CASE STUDY

MIDDLE EAST

New York University - Abu Dhabi Campus

Solahart®
hot water free from the sun®

Solahart International +61 8 9351 4600 solahart.com
Solahart Australia +61 2 9684 9100 solahart.com.au

Solahart®
hot water free from the sun®

SAADIYAT ISLAND

NEW YORK UNIVERSITY - ABU DHABI CAMPUS

Location: Saadiyat, Abu Dhabi, United Arab Emirates
System Installed: Hot Water Requirements: 242,000 litres per day at 60°C.
Solar Collectors: 916 x Solahart Bt Collectors (1832m^2 in total)
Storage System: 13 x Solahart 7000 DBe Heat Store II, 9 x 3500 DBe Heat Store II. (136,000 litres in total). Electrically boosted.
Estimated Energy Saving: 10,000 kWh per day

New York University - Abu Dhabi Campus (NYUAD) is located on Saadiyat Island, a large low lying island 500 metres off the coast of Abu Dhabi in the United Arab Emirates. NYUAD Institute is a research university, liberal arts and science college. It attracts students from around the world, and prepares them for the challenges and opportunities of our interconnected world.

Solahart started working with the architects and engineers on the conceptual solar design for the NYU in 2009. The project constitutes seven (7) main blocks which are divided into 2-3 blocks of 20 buildings. The lower floors include extensive classroom facilites. The library, information technology facilities, laboratories, student, faculty and staff housing are incorporated on the upper floors. Once fully completed it is expected this world class facility, known as NYUAD, to have a student intake of 2,500.

The Solahart Drain Back technology was specifically included in the performance specification to prevent overheating in summer. The client's expectations are to provide maximum hot water in winter without overheating in the summer, when temperatures can exceed 45°C on a daily basis. The system design incorporates seven plant rooms with ten separate roof areas to house the 22 tanks and a total of 916 collectors. The daily demand is 240,000 litres, which would require approximately 10,000 kWh of electrical heating without solar.

The system was installed and commissioned to commence operation in 2013.