



#### Urban Agenda Platform

*The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.*

# Affordable Abodes Private Limited

Region	Asia and the Pacific
Award Scheme	Habitat for Humanity
Start Year	2019
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

## Summary

The production of construction materials such as concrete products have an enormous impact on the environment. Concrete Hollow Blocks are the predominant construction material utilized in low income housing across the globe. Cement accounts for 8% of the world's CO2 emissions.

## Background and Objective

Affordable Abodes manufactures bio-composite building materials to build high quality, low-cost housing around Southeast Asia. The company has developed a circular economy model from production of eco-friendly building materials, while ensuring positive impact at each step in the value chain. As of July 2019, Affordable Abodes had built seven prototype houses. The company intends to scale up production to 5,000 houses per annum in the next three years through setting up factories throughout the country.

## Innovative Initiative

Kenafcrete® is a bio-composite building material made from up-cycled agricultural and industrial by-products. Kenafcrete® is produced using the entire Kenaf plant and is sand-free, and shares similar structural properties of concrete but is a lightweight and environmentally sustainable alternative. Affordable Abodes uses Kenafcrete® to manufacture prefabricated panels which can be used in low-income housing projects. The company aims to decrease the housing deficit by addressing Malaysia's high cost but low quality low-income housing stock. By creating prefabricated panels from Kenafcrete®, Affordable Abodes will build good quality materials at a lower price point, use locally manufactured materials sourced from renewable resources, as well as employ local labor throughout the production process.