

# REALL IS AN INNOVATOR AND INVESTOR IN CLIMATE-SMART AFFORDABLE HOUSING ACROSS AFRICA AND ASIA, BUILDING A HOME FOR HUMAN POTENTIAL THAT DOESN'T COST THE EARTH.

Reall are building a global network of pioneers, testing proof-of-concept housing, creating open source data and evidence, and sharing learning and experience across our partners. Reall de-risks private investment, building a portfolio of green affordable homes and brokering policy change to unlock housing markets at scale.

Green, resilient homes are at the nexus of climate change, affordability and inclusion - they are a critical opportunity to deliver on mitigation and resilience, whilst stimulating economic growth. Reall finds sustainable-housing ecosystem pioneers, and works with them to kick-start markets through innovation and investment in affordable housing and end-user finance in urban Africa and Asia, exclusively targeting people in the bottom 40% of the income pyramid - where the need is greatest and the housing deficit is most acute.

Reall invests in and partners with climate-smart thought leaders through funding, technical advice and dedicated research, developing revolutionary approaches to sustainable affordable housing in the areas most vulnerable to climate-related impact.

**These are the game-changers, creating solutions to humanity's most pressing challenges.**



## REALL PARTNER PROFILE:



1.6 billion people are without a home. Construction is responsible for nearly 40% of global carbon emissions. In Pakistan, 140 million people face severe drinking water shortages. When ModulusTech examined this three-part problem, they recognised an urgent need for an **affordable, scalable, carbon-neutral housing design, which can work off-grid.**

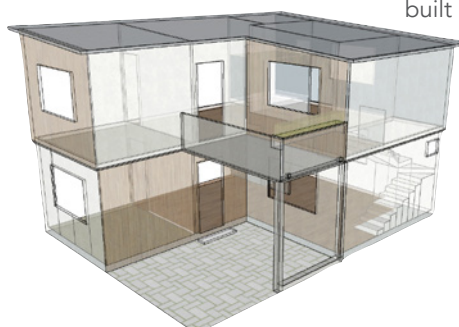
### Pakistan's first net-zero homes

ModulusTech are working with Reall to deliver an **innovative carbon-neutral modular system in Karachi, Pakistan, using their unique #InterMesh housing technology.**

### This pioneering design harnesses multiple benefits:

- **Cost-effective and time-efficient**
- **Environmentally friendly:** self-sustaining, low embodied-carbon release, energy-efficient
- **Flexible:** re-locatable, modular, off-grid
- **Accessible:** simple construction methodology, plug & play mechanism for utilities
- **Sustainable:** climate resilient, fire & earthquake safe, international building code-compliant

Prefabricated components can be assembled on site **ten times faster** than using conventional construction techniques: manufactured and delivered within a week. Their compact design means transportation costs are lower too - both financially and in carbon emissions. 2000ft<sup>2</sup> of built space fits in a single 40-foot container.



# MODULUSTECH'S HOUSING TECHNOLOGY IS A POWERFUL ANTIDOTE TO THE IMMINENT THREAT OF CLIMATE-CHANGE - REDUCING CO<sup>2</sup> EMISSIONS TO A FRACTION OF CONVENTIONAL HOUSING

A concrete house comparable in size produced 45,000kg CO<sup>2</sup> emissions - **52 times as much as a ModulusTech home**. The houses are completely self-sustaining, able to operate **solar electricity** and **water purifiers**, creating resilience against power blackouts, water shortages and rising energy prices, and designed for **maximum thermal comfort** and resilience against heatwaves. Insulation, window placement, and wind catchers facilitate a natural ventilation system, providing a 10-12°F drop in temperature indoors on a sunny day.

Natural lighting and cooling **reduce the electricity load** for lighting and air conditioning. Smart solar microgrids provide **internet connectivity**, empowering people in even the most remote and disconnected areas.

## EDGE-Advanced certified

EDGE, an innovation of the International Finance Corporation, is a tool and certification system that helps developers and construction professionals to deliver greener buildings. Using the EDGE energy efficiency calculator, ModulusTech houses are 96% more efficient than local alternatives, and are accredited as EDGE-Advanced homes.



Efficiency savings in producing mass prefabricated modular components creates a cost reduction in manufacturing, and a 900ft<sup>2</sup> ModulusTech home is \$16k, an affordable option for low-middle income families in Karachi. And building self-sustaining communities for the most underserved segments of society, ModulusTech are providing not just homes, but better health, stability, and economic opportunities, creating resilience to climate shocks through an accessible route out of informal settlements.

**Smart, innovative engineering—coupled with a frank assessment of the climate, infrastructure, and economic challenges—has led ModulusTech to build a solution for the triple bottom line: people - planet - profit.**

Reall's partner network provides the opportunity to share solutions like ModulusTech's engineering design across the sector, driving wider market change, and unlocking climate-smart infrastructure assets at scale, catalysing investment by demonstrating the commercial viability of low-carbon affordable homes.

**"IT IS RARE TO FIND PARTNERS AS SUPPORTIVE AND FORWARD-THINKING AS REALL; ENCOURAGING INNOVATION, SUSTAINABILITY AND ENTREPRENEURSHIP.**

**WITH OUR SHARED VISION, THE PARTNERSHIP IS IMPERATIVE FOR CREATING LARGE SCALE IMPACT IN THE REGION, AS WELL AS ADDRESSING CLIMATE CHANGE."**

Nabeel Siddiqui ModulusTech CEO

