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## Holcim announces Africa's largest 3D-printed affordable housing project

- **52-house complex in Kenya delivers affordable and climate-resilient housing at scale**
- **Innovative 3D printing builds more with less material in shorter time**
- **Sustainable design certification for 3D-printed housing in regenerative ecosystem**

Holcim announces Africa's largest 3D-printed affordable housing project in Kenya, developed by its joint venture 14Trees in partnership with CDC Group, the UK's development finance institution. Building on Holcim's world-first 3D-printed school in Malawi, the Mvule Gardens housing complex is scaling up affordable housing in Kenya to be part of bridging the country's infrastructure gap. This project was made possible by Holcim's proprietary ink, TectorPrint, giving the walls structural function to bear the load of the building. This breakthrough will accelerate the scale-up of 3D printing for affordable housing.

Jan Jenisch, CEO Holcim: "We are excited to be building one of the world's largest 3D-printed affordable housing projects in Kenya. With today's rapid urbanization, over three billion people are expected to need affordable housing by 2030. This issue is most acute in Africa, with countries like Kenya already facing an estimated shortage of two million houses. By deploying 3D printing, we can address this infrastructure gap at scale to increase living standards for all."

Tenbite Ermias, CDC Africa Managing Director: "14Trees is pioneering the use of leading edge technology to address one of Africa's most pressing development needs - affordable housing - to create life-changing infrastructure for whole communities."

The Mvule Gardens in Kilifi, Kenya, is one of the largest 3D-printed affordable housing projects in the world. It is part of the Green Heart of Kenya regenerative ecosystem, a model for inclusive and climate-resilient cities. Its advanced sustainability profile won an IFC-EDGE Advanced sustainable design certification, which recognizes resource-efficient and zero-carbon buildings.

Holcim's joint venture 14Trees is dedicated to addressing Africa's shortage of affordable housing with 3D printing and smart design while creating skilled local jobs. As proven in Malawi, the technique can reduce the environmental footprint of a house by more than 50% compared to conventional methods, while the walls can be built at record speed in just 12 hours compared to almost four days with conventional building techniques.

MASS Design Group, an American and African-based architecture practice, designed the Mvule Gardens to advance affordable, sustainable and replicable housing units adapted to Kenya's environment.

## About Holcim

Holcim builds progress for people and the planet. As a global leader in innovative and sustainable building solutions, Holcim is enabling greener cities, smarter infrastructure and improving living standards around the world. With sustainability at the core of its strategy Holcim is becoming a net zero company, with its people and communities at the heart of its success. The company is driving the circular economy as a world leader in recycling to build more with less. Holcim is the company behind some of the world's most trusted brands in the building sector including ACC, Aggregate Industries, Ambuja Cement, Disensa, Firestone Building Products, Geocycle, Holcim and Lafarge. Holcim is 70,000 people around the world who are passionate about building progress for people and the planet through four business segments: Cement, Ready-Mix Concrete, Aggregates and Solutions & Products.

More information is available on [www.holcim.com](http://www.holcim.com)

## About CDC

CDC Group is the UK's impact investor with over 70 years of experience of successfully supporting the sustainable, long-term growth of businesses in Asia and Africa. Under its new strategy its geographical mandate will be expanded to include Indo-Pacific countries and the Caribbean. More detail about the next strategy period will be made available on 14 December 2021.

CDC will become British International Investment plc on 4 April 2022. The company is a leading player in the fight against climate change and has committed more than £700m of climate finance over the last four years. It plans to invest over £3 billion in climate finance between 2022 and 2026.

CDC is also a founding member of the 2X challenge which has raised \$10bn to empower women's economic development. The company has investments in over 1000 businesses in emerging economies and total assets of £6.9 billion.

In 2020, CDC committed over of £1.1 billion to businesses in Africa and Asia, and aims to invest up to £1.3 billion in 2021 – with a focus on driving inclusive growth, job creation and supporting economic recovery from COVID-19.

CDC is funded by the UK government and is a champion of the UN's Sustainable Development Goals. All proceeds from CDC's investments are reinvested to improve the lives of millions of people in Asia and Africa.

CDC's expertise makes it an ideal partner for private investors looking to devote capital to making a measurable environmental and social impact in countries most in need of investment.

Find out more at [www.cdccgroup.com](http://www.cdccgroup.com)

## About 14Trees

14Trees is a joint venture between Holcim and CDC Group which is focused on building affordable houses, schools and social infrastructures in Africa. It was set up with the aim to accelerate the production and commercialization of environmentally-friendly, affordable construction solutions in Africa. 14Trees benefits from the expertise of Holcim's R&D centre, the world's leading building materials research centre, to accelerate the use of environmentally friendly solutions such as Holcim earth brick Durabrick® and 3D printing. For more information go to <https://www.14trees.com>

## Important disclaimer – forward-looking statements:

This document contains forward-looking statements. Such forward-looking statements do not constitute forecasts regarding results or any other performance indicator, but rather trends or targets, as the case may be, including with respect to plans, initiatives, events, products, solutions and services, their development and potential. Although Holcim believes that the expectations reflected in such forward-looking statements are based on reasonable assumptions as at the time of publishing this document, investors are cautioned that these statements are not guarantees of future performance. Actual results may differ materially from the forward-looking statements as a result of a number of risks and uncertainties, many of which are difficult to predict and generally beyond the control of Holcim, including but not limited to the risks described in the Holcim's annual report available on its website ([www.holcim.com](http://www.holcim.com)) and uncertainties related to the market conditions and the implementation of our plans. Accordingly, we caution you against relying on forward-looking statements. Holcim does not undertake to provide updates of these forward-looking statements.