

Enhancing Inclusivity and Accessibility to Climate Technologies for All

CHIRAG BHIMANI



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Introduction







- ✓ Since the Industrial Revolution, technological advancements powered by fossil fuels have increased the levels of heat-trapping Greenhouse gases (GHG) in the atmosphere.
- ✓ These increased levels of GHG in the atmosphere are driving changes in our climate, bringing extreme heat, droughts, sea-level rise, and unpredictable weather events with potentially disastrous effects for humanity.
- ✓ Climate technologies aim to better our ability to mitigate and adapt to the effects of climate change. e.g. renewable energy and carbon capture/storage technologies reduce CO2 in our atmosphere.
- ✓ At the same time, technologies such as sea wall defenses and improved weather warning systems make living with the effects of climate change more manageable.



Introduction



Some climate technologies like wind power and stilted buildings in flood zones have been around for decades.

But, other forms such as artificial intelligence, satellite imagery, or data science are more modern advancements.



Research suggests that 60% of the emissions reduction needed by 2050 will come from existing mature technology.

But, for the rest of emissions, we will have to rely on technologies still in their infancy or yet to be discovered.



New innovations such as AI, ML and Block Chain give us tools like climate management and accounting platforms to accurately measure carbon footprint and advance existing technologies' capabilities.



Thus, new climate technologies, coupled with more traditional ones such as wind and solar power, provide solutions to stave off the worst effects of climate change on the way to net zero.



Climate Tech for an individual

For an individual or for me, Climate Technology means actions that reduce CO₂ emissions



Reduce, reuse, repair and recycle



Clean up your environment

Plant native

species











Eat more vegetables & waste less food



Save energy at home / Change source of energy



Walk, bike or take public transport or use an electric vehicle



Climate Tech for a company

Internally

Internally, Climate Technology
would mean for a company same
like an individual i.e. actions for
reduction in CO₂ emissions

Externally

Externally, Climate

Technology for a company

would mean exploring the

innovations and getting them

implemented professionally





Climate Tech for a company

Energy

- ✓ Renewable energy generation
- ✓ Energy storage systems
- ✓ Hydrogen & other low-carbon fuels
- ✓ Renewable energy software & grid management platforms

Carbon

- ✓ Carbon removal tech
- ✓ Carbon capture & storage tech
- ✓ Carbon reuse
- ✓ Carbon offset marketplaces

Food, Agri & Land Use

- ✓ Meat substitutes
- ✓ Regenerative agriculture
- √ Water tech
- ✓ Food waste reduction systems

Transportation

- ✓ Electric Vehicles (EVs)
- ✓ EV battery tech
- ✓ "Micromobility" (e.g., shared city) bikes, e-bikes, e-scooters)
- ✓ Zero-emission planes, boats, and trains

- ✓ Low-carbon cement, steel, and chemicals
- ✓ Sustainable packaging and fabrics
- ✓ Circular economy systems
- ✓ Waste and recycling management

Industrial Production Climate management

- ✓ Farth observation tech.
- ✓ Emissions tracking & accounting
- ✓ Climate risk assessment
- ✓ Environmental, social, and governance (ESG)



Benefits of Climate Technology

Helping avoid the runaway costs of climate change mitigation

Preserving vital ecosystems and species



Providing Food Security



INTEGRATION

Integrating newer Climate
Technologies into existing
infrastructure, hardware,
software, and operational systems
is a major challenge

TALENT, MENTORS & FUNDING

Founders face persisting funding gaps and global talent challenges Good mentors in Climate Tech are hard to find

GENDER / RACE BIAS

Minorities and female entrepreneurs in Climate Tech face bias and difficulty raising capital

SCALING

Climate mitigation cannot happen due to companies facing greater challenges in scaling the feasible / viable climate technologies

GLOBAL CONNECT

Innovation can come from anywhere in the world, but founders need global connections in order to make it viable at scale

COSTING

Inspite of having good scalable Climate Technologies at times costing becomes a hurdle for harnessing them.





INTEGRATION



Integrating newer Climate Technologies into existing infrastructure, hardware, software, and operational systems is a major challenge

Many examples

- ✓ Transportation Sector integrating EV into existing infra.
- ✓ DAC integration into major CO₂ emitting sectors Cement, Steel, Power





INTEGRATION

Many examples (contd.)



✓ Manufacturing Sector – processes replacing dirty and high emitting manufacturing processes with more resource-efficient and environmentally friendly ones resulting in decarbonization





GENDER / RACE BIAS

Female founders worldwide and minority founders in the United States face bias and difficulty raising capital.

✓ Climate tech companies with at least one female founder were less than half as likely to scale than companies with all-male founding teams.



GENDER / RACE BIAS

- ✓ Female founders reported they benefited from creating networks with other female founders.
- ✓ Minority founders reported actively building networks through fellowships and other professional experiences to improve access to capital.
- ✓ Both mentioned the need for increasing representation by encouraging women and minorities to study relevant disciplines and enter fields like venture capital, tech, and entrepreneurship.











Thanks!

Do you have any questions? chirag@bhimani.in +91 98258 30535 www.chiragbhimani.com







