

# EMERGING OPPORTUNITY: The Hidden Role of Sheltertech in Climate Tech Investing



**Habitat**  
for Humanity®

Terwilliger Center for  
Innovation in Shelter

## Acknowledgements

The report was conceptualized and written by Paula Woodman, Lizan Kuster-Jaeggi, and Jane Parry.

Data research for this report was completed by Martin Ignacio del Pino, K Shakthi Dhar Reddy and Francisco José del Pino. Report design was by Nikka Almazan-Biasotto.

We would like to thank Habitat for Humanity colleagues including Alejandro Jaramillo and Naomi Ciira for their input and support and the Global Communications team, including Julia Ferraz.

The team would like to thank all the investors, startups, business and incubators who provided their invaluable insights, including:

Alex Blum (Applied Bioplastic), Andra Stanciu (Hometeam Ventures VC), Beth Foster-Chao (Autodesk, Inc.), Brian Mayers (Breakthrough Energy, LLC), Caitlin Rosser (Calvert Impact Capital, LLC), Charles Newman (AIA), Daniel Waldron (Acumen), Ellen Martin (Circulate Capital, LLC), Fauzal Riziki and Hana Purnawarman (Sampang), Greg Smithies (Fifth Wall), Jamie LePinnet (NewLab), Jourdan Younis (Presidio Advisors), Konstantin Hapkemeyer (Seedstars SA), Leonardo Borrero (ANDEO Capital), Lisa Hanson (Global Urban Village), Luisa Mendes Brasil (CDP), Martin Stadelmann (South Pole), Mason Tan (Garden Impact Fund VCC), Naa Adjeley Kome-Mensah (Kubik), Nelson Stratta (Inflection Finance and CRDC), Nicolas Chow (Plug and Play), Patrick Elmer (iGravity AG), Prasoon Kumar (Billion Bricks, Inc.), Priya Thachadi (Villgro Philippines), and Zander Geronimos (MetaProp VC).



# Contents

Executive Summary	4
Introduction	5
The Case for Affordable Housing as a Climate Tech Investment	10
Lay of the Land: Mapping Tech and Sheltertech Investors	12
Meet the Investors	13
What Climate Tech Investors Think of Sheltertech	16
Ways to Drive More Investors to Sheltertech	19
Conclusion	22

# Executive Summary

An estimated 1.8 billion people lack adequate shelter<sup>1</sup>, even without taking into account the consequences of climate change. With the built environment already accounting for 37%<sup>2</sup> of global greenhouse gas emissions, significant innovation and scaling finance are required or future construction will severely exacerbate the climate crisis. However, sustainability-focused investors have failed to notice the opportunity presented by the affordable housing market. This represents a barrier to achieving a just transition<sup>3</sup>, and with it, securing a future where sustainability is the norm. Without investment in the technologies for home adaptations for the world's most vulnerable, societies will continue to face escalating political and social instability, including a predicted 1.2 billion climate refugees by 2050.<sup>4</sup>

The affordable housing sector presents significant opportunities for investments that aim to meet climate change adaptation and mitigation goals. This is especially so for sheltertech, a term used to describe the sector where startups and businesses work on innovative and scalable products and services catering for affordable housing markets.

Sheltertech is recognized by some as an engine for innovative climate mitigation and adaptation solutions in the built environment. Sheltertech ventures are proving attractive to investors, as demonstrated by Ethiopia's innovative answer to plastic waste and affordable housing, Kubik, which has just successfully closed a US\$3.34 million seed funding round.<sup>5</sup> Additionally, BillionBricks, a startup that develops net-zero homes and communities, closed a US\$2.45 million seed funding round.<sup>6</sup> Climate tech's share of the start-up investment market is promising – it rose to 11.4% in Q3 2023 and is tracking at an annual rate of 10% for the year to date, extending a decade-long upward trajectory.<sup>7</sup> However, this report estimates a US\$145-174 billion deficit in venture capital over the last ten years in order to reduce the built environment's contribution to greenhouse gas emissions by growing climate tech solutions - before we even start to consider capital for adaptation focused innovations.

The Terwilliger Center commissioned this study to investigate why sheltertech is underrepresented in climate tech investment and



what should be done to bridge the existing opportunity gaps. The study looked at investors groups that are relevant to the sheltertech industry and conducted interviews to understand current behaviors and attitudes. It was found that significant efforts are needed to demystify the sheltertech space, draw investors in and tell the story of the multiple impacts and the financial returns that are possible. In addition, a great part of funding in climate tech is mobilized through the promise of significant financial returns, making them skeptical of business models around sheltertech, whose perceived returns are longer-term and harder to scale.

The strong connection between affordable housing, climate and other development imperatives makes sheltertech businesses a ripe investment opportunity that can deliver triple bottom line returns – financial, social and environmental. Investors need to recognize low-income households as active consumers of housing products and services, rather than perceiving them only as the recipients of public sector housing developments. Investors also need to see the products and services of startups validated and be presented with successful role models.

There is great scope for partnerships between investors, startups, and corporations, and there are exciting opportunities for collaboration with development finance institutions that are well positioned to bring innovative financing solutions and instruments to the table, and have an alignment of interests in human development, climate change response and poverty reduction.

1 Housing Rights. UN-Habitat. [www.unhabitat.org/programme/housing-rights](http://www.unhabitat.org/programme/housing-rights). Accessed 01/11/2023.

2 United Nations Environment Programme, & Yale Center for Ecosystems + Architecture (2023). Building Materials and the Climate: Constructing a New Future. <https://wedocs.unep.org/20.500.11822/43293>.

3 A just transition maximizes the social and economic opportunities of climate action, while carefully managing its challenges. Rooted in sustainable development, a just transition leverages environmental strategies to advance decent work, promote social inclusion and eradicate poverty. Source: UN Global Compact. "Introduction To Just Transition, A Business Brief." [www.info.unglobalcompact.org/1/591891/2023-10-12/586p4s/591891/1697132116TCZ25R6v/2023\\_Final\\_Introduction\\_to\\_Just\\_Transition.pdf](http://www.info.unglobalcompact.org/1/591891/2023-10-12/586p4s/591891/1697132116TCZ25R6v/2023_Final_Introduction_to_Just_Transition.pdf).

4 Institute for Economics and Peace. "Ecological Threat Register 2020." [www.economicsandpeace.org/wp-content/uploads/2020/09/ETR\\_2020\\_web-1.pdf](http://www.economicsandpeace.org/wp-content/uploads/2020/09/ETR_2020_web-1.pdf).

5 Plastic upcycling startup Kubik closes \$3.34M seed to scale production in Ethiopia, TechCrunch+, <https://tcrn.ch/3pfRToG>

6 Climate-tech venture, BillionBricks closes US\$2.45 mil seed funding round led by Thakral (theedgesingapore.com)

7 Emma Cox, Will Jackson-Moore, Leo Johnson, Tarik Moussa. State of climate tech 2023. How can the world reverse the fall in climate tech investment? PwC. [www.pwc.com/gx/en/issues/esg/state-of-climate-tech-2023-investment.html](http://www.pwc.com/gx/en/issues/esg/state-of-climate-tech-2023-investment.html). October 17, 2023.

# Introduction



The challenges of climate change – rising sea levels, more extreme and unpredictable weather events, and climate-related disasters – pose a risk for everyone, but the impacts of climate change are vastly unequal, disproportionately affecting the most vulnerable populations in the Global South.

Climate change and housing construction are closely linked. The built environment, including housing, accounts for an estimated 37% of global greenhouse gas emissions, driven by embodied emissions due to the high use of carbon-intensive materials, such as carbon and steel, as well as operational emissions, such as the energy needed to heat, cool, and power buildings.<sup>8</sup> Urban areas in high- and middle-income countries account for most CO<sub>2</sub> emissions, but it is in middle- and low-income countries that the enormous need for new housing construction exists, with an estimated 1.8 billion urban and rural dwellers lacking adequate shelter.<sup>9</sup>

In urban settings, more than one billion people are living in slums and informal settlements. Their homes are acutely exposed to climate change and lack the resilient design and materials to protect them from extreme heat, storms and flooding, increased fire risks, and water scarcity. With more than 90% of urban areas in coastal locations, millions of people are at the mercy of rising sea levels and extreme weather events.<sup>10</sup> Climate change profoundly affects access to quality housing, especially in developing countries. According to the United Nations Special Rapporteur on the right to adequate housing, climate change-related disasters have been the primary driver of internal displacement over the past decade, pushing an estimated 20 million people out of their homes.<sup>11</sup>

Future housing construction must not only meet people's basic need for shelter – it must also play a role in climate change adaptation. The most vulnerable to the effects of climate change are also the ones who lack homes capable of withstanding climate warming and the extreme weather events that accompany it. At the same time, how homes are constructed have important implications for climate change mitigation. If the current housing gap is addressed without radical changes to the carbon footprint of the construction process, it will be disastrous for the environment. As such, the affordable housing sector presents many opportunities for improvement through innovation and investment focused on climate change adaptation and resilience.

## Sheltermtech and climate change

Sheltermtech emerged as the industry where startups, scaleups and even larger businesses meet the housing needs of low-income households, with a lens towards affordability, sustainability and climate adaptation. It is similar to another blended word, proptech, also known as property or real estate technology, an umbrella term for cutting-edge technologies to optimize real estate markets. However, sheltermtech differs in that its focus is on catering to the need for affordable housing, whereas proptech focuses predominantly on innovations for commercial buildings, and middle- and upper-class residential homes, and does not address need for affordable housing in low-income communities. Sheltermtech startups leverage housing solutions as drivers of economic growth and equality.

Habitat for Humanity's Terwilliger Center for Innovation in Shelter

<sup>8</sup> Brodie Boland, Shailesh Lekhwani, Sebastian Reiter and Erik Sjödin. "Building value by decarbonizing the built environment." McKinsey & Company. [www.mckinsey.com/industries/engineering-construction-and-building-materials/our-insights/building-value-by-decarbonizing-the-built-environment](http://www.mckinsey.com/industries/engineering-construction-and-building-materials/our-insights/building-value-by-decarbonizing-the-built-environment). June 12, 2013.

<sup>9</sup> First-ever United Nations Resolution on Homelessness. UN Department of Economic and Social Affairs. [www.un.org/development/desa/dspd/2020/03/resolution-homelessness](http://www.un.org/development/desa/dspd/2020/03/resolution-homelessness). 9 March 2020.

<sup>10</sup> Climate Change. UN Habitat. [www.unhabitat.org/topic/climate-change](http://www.unhabitat.org/topic/climate-change). Accessed: 01/11/2023.

<sup>11</sup> Climate change and the right to housing. United Nations Office of the High Commissioner for Human Rights. [www.ohchr.org/en/special-procedures/sr-housing/human-right-adequate-housing](http://www.ohchr.org/en/special-procedures/sr-housing/human-right-adequate-housing). Accessed 01/11/2023.

pioneered the acceleration of innovative housing technologies as a market systems driver, allowing low-income families to access the products and services they need to build safe, decent homes. It created the ShelterTech platform, which plugs sheltertech entrepreneurs into an ecosystem of collaborators and innovations for affordable housing.<sup>12</sup> The platform hosts regional and national accelerator programs, deploys catalytic funds, advises existing accelerator and incubation programs in proptech, smart cities or impact-focused areas to incorporate affordable housing into their curriculum, convenes the sheltertech community, and invests through its Shelter Venture Fund (see box 1).

### Box 1: Habitat for Humanity's Shelter Venture Fund

Launched in 2017, Habitat's Shelter Venture Fund invests in and nurtures innovative entrepreneurs and small-but-growing businesses focused on improving housing conditions for the world's 1.8 billion people living in slums or inadequate housing.

The fund seeks to catalyze and expand the affordable housing market by investing in sheltertech entrepreneurs operating in the "pioneer gap" – where early-stage companies are often considered too nascent or too risky for conventional venture capital firms. The intent is to accelerate those entrepreneurs' pathways to reaching low-income families with products and services that improve their housing conditions.

The Shelter Venture Fund is positioned to grow its Assets Under Management significantly, having disbursed US\$3.02 million to eleven companies globally. They include India-based Tvasta Manufacturing Solutions, which uses their patented concrete 3D-printing technology to address the affordable housing deficit in the country; EarthEnable, whose alternative to concrete helps families in African countries progressively and affordably improve their flooring; Graviti, which unlocks affordable access to essential services for unbanked and underserved families in Mexico, and more.

Despite the strong linkage between sheltertech innovations and all aspects of climate change mitigation and adaptation outcomes (see figure 1), investment in sheltertech has been significantly lower than, for example, investment in other climate tech solutions, such as electric vehicles. Although Habitat for Humanity has partnered with many sheltertech entrepreneurs, the potential of this market segment does not seem to have been noticed by climate tech investors, impact investors and venture capitalists.

## About this report

This report seeks to understand the extent to which innovative, affordable housing products and services have been on the radar of climate tech and impact investors (see box 2). It examines potential avenues for overcoming investment barriers in the sheltertech space, and what can be done to attract more climate tech investors into this area.

### Box 2: Investment types

#### What is impact investment?

Impact investments are made with the intention to generate positive, measurable social and environmental impact, as well as a financial return.<sup>13</sup>

#### What is climate tech investment?

Investment in climate tech encompasses a wide range of technologies and innovations being used to reduce greenhouse gas emissions or address the impacts of global warming, across a wide range of industries.<sup>14</sup>



<sup>12</sup> Habitat for Humanity. Terwilliger Center for Innovation in Shelter. [www.habitat.org/our-work/terwilliger-center-innovation-in-shelter](http://www.habitat.org/our-work/terwilliger-center-innovation-in-shelter). Accessed 01/11/2023.

<sup>13</sup> What You Need To Know About Impact Investing. Global Impact Investing Network. [www.thegiin.org/impact-investing/need-to-know/#what-is-impact-investing](http://www.thegiin.org/impact-investing/need-to-know/#what-is-impact-investing). Accessed 01/11/2023.

<sup>14</sup> Emma Cox, Will Jackson-Moore, Leo Johnson, Tarik Moussa. "State of Climate Tech 2022. Overcoming inertia in climate tech investing," PwC. [www.pwc.com/gx/en/services/sustainability/publications/overcoming-inertia-in-climate-tech-investing.html](http://www.pwc.com/gx/en/services/sustainability/publications/overcoming-inertia-in-climate-tech-investing.html). November 3, 2022.



Figure 1. Sheltertech as a multifaceted opportunity for climate solutions



**Lumkani's** fire alarms and insurance services are designed for informal settlements. Their alarms mobilise a community-first response that is faster and more effective than mainstream services.

<https://lumkani.com/>



Cambodia

**Tap Effect** is running and scaling sustainable piped water solutions for rural communities, increasing their resilience to water shortages.

<https://www.tapeffect.asia>



Kenya

**Start Somewhere** has engineered the TwistBlock for building in informal settlements. This fast, flexible and reusable material offers lower carbon builds and are fire-safe.

<https://www.startsomewhere.eu/>



Indonesia

**Sampangan** provides sustainable waste processing. Its technology converts waste into activated carbon and other organic and safe products.

<https://www.sampangan.id/>



**MODROOF**

India

**ReMaterials ModRoof** technology turns waste products into durable, modular roofing panels that keep homes up to 18 degrees Fahrenheit cooler in summer.

<https://www.modroof.in/>



Uganda and Rwanda

**Earth Enable** has adapted traditional earth building practices to improve resilience to extreme weather, improve family health, and provide an appealing alternative to cement.

<https://earthenable.org/>



Malaysia and Singapore

**Affordable Abodes** uses innovative bio-composite materials and simpler construction methods to bring the cost of a new home down, whilst increasing its quality.

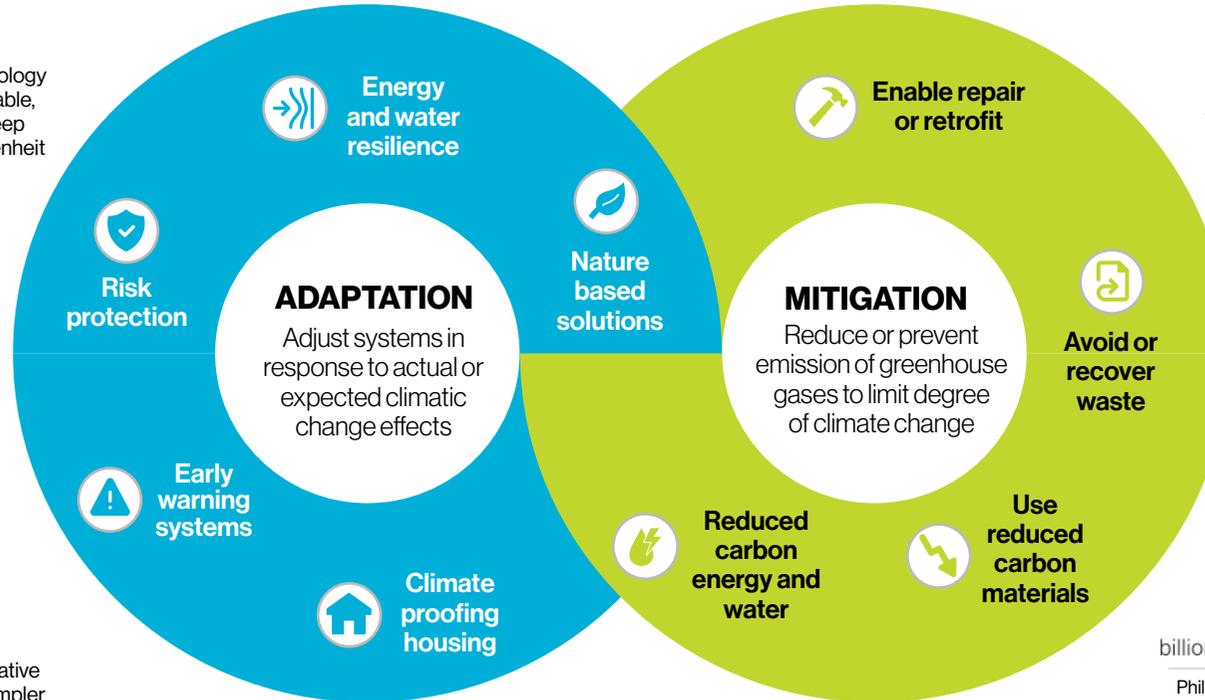
<https://www.afford-able.com>



Kenya

**BURN** produces a range of revolutionary cooking appliances that reduce greenhouse gas emissions, preserve forestry and biodiversity, and saves lives.

<https://www.burnstoves.com/>



Peru

**Ciclo** transforms construction and demolition waste into eco-materials for use in construction. They also provide an integrated waste management for the industry.

<https://ciclo.com.pe/>



Ethiopia

**Kubik** builds low-carbon, ultra durable buildings that remove plastic waste from the environment. These homes are better insulated and more affordable.

<https://www.buildkubik.com/>



Philippines

**Billion Bricks** is providing sustainable, eco-friendly, and affordable homes that uplift entire communities by generating more energy than they use.

<https://billionbricks.org/>



Mexico

**Energyn** produces low-cost, eco-friendly water heaters called Solesyto that are cheaper to run and provide a viable alternative to traditional gas-powered water heaters.

<https://energyn.com/>



Colombia, Brazil and 6 other countries

**Litro de Luz** creates sustainable, locally-powered public and residential lighting solutions using plastic bottles that would otherwise go to waste.

<https://www.litrodeluz.com/>



# The Case for Affordable Housing as a Climate Tech Investment

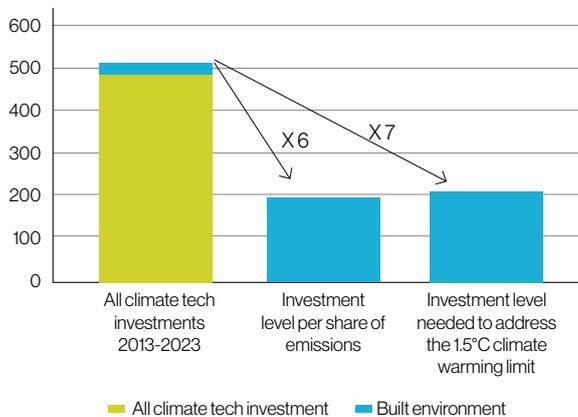
There is a great deal of scope for climate tech investment in affordable housing. What is holding this back?

## Distorted investment priorities

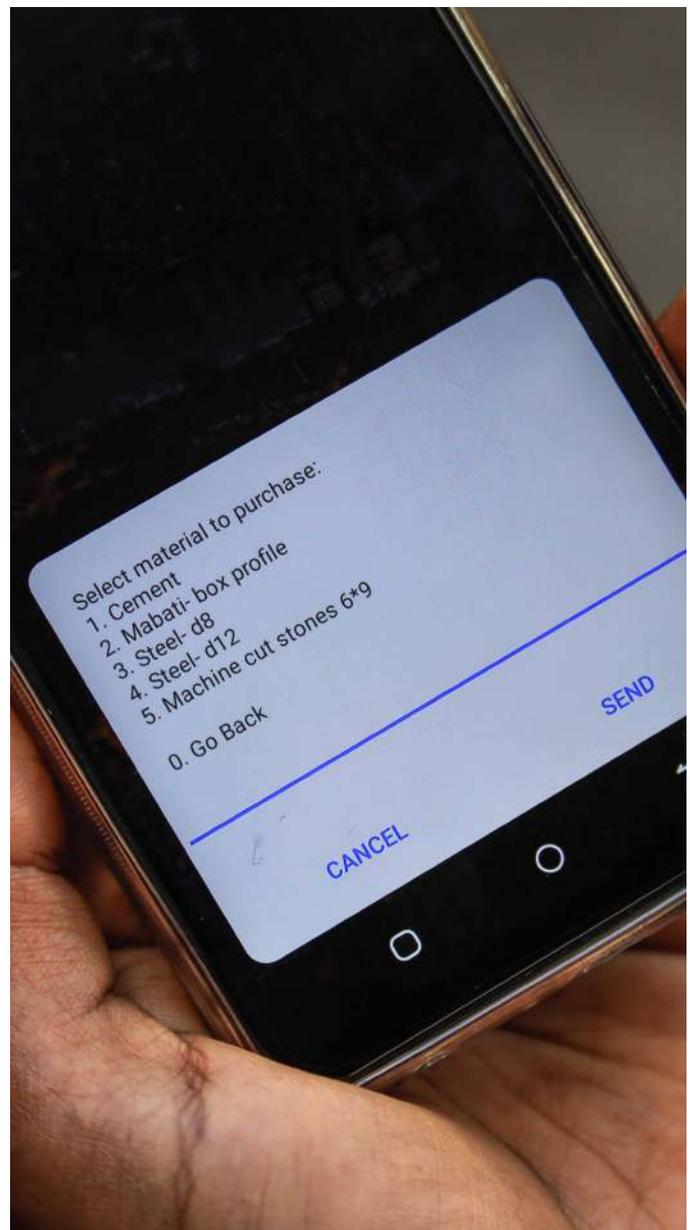
Over the last ten years, the built environment accounts for only a fraction of climate tech investment (figure 2). Five percent of startup investment for climate tech solutions went to the built environment between October 2022 and September 2023, notably receiving a decrease in its share of climate tech investments from previous years.<sup>15</sup> In contrast, the mobility industry is responsible for 15% of emissions, but attracts 50% of climate tech investments. This amount of investment is not driven by the urgency of the current climate crisis, nor is it driven by current demand, but by anticipation of a future market: the smart mobility market is expected to generate over US\$270 billion in revenues by 2040.<sup>16</sup>

To illustrate the scale of this distortion, we can look at a scenario where climate tech investment was allocated to sectors according to their contribution to carbon emissions. The built environment would therefore need to have received 37% of all climate tech investments, equating to an additional US\$145 billion of climate tech investments over the last 10 years. Or to use another scenario, global decarbonizing efforts need to be seven times faster to be in line with 1.5-degree climate warming limit target. For illustration purposes, the corresponding uplift in climate tech funding for the built environment would equate to an additional US\$174 billion over the last 10 years (see figure 2).

**Figure 2. Climate tech investments in the built environment**



These scenarios illustrate the significant historical capital deficit for climate change innovations in the built environment sector, and the real urgency with which we need to increase investment. In fact, these figures are limited to climate change mitigation efforts (focusing on reducing carbon emissions in the construction sector) and do not factor in the urgent demand for resilient and climate-adapted housing.



<sup>15</sup> Mobility 2040: The Case for Smart Mobility. Oliver Wyman, 2018. [https://www.oliverwyman.com/content/dam/oliver-wyman/v2de/publications/2018/Aug/Mobility2040\\_Oliver-Wyman.pdf](https://www.oliverwyman.com/content/dam/oliver-wyman/v2de/publications/2018/Aug/Mobility2040_Oliver-Wyman.pdf)

<sup>16</sup> Emma Cox, Dan Dowling, James King, Josh Huntley. Net Zero Economy Index 2023. Bending the curve: can climate ambition and reality still converge? PwC. [www.pwc.co.uk/services/sustainability-climate-change/insights/net-zero-economy-index.html](http://www.pwc.co.uk/services/sustainability-climate-change/insights/net-zero-economy-index.html). September 2023.

## The greatest future housing demand will be in developing countries

Given that future housing needs are enormous, they present a major opportunity for investment in fighting climate change. Out of one billion people living in slums or informal settlements, 80% are in Asia and sub-Saharan Africa. Ninety percent of the expected increase in the urban population is going to happen in Asia and Africa.<sup>17</sup> Of the building stock needed by 2040 in the Global South, 70% is yet to be constructed. To meet the colossal housing demand of the coming decades in a way that is accessible, affordable and conducive to sustainable growth, it is essential to mobilize investments in environmentally conscious construction and renewable energy.<sup>18</sup>

The estimated cost of climate change adaptation for developing countries is between US\$140 billion and US\$300 billion a year by 2030.<sup>19</sup> Climate change mitigation through affordable housing construction directly relates to numerous global calls to climate-action.<sup>20,21</sup> It also relates to the Sustainable Development Goals, notably Goal 11: Sustainable Cities and Communities, among other SDGs (figure 3).<sup>22</sup> Moreover, housing innovations that have community-level impact also contribute to the localization of the SDGs, essential to accelerating progress towards the 2030 deadline to reach the SDG targets.<sup>23</sup>

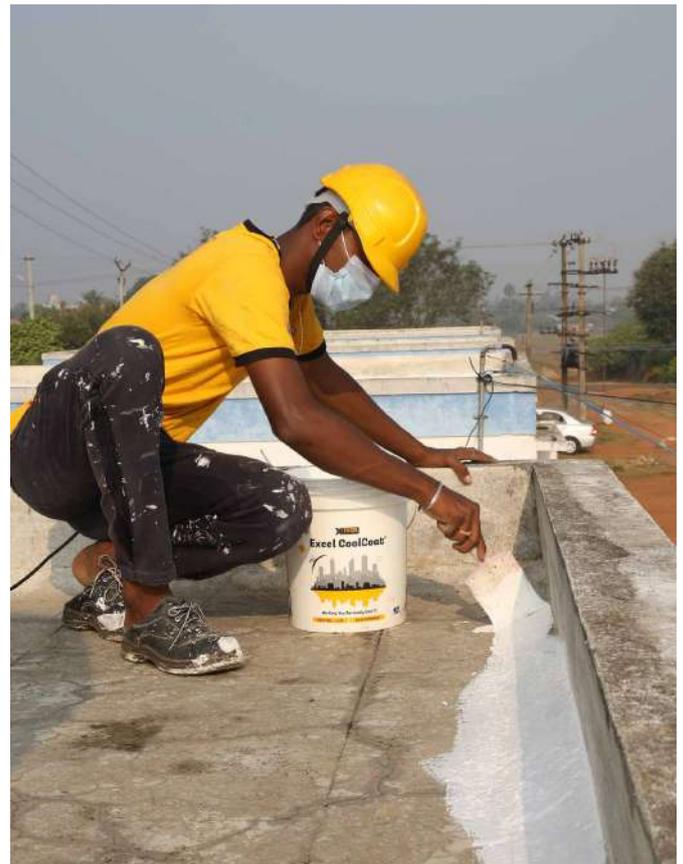


Figure 3. How Housing Supports the Sustainable Development Goals



Source: Terwilliger Center for Innovation in Shelter

17 King, R., M. Orloff, T. Virsilas, and T. Pande. 2017. "Confronting the Urban Housing Crisis in the Global South: Adequate, Secure, and Affordable Housing." Working Paper. Washington, DC: World Resources Institute. <https://smartnet.niuia.org/sites/default/files/resources/towards-more-equal-city-confronting-urban-housing-crisis-global-south.pdf>.

18 CO2 emissions from buildings and construction hit new high, leaving sector off track to decarbonize by 2050: UN Environment Programme, November 2022.

<https://www.unep.org/news-and-stories/press-release/co2-emissions-buildings-and-construction-hit-new-high-leaving-sector>

19 Puig, D., Olhoff, A., Bee, S., Dickson, B., & Alverson, K. (Eds.) (2016). The Adaptation Finance Gap Report. United Nations Environment Programme. [https://backend.orbit.dtu.dk/ws/files/198610751/Adaptation\\_Finance\\_Gap\\_Report\\_2016.pdf](https://backend.orbit.dtu.dk/ws/files/198610751/Adaptation_Finance_Gap_Report_2016.pdf)

20 "Towards a just transformation: climate crisis and the right to Housing." United Nations General Assembly, Human Rights Council Fifty-second session, 27 February–31 March 2023. [www.documents-dds-ny.un.org/doc/UNDOC/GEN/G22/612/32/PDF/G2261232.pdf](https://www.documents-dds-ny.un.org/doc/UNDOC/GEN/G22/612/32/PDF/G2261232.pdf)

21 Climate Change, Cities and Forced Migration: Advancing Knowledge, Action

and Collaboration. 2021, Global Parliament of Mayors. <https://globalparliamentofmayors.org/wp-content/uploads/2021/07/Pamphlet-Call-to-Action-Climate-Migration.pdf>

22 Oomen J, Net-Zero Homes: How circular economy solutions to the housing crisis in low-income countries are key to achieving global climate targets. Terwilliger Center for Innovation in Shelter, 2022. [https://www.habitat.org/sites/default/files/documents/Net-Zero\\_Homes\\_report\\_2022.pdf](https://www.habitat.org/sites/default/files/documents/Net-Zero_Homes_report_2022.pdf)

23 Priorities 2022-2023: Adequate Housing, Cities and Climate Change, and Localising the Sustainable Development Goals. UN Habitat 2022. <https://unhabitat.org/priorities-2022-2023-adequate-housing-cities-and-climate-change-and-localising-the-sustainable>

# Lay of the Land: Mapping Tech and Shelter Tech Investors

The Terwilliger Center commissioned this study to investigate investor behaviours and attitudes towards sheltertech, as well as how to increase investments in affordable housing technologies.

## Methodology and methods

The study used a mixed-methods design, chosen because combining both quantitative and qualitative data can answer research questions that neither are able to answer on their own.<sup>24</sup> In this way, mixed methods research can shed light, not just on the extent (or lack) of climate change and impact investment in sheltertech, but also why that is, from the perspective of those involved.

After a comprehensive literature review for context, a quantitative dataset was generated through web scraping using a model to collect data from startups and investors working in sustainability and sheltertech, and the overlap between the two. The main data source was Crunchbase<sup>25</sup> augmented by other sources, namely Impact Assets 50, Shelter Tech investments, Pitchbook reports, as well as a review of relevant literature.

Qualitative data was derived from interviews with 27 global experts – shortlisted from a 50 mapped individuals and organizations in the ecosystem – of whom 17 were investors, to investigate how they invest, and to gauge their awareness of affordable housing issues in comparison to climate change, as well as their understanding of the sheltertech industry. The research also incorporated the views of four sheltertech startups and six support players in the ecosystem, in the form of startup incubators and housing experts.

This report first looks at the case for affordable housing as a tech investment, especially one for climate tech. It presents a profile of investors, including types of source capital and preferred investment vehicles, as well as their innovation focus. It then looks at the extent to which sheltertech features in the investment profile of

investors. Finally, it proposes avenues for change that can address the current barriers for climate tech and impact investment in the sheltertech sector.

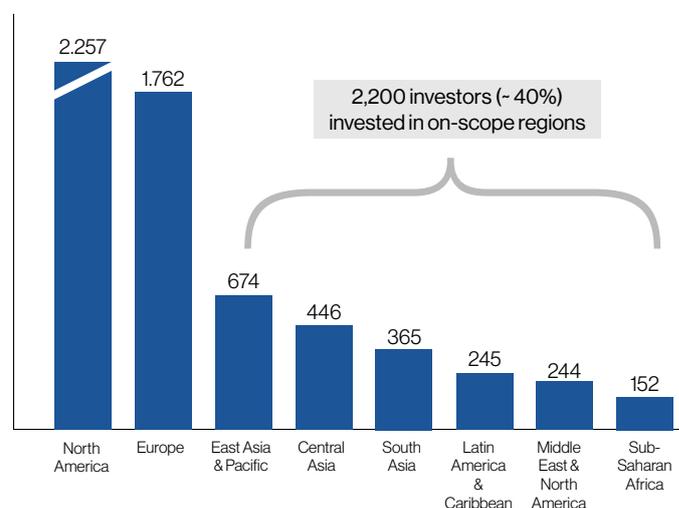
## Data collection

Quantitative study data collection identified over 24,000 startups and 5,500 investors in sustainability and the built environment.

## Profile of the investors

Of these, the dataset included 2,200 investors that invested in the Global South (figure 4), of which between 20% and 40% invested in sectors relevant to affordable housing, such as energy and energy efficiency, industrial resources and sustainability, and real estate and housing specifically and housing specifically.

Figure 4. Number of investors in relevant regions



<sup>24</sup> Mixed Methods. The University of Queensland Institute for Social Science Research. <https://issr.uq.edu.au/research-methods/mixed-methods>.

<sup>25</sup> <https://www.crunchbase.com/>

# Meet the Investors

A scoring model refined the dataset from 5,500 investors analyzed for sector-level insights, down to 50 to map the ecosystem of investment (figure 6). These companies were then divided into four key investor groups:

- 1 Shelters tech
- 2 Construction and Real Estate
- 3 Sustainability and Impact Investors in Developing Countries
- 4 Generalist Investors

## Shelters tech

These investors are already sold on the concept of shelters tech and its potential to help address the need for affordable housing, especially in developing countries. Examples include private sector company foundations, multilateral development organizations and non-profit organizations with an urban agenda.

This investor group typically has relatively low fund amounts at their disposal. They struggle to invest in early stage innovations with an uncertain impact, and have limited capacity to invest in growth-stage startups. They are, however, ideal partners for advocacy, networking and knowledge generation to attract funding and co-investment opportunities.

## Construction and real estate

Venture capital firms focused on innovation in the global construction industry, typically backed by corporate players in the construction and real estate sector, are well positioned to invest in

making the sector more efficient and sustainable.

One of their downsides is that they are averse to investing in developing countries, and tend to focus on environmental rather than social impact. That said, they have high levels of funding available, and are well positioned to take advantage of the growing popularity of sustainability in construction as a major investment trend. Moreover, developing countries are increasingly seen as a market with high-profit opportunities.

## Sustainability and impact investors in developing countries

These investors have a clear focus on impact, and there have been some, albeit marginal, investments in housing already from such investors. They often apply a social and environmental impact lens to their work in other sectors that could be turned to housing. Unfortunately, this group of investors tends to underestimate (or be unaware of) the climate impact of the built environment. Many track impacts against the Sustainable Development Goals and therefore the impact on the housing sector can be lost.

## Generalist investors

These investors do not have a particular orientation towards sustainability or housing. They typically deploy high dollar-value venture capital globally, with a general investment scope. This can be at the early-stage or growth stage. They are profit-driven investors where impact is not in their core key performance indicator.

Figure 5. The ecosystem of sustainability investors analysed by current levels of interest in housing and Global South



1 shelters tech, 2 construction and real estate, 3 sustainability/impact investors in developing countries, 4 generalist investors

Having mapped the landscape of venture investors and establishing that there is a disconnect between the investors and sheltertech businesses, it is important to understand, from the investors themselves, why this disconnect exists. This understanding is fundamental to bridge the gap between entrepreneurs and investors in a way that can increase climate tech investment in sheltertech.

The 50 investors mapped by the quantitative model formed the basis for the 17 investors that were shortlisted and subsequently interviewed, in addition to six ecosystem actors and four sheltertech startups. These 17 investors were arrayed across the four key investor groups identified in the quantitative research. All interviews were confidential, and the investors interviewed are not expressly identified in this report.

### Investors' sources of funding and investment vehicles

The interviewed investors, both venture capital firms and impact investors, draw on a variety of sources of investable capital. Philanthropic foundations and grant funding from development finance institutions (DFIs) were among the most cited sources (cited by seven), as well as investment by friends and family (cited by three) and high net-worth individuals (cited by four). Other investors include pension funds and other professional fund managers and corporations.

The investors interviewed use a wide variety of investment vehicles. Equity was cited by respondents (cited by eight) and simple agreements for future equity mentioned by three of the venture capitalists. Convertible notes (cited by five), and debt (cited by four), as well as tailor-made funds (cited by two) were the other sources mentioned.

### Which metric comes first?

Investments in sheltertech solutions have potential to not only yield financial and environmental rewards, but also deliver significant

social impact. One sheltertech investor said that “we’re looking at businesses that were created to mitigate emissions, so environmental is therefore the first hurdle.” Another sheltertech investor concurs, saying that “sustainability is a common thread through all of the investments, the investment has to have positive impact of some kind in that space.”

Another sheltertech investor quantified the climate impact, explaining that for investments in climate change mitigation, they need to see at least half a gigaton – or five hundred billion metric tons – forecast in reduction of greenhouse gases. Nonetheless, the investor reiterated that not all of its investments were so strictly emissions driven. Investments in its climate change adaptation portfolio have more latitude and can have more incremental carbon reductions. “That could be local materials, for example,” they said. “We don’t want to lock in super carbon-intensive methods, but we balance that with the urgency of getting people into safe shelter.”

### Affordable housing metrics

Impact investors who have already entered the sheltertech space have developed housing-specific impact metrics. One investor whose impact investment firm has invested in half a dozen housing projects to date, said its metrics included “the number of homes financed and the number of people who benefitted, and the impact on quality of life, disaggregated by gender.” Other impact investors are already incorporating social impact metrics that are highly relevant to sheltertech innovations’ impact on affordable housing markets. “One of the biggest impacts is job creation, getting local economies to grow and being sustainable. Our companies solve large problems while creating jobs and building jobs,” they added.

The complexity of investing in innovative technologies, which often disrupt traditional building techniques and value chain linkages, can lead to complexity in impact assessment. “As the built environment looks to improve efficiency it may be displacing job opportunities, a key impact goal,” said one. “There are so many different facets. If you make a [construction] process more efficient and reduce costs, it makes housing more affordable, but then maybe you’re eliminating



jobs? Maybe it needs two skilled people, versus nine people previously. But then more people can get homes. It's a bit muddy. We do look at it, but it's not always clear cut."

For one of the accelerators interviewed, the first screen for a potential investment is always social or environmental impact. It has also committed to fund majority women-owned businesses. Then the next step is to look at finances and risk. "The challenge is that the pipeline becomes small," said the chief executive officer. [Villgro phils] "Due diligence is very hard for a lot of the enterprises."

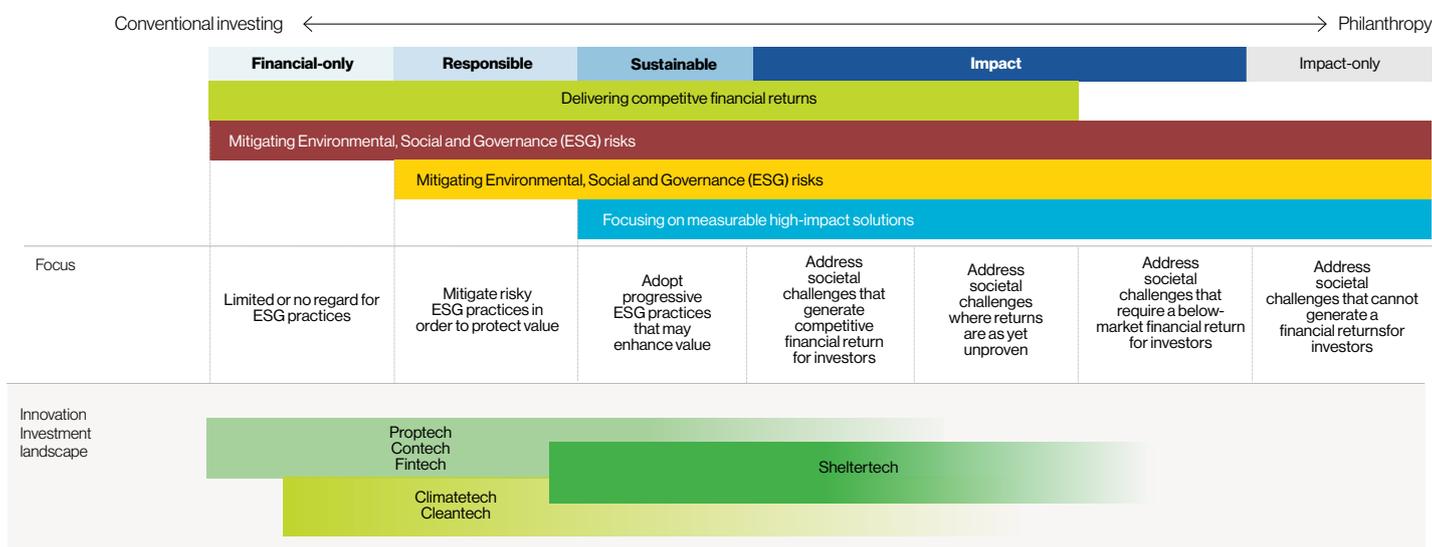
### Finance first

Amongst the 14 study participants, some were looking primarily for financial returns. For these investors, an enterprise that is not projecting profits that are competitive with mainstream venture capital investments is a non-starter. As they talked more in-depth into why they do or do not have an interest in sheltertech, investors' appetite for risk and expectation of return was one of the main themes. As one VC investor noted, they wanted "to invest in companies that can be profitable, and if they happen to have an impact, that makes them even more attractive." Finance has been attracted to these venture capital funds through the promise of significant financial returns and their model is not compatible with all sheltertech businesses, said one investor. "We wouldn't compromise the financial returns. As such, mainstream VC investment capital is not the right finance model for many businesses; many don't want to scale to that level."

In contrast, impact investors may be willing to see no financial return at all. One impact investor that has invested in housing projects in the past said that "our philanthropy capital is not repayable, and it takes on quite a bit more risk [investing in] early-stage companies, and returns are only moderate – they get 90% of the capital back." A spectrum of capital is at play for sheltertech (see figure 6).



Figure 6. Spectrum of capital and innovation investment landscape



# What Climate Tech Investors Think of Sheltertech

## Some climate tech investors are already sold on Sheltertech

There are already a number of impact investors who have grasped the potential of the sheltertech sector and have already invested in it. “We’re interested in any investments to do with built environment, including 3D, artificial intelligence, big data and data acquisition, the internet of things and smart buildings that enable cities to operate more efficiently,” explained one alternative and impact investment advisor. “There are a lot of construction companies trying to build up sustainability teams or building up digitization or innovation. This has been a positive shift. We hope to partner with those companies that are of the certain size and with a wish to change and help drive innovation by giving them access to the newest technologies.”

One design and engineering company’s philanthropic foundation looks at housing-related investments across three different portfolios, investing in climate change adaptation, climate change mitigation and work and prosperity, respectively. “Material innovations are definitely of interest,” the foundation’s portfolio and investment manager said. “[This is] often paired with construction methods.” The foundation is also interested in entities that cater to incremental builders for their climate change adaptation portfolio.

Although owner-driven, incremental building accounts for a substantial proportion of affordable housing construction, with 50 to 90 percent of residential development in the Global South estimated to be incremental,<sup>26</sup> it remains a challenging market to work with. In sub-Saharan Africa, for instance, business-to-consumer, or B2C, investments remain very difficult from a commercial perspective, one impact investor said. “It depends on what type of promise a fund makes to investors. We have promised typical venture capital returns, and business to business has been more attractive and successful than B2C.”

## No action yet, but interest

Many participants who had not yet ventured into the sheltertech ecosystem were interested in doing so. “As an angel investor, I haven’t yet invested in sheltertech startups, but I have done so as a corporate in the construction sector,” said one investment fund manager. “I’m always looking at deals and reviewing our investment pipeline and would love to be introduced to sheltertech businesses” they said.

One impact investor who is positive about sheltertech views its promise through a sustainability lens. “We have a fund that aims to support the most vulnerable people in rural landscapes to effectively adapt to climate change,” explains the senior director of a carbon finance consultancy. “It [does this] by providing knowledge and investing in small and medium enterprises that target adaptation and resilience through sustainable land management, which could also include housing.”

For a circular economy impact investor, the potential of the housing sector to engage in plastics re-use was identified as a potential entry point to sheltertech investments. Housing and other parts of the built environment have interesting potential for adding value while addressing the plastic waste crisis. “[We’re looking at] how to make buildings more energy efficient, solutions that take hard to recycle packaging and turn it into construction materials, or phase change materials and solutions that turn plastics into a temperature barrier in buildings, for example,” they added.

## Wary of an unfamiliar ecosystem

Investors from both the impact and venture capital camps described the barriers they perceived between them and the sheltertech space. Mainstream venture capital funds investing in climate tech may not consider that the risk-return profile of an affordable housing project can align with their objectives. The venture capital mindset is to generate outsized returns over a relatively short time horizon. “That is what motivates these big funding flows into electric vehicles, for example; I think people are smart enough to know that this just isn’t going to happen in affordable housing,” said one investor.

Even for impact investors who may not have the ‘profit first’ mindset of a venture capitalist, they may perceive the affordable housing market as daunting and off-putting. “There are real limits to scalability in emerging markets, and people are wary of political issues, regulation, and issues of title and land tenure. That colors people’s impressions to an inordinate degree, plus the tenure of the loans required moves off the traditional timeframe.”

This wariness of developing country settings is echoed by another impact investor. “Meeting the needs of low-income people is not the first place for investors. Even for technologies we’re investing in,



we would start in, say, a European country rather than starting in, say, the Philippines, because it's perceived as less risky. Populations who are unbanked in developing countries are a hard customer base." Similarly, a carbon-neutral building materials manufacturer described the struggles they'd had to gain traction for investments targeting housing. "Low-income or vulnerable communities are a non-investable sector because it is complex to make a profit from it," he said.

In emerging and frontier markets, even among foundations and grant funders, housing is not often a specific mandate, said one impact investor. "They may be working on health for example, and we know how critical housing is to health outcomes, but that's the challenge." Because they don't have that specific mandate, it's an area that is overlooked and underfunded. It was also noted a dislocation within climate tech investment firms. "It seems that the innovation teams don't have a priority on affordable housing, and the ones that have an affordable housing department don't look at the innovation and start-up ecosystem."

An impact investor observed that his peers are missing an opportunity to invest in climate adaptation. "Housing needs high quality materials to protect against hurricanes and flooding, for example. There are a lot of investment funds that focus on climate adaptation but they're not looking at housing. There's a lot of money here for adaptation, but they still don't invest in housing."

In developed countries, housing is being recognized as being so central to social impact that, for example, municipalities and social welfare agencies are increasingly taking a 'Housing First' policy, whereby people's housing needs are addressed before others,

such as healthcare or social support.<sup>27,28</sup> This trend should, in theory, promote demand for innovations in affordable housing. Yet, uncertainty around the government's role, and how they influence the adoption of new technologies and standards can be off-putting, said one venture capitalist who invests worldwide. "And any time there's this reliance or uncertainty around the government space, it makes it hard for the private sector," he said.

### Mis-matched investment size perceptions

Several investors saw the sheltertech sector as too niche, requiring smaller funding amounts than they were interested in investing. For one energy-focused venture capital firm, target investments are multimillion dollar businesses. The company has made some sheltertech-related investments, such as in a modular construction technology company which targets affordable housing, among other things, but note that the sector typically "doesn't scream returns(...)most companies go after a higher margin sector first."

When an impact investor's smallest cheque is US\$5 million, the sheltertech sector may simply lack the requisite market size, according to the co-head of climate tech investing at a real estate and construction investor. "We are not a philanthropy organisation so it's very difficult to get there if your primary business is third world, low-income housing. We couldn't go with one Africa-based startup because they were looking for too small an envelope size, and the addressable market was not big enough. Then we looked at a US-based firm with similar technologies, but they are looking at retaining walls on building sites which is a massive addressable market."

<sup>27</sup> Housing First. Government of Canada. [www.infrastructure.gc.ca/homelessness-sans-abri/resources-ressources/housing-first-logement-abord-eng.html](http://www.infrastructure.gc.ca/homelessness-sans-abri/resources-ressources/housing-first-logement-abord-eng.html). Accessed 01/11/2023.

<sup>28</sup> Jones S, Albanese F and Revelli M. "Achieving a New Systems Perspective to Ending Homelessness Through Housing First: A policy and practice guide." Housing First Europe, 2022. [www.housingfirsteurope.eu/wp-content/uploads/2022/05/Systems\\_Perspective\\_Policy\\_and\\_Practice\\_Guide.pdf](http://www.housingfirsteurope.eu/wp-content/uploads/2022/05/Systems_Perspective_Policy_and_Practice_Guide.pdf).



The sheltertech sector also needs to have realistic expectations of the impact investment ecosystem said one accelerator representative, recognizing that their value proposition is not for everyone. “Is venture capital really the capital for this space? I think possibly not,” they said. “The majority of investors’ return expectations won’t be matched; a return in 3-5 years is not possible. Even on the impact investment side there’s a spectrum, so even there we need to build the pool [of successes].”

This view was echoed by one building systems startup. “We don’t think we are venture investible, and that’s an area where a lot of ventures make mistakes to pursue that. The returns are too low for VCs and the risk is too high, the business is too untraditional, they’re not aware of the industry, so that the return becomes secondary, as the risk is too high already,” he said. “We still try for venture investible, and we would aim to get there but, in reality, we don’t land there.” Investment time horizon is another challenge. “In order to serve the lowest income people, we needed to scale as fast as wanted to and invest in research and development, we needed investors who understood that this is a 20-year game,” said one sheltertech entrepreneur. “This is not something that going to have significant returns without a pretty big influx of capital to first address the market failures.”

# Ways to Drive More Investors to Sheltertech

The perspectives of investors and other global experts help show the way to what would need to change for more interest and investment in sheltertech solutions. As one investor already convinced of the value of sheltertech put it “the good news is that there is enough credit capital, and there are business models to connect the need with current investment, but the impact investment camp needs to see housing and habitat for what it is: a prime area to achieve the SDGs.”

## Demystify the Sheltertech space

It is a common misperception that investments focused on the needs of low-income families are too capital-intensive over a too-long investment horizon. When low-income housing is raised as an opportunity, many players default to the bureaucratic difficulties of public sector housing development schemes, reducing it to a matter of policy. However, the immediate reality for millions of families living in inadequate conditions in the Global South is that they are looking for affordable products and services in the market to improve their housing conditions themselves. And when businesses can meet the demand through innovations that are affordable, circular and climate change-proof, investors will also find the sweet spot between impact and returns.

There remains an opportunity for sheltertech investors and ecosystem players to instill awareness and interest in the size of the market that is not waiting for government subsidy for their housing, but is building their own housing, often incrementally, and demand quality products and services to improve their living conditions. The sheltertech sector's task is to share data about the capital need and stage of the current pipeline in the sheltertech sector, draw

investors in and tell the story of the multiple social impacts and financial returns that are possible.

## Socialize Sheltertech

Ask venture capitalists unfamiliar with the term sheltertech what it means, and it becomes clear that the sector is not well understood. It can be seen as contradictory. “The problem with sheltertech – from an investor perspective – the shelter piece is low income, and the tech is opposite to that,” said one venture capitalist. The term itself can be a source of misunderstanding because it has connotations of humanitarian settings, with ‘shelter’ referring to transitional housing provided to those immediate affected by disasters, rather than a vibrant marketplace in its own right.

However, the term already has its champions. “I will use the term sheltertech, it's a good one. I'm in the choir,” said one impact investor. “It's like climate tech just five years ago, when you had to explain it more. There is the same potential to move with sheltertech.”

## Showcase the successes

To help make the case for sheltertech as a climate opportunity, investors need to see the products and services of startups validated and be presented with successful role models. There is a need for pilots with developers testing sheltertech products and services. Startups can help shape that influence with the practical knowledge they possess of the challenges and opportunities faced on the ground. “It will be important to get startups on the table to support the sheltertech agenda and influence the industry,” said the founder of a sustainable waste processing startup.



“Currently, there aren’t enough successful role models to see what the return horizon looks like, and there’s a need to establish that,” said one accelerator. “Aligning with adjacent sectors can provide a solution, such as with a climate agenda, or the circularity agenda,” they said.

### **Emphasize the nexus between affordable housing, climate and other development imperatives**

When housing contributes so fundamentally to our Sustainable Development Goals – it makes a direct contribution to six of the seventeen SDGs – it sometimes seems so ubiquitous that it falls through the gaps of people’s attention, one investor said. “In the housing conversation it’s too easy to say there’s a 1.8 billion people housing gap. We need to tell the stories of what we can do, then it becomes exciting. Including the innovation piece would really help.”

In the context of climate change, investors also need to hear how affordable housing is at the nexus of a just transition. In the words of one industry expert “what better way to foster just transition than by starting at home? The investments that people make themselves, and that investors make, provide the literal and figurative foundation for better livelihoods.” Articulating the connection between affordable housing and climate has the potential to crowd in more investors, said one investor. “That’s an area I can see housing innovation and sheltertech falling more within the funding mandate,” they said.

Impact investors may not be aware that affordable housing overlaps with many other development imperatives: without stable, affordable housing, it is difficult for families to turn their attention to their health or prioritize education for their children. Impact investors looking at, for example, creating jobs, improving health, empowering women, expanding access to education, or other aspects of the SDGs, can all strive for these goals through affordable housing investments.

For mainstream finance-first investors, sheltertech can help triple bottom line returns, not just financial but also social and environmental. Tax incentives can drive investors towards this. The United Kingdom’s former Social Investment Tax Relief was an example of this approach.<sup>29</sup> This measure enabled investors to claim personal tax reliefs when investing in qualifying social enterprises, and was successful in being used in GBP18 million of investment deals over an eight-year period. Such measures are also emerging in the Global South. In Colombia, for example, the

government introduced tax incentives for green building and affordable housing construction,<sup>30</sup> and India has been at the forefront of innovative housing finance for low-income populations.<sup>31</sup>

### **Help investors understand the sector’s innovations**

Climate tech investors are by their nature open to new ideas and innovative technologies, but they may need help getting to grips with sheltertech’s most innovative aspects.

For example, for climate tech impact investors, one of the most prolific innovations to come out of the sheltertech space are bricks made from converted plastic waste. Yet investors sometimes can’t get a good grasp of this technology and its uses in affordable housing construction, said one impact investor. “The number of startups turning plastic waste into blocks – I don’t know how to compare them. There is this feeling of overwhelm. For a lot of investors this is a new sector and there is a need to reduce barriers and help them to understand these technologies.” Ecosystem support organizations, such as Habitat for Humanity’s Terwilliger Center, help to bridge this divide, but cannot do this in isolation. Additional research is essential to build and communicate compelling business case, giving new data and market insights to generate credible evidence.

### **Ensure climate tech investors know where and why they are needed**

Climate tech investors might also need guidance toward parts of the construction industry that are more dynamic than the rest. The industry is seen often by investors as too conservative, unlike, for example, the automotive industry. The conservatism of the construction industry is palpable, said one impact investor. “It’s no surprise that they are very risk averse, but that means if sheltertech startups customers are the construction industry, adoption is really hard. My first question is: will industry use it?”

Once an investor is convinced by a sheltertech business value proposition, it can go a long way to boosting a sheltertech startup’s credibility. For example, one startup first raised a substantial amount of philanthropic funding as a non-profit, and then used that to fund the research and development necessary to prove its potential to a commercial investor. “A large corporation invested in a company like us. Nobody believed that they would do it [but they did] and this gave us a lot of credibility. It attracted a lot of other interest.”

<sup>29</sup> Social Investment Tax Relief (SITR) Get SITR. [www.assets.publishing.service.gov.uk/media/5a7c9da8e5274a29d8363be3/Social\\_investment\\_tax\\_relief\\_\\_SITR\\_\\_draft\\_guidance.pdf](http://www.assets.publishing.service.gov.uk/media/5a7c9da8e5274a29d8363be3/Social_investment_tax_relief__SITR__draft_guidance.pdf). Accessed 01/11/2023.

<sup>30</sup> “Gaining an EDGE in financing green buildings.” Environmental Finance. November 12, 2021. [www.environmental-finance.com/content/market-insight/gaining-an-edge-in-financing-green-buildings.html](http://www.environmental-finance.com/content/market-insight/gaining-an-edge-in-financing-green-buildings.html)

<sup>31</sup> “Key Investment in HDFC to Help Grow Green Affordable Housing Finance in India, Supporting Climate Goals.” International Finance Corporation. December 23, 2022. [www.pressroom.ifc.org/all/pages/PressDetail.aspx?ID=27360](http://www.pressroom.ifc.org/all/pages/PressDetail.aspx?ID=27360)

In some cases, the innovation is not the technology itself, but the adaptation of a business model already in use in another region into a local context. “In emerging markets typically it’s often less about brand new innovations and more about working with business models, how the business from other regions can be adopted to local conditions,” said one impact investor. “There are a lot of fundamental needs, such as access to bank accounts, insurance, and so on. Our innovation is more business model innovation.”

### Partner up for financing

The data shows that there is great scope for partnerships between investors, startups, and corporations, as well as opportunities for partnerships with development finance institutions, such as multilateral development banks. “DFIs can’t be ignored. They’re big agents, and they often share the project pipeline,” said one sheltertech investor.

There is an estimated US\$16 trillion financing gap for delivering decent homes and over 80% of this must come from private sector participation.<sup>31</sup> The World Bank’s International Finance Corporation is a committed player in this sector, describing itself as the leading international investor in housing finance in emerging markets. It has deployed US\$7 billion to the sector since 2000, and holds an aggregated portfolio of US\$3.8 billion across 93 projects as of March 2023.<sup>32</sup> DFIs such as IFC and development banks, such as the Asian Development Bank – which has partnered with Habitat for Humanity for building capacity in the housing microfinance sector – are also valuable partners to explore innovative finance modalities such as blended finance, a strategy to combine capital with different levels of risk, to catalyze risk-adjusted market-rate-seeking financing into impact investments.<sup>33</sup>

Other financial instruments such as insurance can also be used. For example, in 2019, the Asian Development Bank used US\$921 million worth of credit insurance to bring insurance providers into loans or portfolio of loans, including over US\$514 million denominated in local currency, with other DFIs have taken similar actions.

### Advocate for improved innovation policies

There is a perception of a lack of government support to promote investment in sheltertech. This was cited as a deterrent to investing by one venture capitalist.

This calls for a regulatory framework that supports, rather than deters, investing in sheltertech solutions. Where governments have been supportive, there has been an uptick of sheltertech investments.

For example, in 2023 the Construction Innovation Hub was established by the Kerala Startup Mission, the government agency for promoting entrepreneurship in the state of Kerala, India. While the Hub fosters collaboration, innovation and knowledge-sharing among construction stakeholders, it also has the important mandate of focusing on sustainability and innovation in the development of housing markets serving low-income families.

Furthermore, given that households are price sensitive, a supportive enabling environment is a must to support uptake of innovation. “The regulation isn’t there to promote investment in the sector since most of these technologies are more expensive than traditional materials, and price is the number one factor the sector looks at,” one investor said. Strategic subsidies to incentivize the scaling of sustainable sheltertech materials and business models would move the sector in that direction.

<sup>31</sup> “A blueprint for addressing the global affordable housing challenge.” McKinsey Global Institute. October 2014. [www.mckinsey.com/featured-insights/urbanization/tackling-the-worlds-affordable-housing-challenge](http://www.mckinsey.com/featured-insights/urbanization/tackling-the-worlds-affordable-housing-challenge)

<sup>32</sup> “Factsheet: Green, Resilient and Inclusive Housing Finance.” International Finance Corporation. May 21, 2023. [www.ifc.org/en/insights-reports/2023/green-resilient-and-inclusive-housing-finance](http://www.ifc.org/en/insights-reports/2023/green-resilient-and-inclusive-housing-finance)

<sup>33</sup> Blended Finance Working Group. Global Impact Investing Network. [www.thegiin.org/blended-finance-working-group](http://www.thegiin.org/blended-finance-working-group). Accessed 01/11/2023.

## Conclusion



While ample evidence exists of the fundamental role that the housing sector plays in driving climate change mitigation and adaptation, and its contribution to multiple Sustainable Development Goals, investors still lack awareness of the opportunities that exist in addressing the housing needs of millions of families in the Global South. Tackling climate change through investment in the built environment in an equitable and sustainable manner is crucial for the well-being of vulnerable communities and the planet as a whole.

Investment in sheltertech solutions holds immense potential in driving economic growth through the adoption of emerging and green technologies. However, the research shows that sheltertech has been underrepresented in climate tech investment. This lack of attention poses a barrier to achieving and securing a sustainable future.

To attract more investors to sheltertech, the sector must demystify its potential, showcase successful examples, and highlight the multiple impacts and financial returns that can be achieved. By investing in sheltertech and prioritizing climate-resilient housing, the sector can not only mitigate and adapt to climate change but also ensure equitable access to quality and affordable housing. It is through these collective efforts that a sustainable and just future for everyone can be unlocked.

For more information on sheltertech, please visit:  
<https://www.habitat.org/sheltertech/knowledge-hub>

Get in touch: [tcis@habitat.org](mailto:tcis@habitat.org)

**everyone**  
**needs a place to call home**



TERWILLIGER CENTER FOR INNOVATION IN SHELTER  
285 Peachtree Center Ave. NE, Suite 2700, Atlanta, GA 30303-1220 (229) 924-6935  
TCIS@habitat.org habitat.org/tcis