



News

Asia's largest mass timber building completes in Singapore

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▲ An opening ceremony for Gaia was held last week. Toyo Ito is on the right (Nanyang Technical University)

Work has finished on Toyo Ito & Associates' "Gaia" project for the Nanyang Business School in Singapore.

The zero-energy building, which is billed as Asia's largest mass timber building, takes the form of two six-storey curving rectangles that are joined at multiple points. It consists

mainly of sustainably sourced cross-laminated timber and glued laminated timber, or glulam, stiffened by a concrete core.

According to the business school, Gaia is the eighth building project on the Nanyang Technological University (NTU) campus to receive the Green Mark Platinum for zero energy. A video portrait of the building can be seen [here](#).

The 43,500-sq-m structure has open areas, air wells and terraces to reduce the need for mechanical ventilation.



▲ All the trees used in the construction of Gaia were replaced by saplings (Nanyang Technical University)

Gaia was created in collaboration with Malaysian designer RSP Architects. According to NTU, it provides a “space for learning, research and innovation, where NTU students, faculty and staff can meet and connect to uncover new opportunities for collaboration and discovery”.

To this end, it contains a 170-seat auditorium, 12 lecture theatres, 13 seminar rooms, and classrooms. The interior is mainly exposed natural wood left exposed, with large windows and glazed skylights.

According to NTU, Gaia’s energy-efficient design means that it will produce around 2,500 fewer tonnes of carbon a year compared with a standard building of its type and size.