



aggreko

Powering performance at the World Aquatics Championships - Singapore 2025

CUSTOMER

Kin Productions Pte Ltd

LOCATION

Singapore

SECTOR

Events

KEY FACTS

3.6 MW

total cooling capacity

7.04 MW

total power capacity

20 km

of cabling

40 x

distribution boards

450 m

of ducting

THE CHALLENGE

The World Aquatics Championships - Singapore 2025 presented a complex logistical and environmental challenge

The customer required reliable and efficient HVAC, power, and cabling solutions across two key locations to support critical event infrastructure — including broadcast, audio, visual, and lighting systems.

Singapore's tropical climate, characterised by high temperatures and humidity, posed a significant obstacle in maintaining optimal indoor temperatures within the newly constructed main arena.

With thousands of attendees in constant motion and a large swimming pool centrally located within the venue, consistent cooling performance was essential to ensure comfort and operational continuity.

Compounding the challenge was the requirement to design, engineer, and install a highly specialised HVAC system within a tight project timeline, all while navigating space constraints for equipment placement.

THE SOLUTION

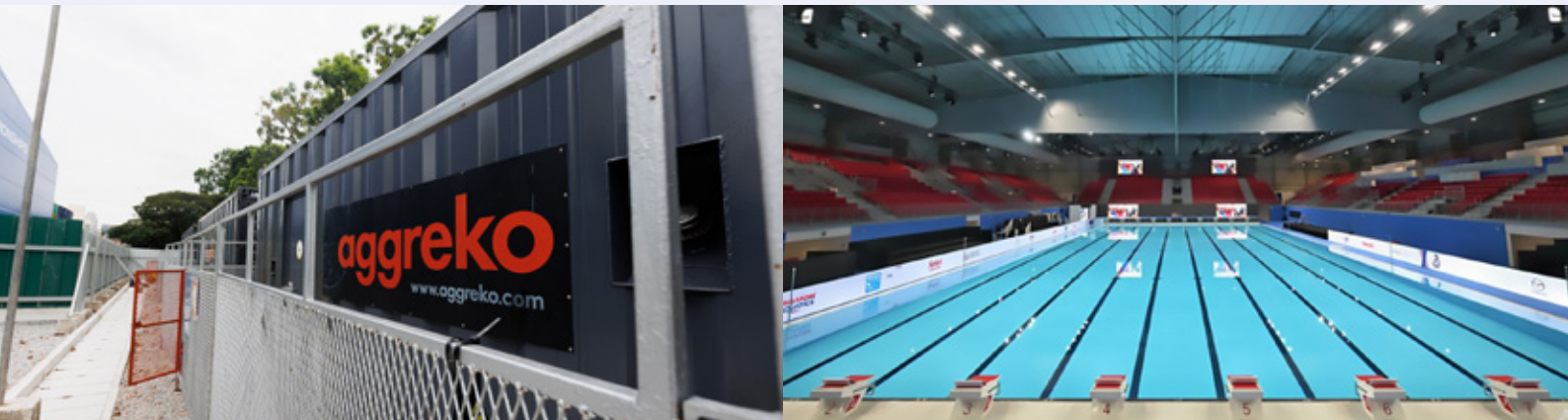
Aggreko's high-capacity HVAC and power solutions: engineered for seamless event performance

Aggreko delivered a fully integrated turnkey HVAC and temporary power solution, meticulously engineered to ensure seamless functionality and adaptability throughout the event. Central to the cooling strategy was a dual-network ducting system that combined internal fabric ducts, suspended from the venue roof, with external rigid ducting. This system was supported by four double-stacked chiller farms and four air conditioning units, working together to distribute chilled air evenly across the expansive arena space.

To meet the cooling demands, Aggreko deployed a system with a total cooling capacity of 3.6 MW. In terms of power, we provided 7.04 MW of capacity through a fleet of 13 generators, ranging from 125 kVA to 1250 kVA.

Power was distributed via 20 kilometers of cabling and 40 distribution boards, ensuring reliable energy supply across all critical event systems including lighting, audio, and broadcast.

The ducting infrastructure featured 250 meters of two-meter diameter internal fabric ducting and 200 meters of 35mm PiD rigid ducting, enabling efficient airflow across the large venue. This entire temporary infrastructure — from design and delivery to installation and commissioning — was executed by Aggreko's specialist team, ensuring minimal disruption and maximum operational efficiency.



THE IMPACT

Delivering seamless HVAC and power under tight timelines

Aggreko's tailored approach enabled the customer to host a world-class sporting event under optimal conditions. Our scalable HVAC and generator systems ensured dynamic temperature regulation and uninterrupted power across key operational services.

Despite tight timelines and technical challenges, the project was completed successfully — maintaining comfort for thousands of spectators, athletes, and staff while supporting global broadcast operations and event technology.

Power supply:

7.04 MW total power capacity

- 13 diesel generators from 125 kVA to 1250 kVA

Distribution:

- 20 km of cabling
- 40 x distribution boards

Ducting:

- 250 meters of 2-meter diameter fabric ducting
- 200 meters of 35 mm PiD rigid ducting

Cooling capacity:

3.6 MW total cooling capacity

- 4 x units of 800 kW chillers
- 8 x units of 500 kW air handlers
- 4 x units of 100 kW air conditioners
- 4 x pumps
- 4 x buffer tanks