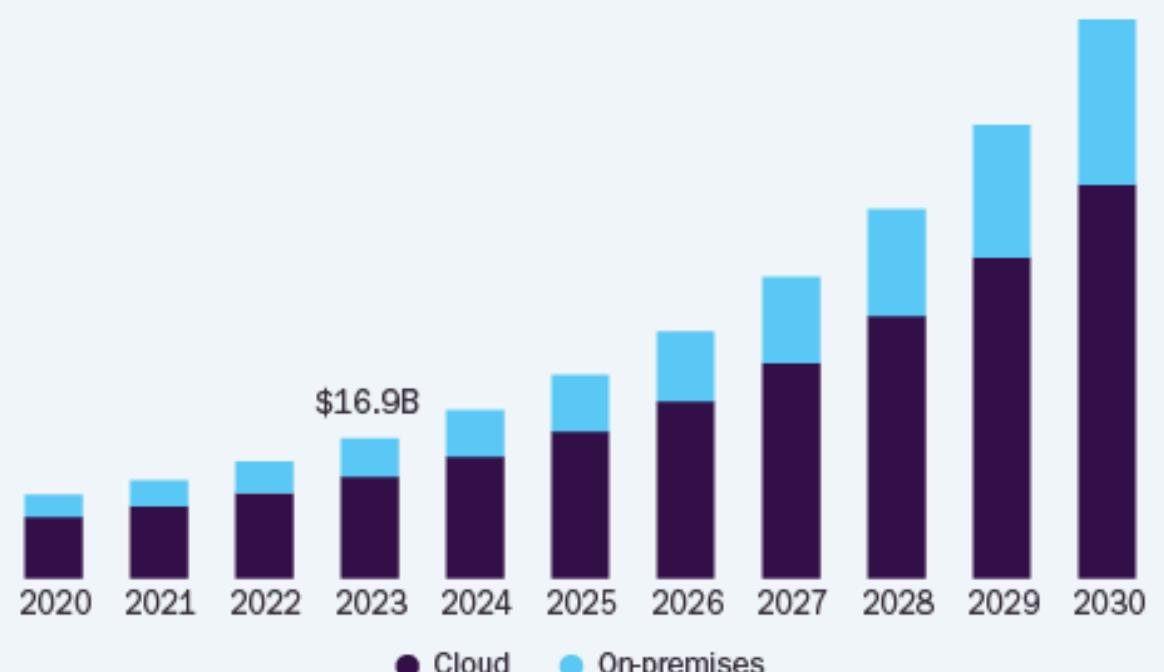
## Carbon Accounting Software Market

Size, By Region, 2019 - 2032 (USD billion)



## Carbon Accounting Software Market Size

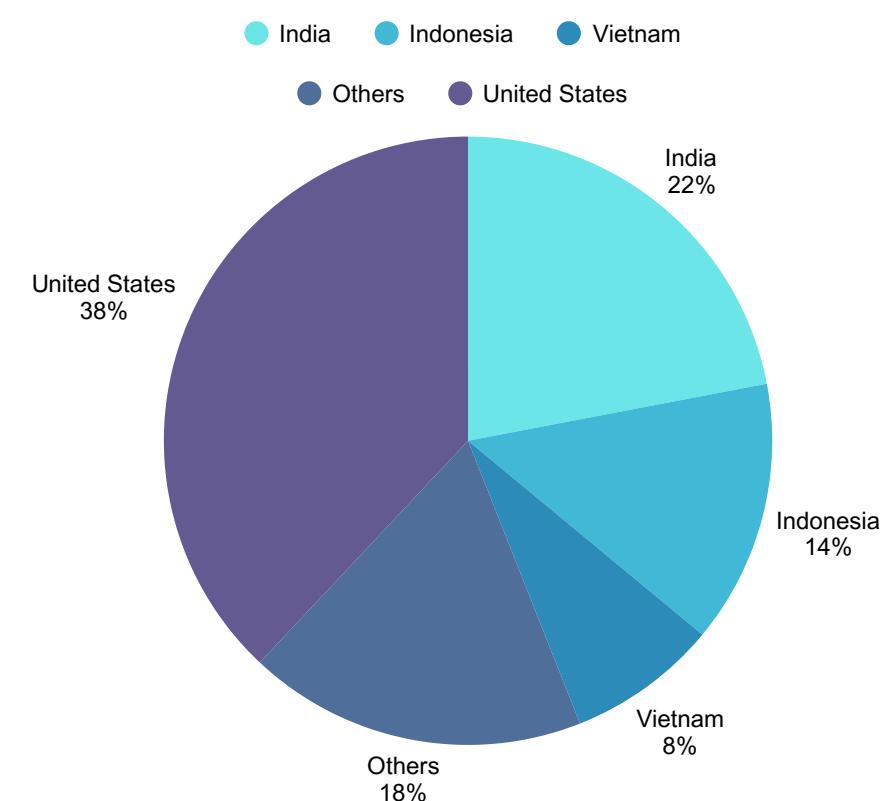
by Deployment, 2020 - 2030 (USD Billion)



**22.1%**

Global Market CAGR,  
2024 - 2030

Source:  
[www.grandviewresearch.com](http://www.grandviewresearch.com)



**PROJECTED REVENUE  
POTENTIAL BY MARKET –  
CLIMATEX TARGET REGIONS  
(2030)**

# PRODUCT MARKET-FIT

Product	Suitability (India)	Strategic Focus	Key Drivers	Key Challenges	Monetization Potential
VeriScope™ EVaaS Platform	High	Aggressive Market Penetration	<ul style="list-style-type: none"> <li>Rising carbon emissions</li> <li>Increasing regulatory mandates for GHG reporting (e.g., SEBI BRSR Core)</li> <li>Accelerating corporate ESG commitments</li> <li>High tech adoption rates</li> </ul>	<ul style="list-style-type: none"> <li>Competition from local/regional providers</li> <li>Need for strong localization of features</li> </ul>	High & Immediate
OffsetX™ Marketplace Gateway	High	Partnership-led Growth	<ul style="list-style-type: none"> <li>Growing voluntary carbon market (projected \$1.158B by 2030, 38.4% CAGR)</li> <li>Accelerating corporate ESG commitments</li> <li>Demand for verifiable offsets</li> </ul>	<ul style="list-style-type: none"> <li>Inconsistent carbon credit standards</li> <li>Market liquidity</li> <li>Integration with diverse registries</li> </ul>	High & Immediate
CaptureLink™ CCS Solutions	Medium-High (Long-term)	Strategic Pilots, Industrial Partnerships	<ul style="list-style-type: none"> <li>Hard-to-abate industrial emissions (steel, cement, power)</li> <li>Emerging CCTS compliance market (operational by 2026)</li> <li>Government support for CCUS</li> </ul>	<ul style="list-style-type: none"> <li>High CapEx (\$16.25M/unit)</li> <li>Complex permitting</li> <li>Long deployment timelines</li> <li>Infrastructure coordination</li> </ul>	High & Long-term
AtmosCore™ DAC Units	Medium (Long-term, niche)	Niche Deployment, R&D Collaboration	<ul style="list-style-type: none"> <li>Access to low-cost, low-carbon energy &amp; water</li> <li>Long-term net-zero goals</li> <li>Potential for local innovation</li> </ul>	<ul style="list-style-type: none"> <li>High CapEx (\$1.25M/unit)</li> <li>Nascent regulatory framework for DAC</li> <li>Operational hurdles for scalability</li> <li>Sorbent media sourcing costs</li> </ul>	Niche & Future Potential

## Key Insights:

- SaaS-First Approach:** VeriScope™ and OffsetX™ are cloud-based, scalable, and can generate revenue quickly with less upfront capital, leveraging India's high tech adoption and growing ESG mandates.

- Policy-Driven Hardware:** India's emerging CCTS (compliance carbon market) will create mandatory demand for CaptureLink™ CCS in energy-intensive sectors (steel, cement, power) by 2026, transforming it from a voluntary effort to a compliance necessity.

- ESG Bonds as Demand & Financing Driver:** India's rising ESG bond market presents a potential financing avenue and demand driver, as companies issuing these bonds seek verifiable carbon impact, which ClimateX's solutions can provide.

## Strengths

- Large, low-cost talent pool: ~1M engineering grads/year, avg. \$25K salary
- Favorable cost structure: DAC CapEx \$1.25M, OpEx \$780/t; CCS CapEx \$16.25M, OpEx \$950/t
- Strong domestic steel supply chain for DAC manufacturing
- Rising corporate disclosure rules driving SaaS demand
- Fastest-growing climate tech market in APAC (~20.9% CAGR)
- Dual-product market fit for DAC, CCS & SaaS
- Faster visas (~3 months) & concessional corporate tax (15%)

## Opportunities

- Voluntary carbon market growth: \$1.158B by 2030 (38.4% CAGR)
- High industrial demand in hard-to-abate sectors
- Govt. incentives (CCUS Mission, JETPs)
- Rising ESG commitments boosting SaaS & offsets
- Long-term CCS potential in steel, cement, power
- Frugal innovation to cut CapEx/OpEx
- ESG bond growth as funding source

## SWOT ANALYSIS

## Weaknesses

- Higher DAC costs vs. Vietnam/Indonesia
- Immature carbon market regulations (CCTS still developing)
- Power infra constraints in some regions
- SaaS competition from local players
- Imported sorbents raising costs

## Threats

- Policy & carbon pricing volatility (current voluntary prices \$1.8–\$3.09/t)
- Strong incumbents in CCS/DAC markets
- Geopolitical supply chain risks (China/Taiwan)
- High CapEx risk if carbon prices drop
- Coordination complexity for CCS infra
- Substitute solutions (renewables, hydrogen)

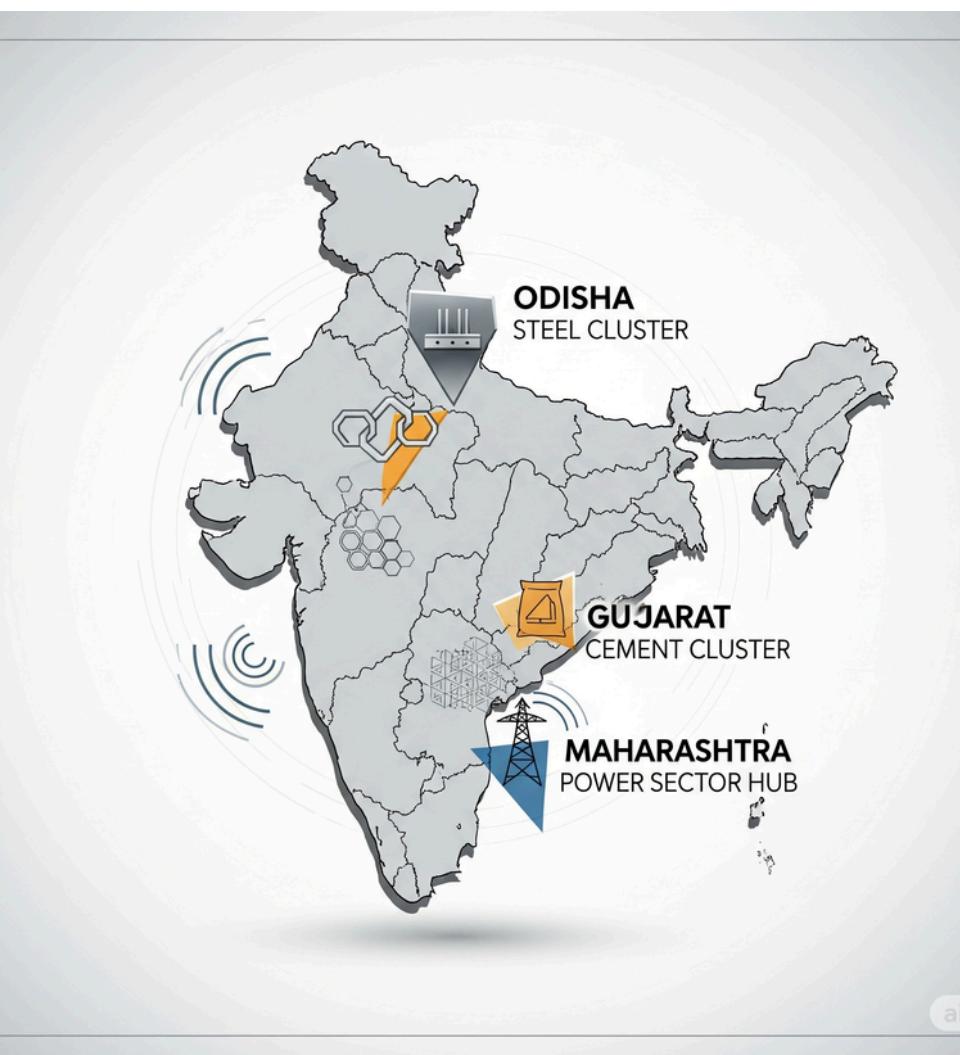
## Why India is Preferred:

- Balanced Growth & Scalability:** Offers rapid market growth with lower entry and operational costs compared to the US, providing a more scalable and de-risked entry point.
- Cost-Effectiveness:** Significantly lower talent compensation and hardware CapEx/OpEx directly impact burn rate and ROI. Concessional corporate tax rates (15%) for new manufacturing companies.
- Strategic Supply Chain Alignment:** Existing sourcing of structural steel from India allows for localization of a significant portion of hardware supply chain, reducing costs and enhancing resilience.
- Evolving Regulatory Landscape:** Active development of a compliance carbon market (CCTS by 2026) and National CCUS Mission provides a clear, structured path for hardware monetization, especially in hard-to-abate sectors.
- Talent Solution:** India directly addresses ClimateX's existing challenges of high attrition and visa issues, providing a vast, cost-effective, and readily available talent pool.

### Voluntary Carbon Market Size (2030 projection):

India → \$1.158B  
 Vietnam → ~\$0.45B  
 Indonesia → ~\$0.38B  
 U.S. → ~\$2.1B

### INDUSTRIAL HUBS



## Why India is ClimateX's Priority Market for Expansion

### 1. Strong Policy & Regulatory Tailwinds

Carbon Credit Trading Scheme (CCTS) operational by 2026 – driving compliance market growth. Make in India & Production Linked Incentive (PLI) schemes support local DAC & CCS manufacturing. National target: 50% non-fossil capacity by 2030, Net Zero by 2070.

### 2. Large & Growing Carbon Market

Voluntary Carbon Market projected to reach USD 1.158B by 2030. CCS potential ~ 350 Mt CO<sub>2</sub>/year by 2035. Major industrial demand from steel, cement, and power sectors.

### 3. Cost & Manufacturing Advantage

20–30% lower production costs than developed markets. Access to regional supply chain (steel: 🇮🇳/🇨🇳, electronics: 🇺🇸/🇨🇳, sorbents: 🇩🇪/🇩🇪). Strategic potential as an export hub to SEA.

### 4. Abundant Skilled Talent

World's largest tech workforce for SaaS, IoT, and MRV systems. Growing climate tech R&D ecosystem with academic-industry linkages.

### 5. Geographic & Strategic Hub

Proximity to Vietnam & Indonesia for regional expansion. Strong port infrastructure for exports. Diverse industrial clusters for quick pilot deployment.

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