
Why Indian Climate Tech Is the Sector to Watch



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India's climate tech growth opens doors for entrepreneurs and investors to drive sustainability.

Already the world's fastest-growing major economy, India is on track to become the **third largest by 2030**. However, this development comes with a significant challenge – sustainability. India ranks **seventh** globally for climate vulnerability, and both its consumers and companies are generally unwilling or unable to pay a 'green premium' for sustainable solutions. This means that Indian climate entrepreneurs must focus on cost-effective innovations that can scale without raising prices.

Solutions must also cater to the most impoverished Indians as they will suffer the most from climate change. A tall order given that **70 percent of the urban infrastructure needed by 2047** is still to be built.

Fortunately, India's climate tech ecosystem is rising to the challenge, thanks to innovation, an entrepreneurial spirit and growing support networks. For entrepreneurs, investors and business managers, now is the time to explore

how Indian climate tech can provide new opportunities for long-term success.

Here are four key areas of opportunity based on [our research](#) into the current ecosystem.

1. Shift from early-stage to later-stage investment

India's climate tech venture capital (VC) scene is still in its early stages. Yet it saw [US\\$5 billion in investment in 2022](#) – a 29 percent rise since 2019. However, much of this capital has focused on early-stage startups, leaving a large gap in Series B and Series C funding for companies ready to scale up.

VC funds such as Avaana Capital, Peak Sustainability Ventures, Omnivore and Ankur Capital are emphasising the need for patient capital to support later-stage climate tech ventures. Many Indian investors are accustomed to quick returns from sectors such as software and e-commerce. Climate tech requires a different approach. Investing in climate companies is critical to ensuring the success of other industries in the future.

Entrepreneurs and investors should be aware of this shift as it signals a move towards more sustainable, growth-focused funding models. Later-stage investment offers an opportunity for those looking to support the next wave of climate innovations.

2. B2B drives the most success, but don't ignore D2C

India's income disparity makes direct-to-consumer (D2C) models challenging to scale. Acquiring individual customers is often too costly for climate startups, but companies using business-to-business (B2B) models have found significant success. A standout example is Zypp Electric. After shifting from a D2C model to corporate partnerships, this electric scooter firm grew into one of India's largest electric vehicle (EV) companies.

However, there are exceptions where D2C can work. SolarSquare, a rooftop solar company based in Mumbai, successfully transitioned from B2B to D2C in 2020 by making their solar panels modular and cost-effective. This allowed them to expand quickly into the Indian household market, and they now power 14,000 homes across 12 cities.

So while B2B models are more scalable, there are opportunities in D2C for companies that can adapt their business models effectively.

3. Agriculture is poised for disruptive innovation

While energy and mobility have attracted over **60 percent of climate tech funding** since 2021, agriculture is emerging as a promising new frontier. Agriculture employs around **55 percent** of India's population. The sector is highly fragmented, with 86 percent of farmers **owning less than two hectares** of land. This presents challenges in acquiring customers due to disparate buying and selling behaviours. However, many see this as an opportunity for innovation.

Companies including Strawcture and Dharaksha Ecosolutions are turning agricultural waste, which would otherwise be burnt, into sustainable materials. This creates new revenue streams for farmers while reducing environmental damage. Another company, FarMart, is helping small-scale farmers by connecting them with markets and providing financial support.

Other areas of potential in agriculture tech include carbon markets and software and loans to farmers. The combination of improving farmers' livelihoods and environmental protection makes this sector ripe for climate tech solutions.

4. Climate innovation across the Global South

As the "**Voice of the Global South**", India is positioning itself as a leader in climate tech for developing countries. For example, the **Unified Payments Interface** (UPI), has become widespread since its launch in 2016, used by businesses ranging from street vendors to high-end restaurants. The next frontier of this technology is in climate with the **Unified Energy Interface** (UEI).

The same pattern is emerging in the electric vehicle sector. Last year, **60 percent** of global electric three-wheelers were sold in India, and nearly half of the three-wheelers on Indian roads today are electric. Indian startups such as Turno, Kazam and Bolt.Earth credit government subsidies and the **Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME II)** legislation for driving this growth.

Business managers should watch how India's innovative climate solutions spread beyond its borders. These solutions offer scalable opportunities to other developing countries facing similar climate challenges.

The role of government

In our discussions with investors and entrepreneurs, the consensus is that the government is vital to advancing India's climate agenda.

Our research revealed three government responsibilities perceived to be key: drafting regulations that encourage green adoption, providing patient and affordable capital to fund climate innovation, and acting as a flagship customer for startups.

Shriti Pandey, CEO of Strawcture, said government funding was essential to getting her business off the ground. This was particularly true when venture capital was scarce and more expensive. During the Covid-19 pandemic, Strawcture secured government contracts to build hospitals using sustainable materials. These contracts were not only a valuable source of revenue but also a strong signal that Strawcture's products were ready for broader commercial adoption.

Since the climate tech industry is still in its infancy, any support from the government through investment has a powerful multiplier effect. It can effectively drive both innovation and the rapid adoption of sustainable solutions.

A unique opportunity for businesses

India's climate tech sector is not just about tackling environmental challenges. Rather it offers real opportunities for entrepreneurs and investors to innovate and grow. Whether through new financing, adaptable business approaches, groundbreaking agricultural technologies or leadership in the Global South, Indian climate tech is shaping the future.

As Anjali Bansal, founder of Avaana Capital, puts it: "India is not going through a green transition, but a green revolution." Now is the time for business managers to align with these trends. The green revolution is already underway – now is the time to be part of it.

Our research was conducted in collaboration with Avaana Capital. Read more [here](#).

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The UN Sustainable Development Goals offer a cohesive and centralised framework for discussing a new development model that is good for all people and the planet. INSEAD is aligning more closely with the SDGs as more businesses use the 17 global goals to enhance their contributions to society.

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