

BUILDING PROJECT LEADERSHIP IN SUSTAINABILITY CARBON PERFORMANCE

NUS SCHOOL OF DESIGN AND ENVIRONMENT 4

Green Mark Platinum (Zero Energy)

Project Team:

- Developer: National University of Singapore
- Architect: Surbana Jurong Consultants
- C&S: Surbana Jurong Consultants
- M&E: Surbana Jurong Consultants
- QS: Surbana Jurong Consultants
- ESD: Surbana Jurong Consultants
- Builder: Kajima Overseas Asia
- Interior Design & Design Architect: Serie+ Multiply Consultants Pte Ltd, Energy and Climatic Consultants

The NUS School of Design & Environment 4 (NUS SDE4) is Singapore's first new-build net-zero energy building and the first university building in the world to be awarded a WELL GOLD certification. As a hub for the test-bedding of green building technology, the sustainable design of NUS SDE4 defines a new standard for energy efficient buildings. Its large overhanging roof and double facades on the east and west sides shade the building from the sun's heat and provide a cooler interior. Interiors are designed to maximise ventilation and natural lighting.

An innovative hybrid cooling system reduces energy consumption significantly by ensuring that rooms are not overly cooled while ensuring the optimal thermal comfort for occupants. Over 1,200 solar photovoltaic panels installed on the roof generate surplus energy within the building's own footprint to sustain its energy requirements. Surbana Jurong, in collaboration with Serie+Multiply Consultants and Transsolar KlimaEngineering, was the lead consultant for architecture, engineering, and environmental sustainable design for NUS SDE4.

