



MMA
OFFSHORE
A **Cyan** Group Company

Offshore Wind





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About MMA

MMA Offshore is a leading provider of marine and subsea services globally.

With our fleet of modern offshore vessels and our marine, subsea and project logistics expertise, we deliver pioneering blue solutions to support energy and offshore renewables projects, governments and coastal infrastructure around the world.

MMA has a proven track record as a trusted partner for the world's leading offshore wind developers, delivering tailored and comprehensive support at every stage of wind farm development.

From delivering vessel support and field preparation investigations to working with our clients to implement innovative marine habitat protection solutions, our global support team is experienced in meeting the unique requirements of the renewable energy market.

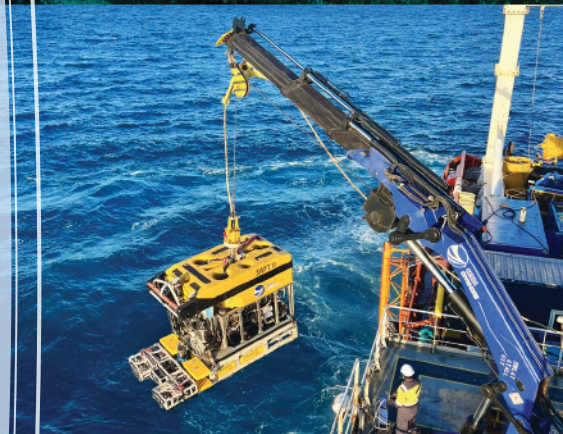
MMA is a subsidiary of Cyan Renewables.

About Cyan Renewables

Headquartered in Singapore and fully owned by Seraya Partners, Cyan Renewables is Asia's first dedicated offshore wind vessel operator supporting the fast-growing offshore wind farm industry and the marine sector's transition from "blue to green". By being the partner of choice to both wind farm developers and vessel operators, Cyan Renewables aims to facilitate the world's transition towards a greener future built on sustainable renewable energy. For more information, please visit

www.cyanrenewables.com and

www.serayapartners.com.



Offshore Wind Solutions



Vessel Services

MMA owns and operates a fleet of vessels for all phases of wind farm projects. We offer tailored solutions for the offshore wind market, either as standalone services or integrated with our subsea solutions. These include:

- Walk-to-Work and accommodation support
- Windfarm construction support
- Crew and supplies transfers
- Inspection, maintenance and repair
- Subsea survey support
- Noise mitigation



Geophysical & Light Geotechnical Services

MMA has extensive experience in delivering geophysical and geotechnical services for offshore wind projects in Taiwan and South Korea. We provide proven solutions using a wide range of geophysical survey equipment to meet client needs, including:

- Reconnaissance geophysical surveys
- Detailed and engineering geophysical surveys
- Hydrographic surveys
- Sediment sampling (Vibrocore, Drop / Piston Core, Box Cores)
- Cone penetrometer testing (CPT and CPTu)



Survey Positioning Support

MMA's experienced project managers and surveyors offer reliable surface and subsea positioning services. We work with both Developers and Tier 1 Installation Contractors, providing:

- Vessel positioning
- ROV positioning
- Cable pre-lay grapnel run
- Cable post-lay inspection and burial
- Underwater balance of plant inspections



Inspection & Light Construction

MMA provides a range of light construction services to support offshore installation activities. MMA's two work-class ROVs and suite of support vessels have provided extensive services for light construction activities in the Taiwanese offshore wind market, including:

- ROV services
- CFE trenching and seabed levelling services
- Geotechnical surveys
- Mattress installations
- Cable installation support services, including post lay inspection and burial (PLIB) cable surveys



Stabilisation & Scour Protection

MMA's stabilisation and scour protection solutions are designed to provide the most efficient form of stabilisation for subsea power and umbilical cables in the offshore wind industry. These services include:

- Scour mitigation
- Grouted supports
- VIV remediation



Marine Grouting

MMA is renowned for marine grouting services in the offshore wind market. MMA's grouts boast market-leading flow rates, matched with rapid grouting plants to reduce installation time and costs. Our bespoke solutions include:

- High strength grouts
- Ultra-high strength grouts



Integrated Ecosystems

MMA integrates ecology into offshore infrastructure designs, creating ecosystems that benefit the marine environment and local communities. We have built over 30 large-scale ecosystems in various climates and collaborate with wind park developers to fabricate materials that are:

- Low CO₂
- Plastic-free, recycled where possible
- Installed remotely



Turnkey Transportation Services

With our significant project logistics experience and suite of turnkey capabilities, MMA's range of transportation services are directly transferable to the offshore wind market and include:

- Cargo transportation
- Towage
- Personnel transportation
- Greenfield support services
- Tugs and barges



Case Studies

Geophysical Survey Services

Project Name: New Sites Geophysical Survey

Location: South Korea

MMA was contracted to provide geophysical survey services in South Korea to develop offshore wind farm sites in the Sea of Japan, approximately 80km east of Ulsan in water depth between 128-160m. The scope consisted of three site surveys each approximately 81km² with geophysical data acquired from the locally flagged South Korea survey vessel, JYS, to help interpret the expected soil conditions, any seabed features, geological processes, geo-hazards and provide soil parameters for both ground model and foundation concept design.

MMA mobilised its in-house team of surveyors, survey technicians and geophysicists on the JYS to operate the following sensors:

- Multibeam Echo Sounder (MBES)
- Sidescan Sonar (SSS)
- Sub-bottom Profiler (SBP)
- Magnetometer
- Multi-channel Ultra High Resolution Seismic (MUHRS)

MMA successfully completed the survey with a combined total of approximately 2,400 line kilometres, 22,008 manhours and no lost time injuries (LTIs).

Turnkey Transportation Services

Project Name: Greater Enfield Nganhurra RTM Decommissioning

Location: Greater Enfield, Western Australia

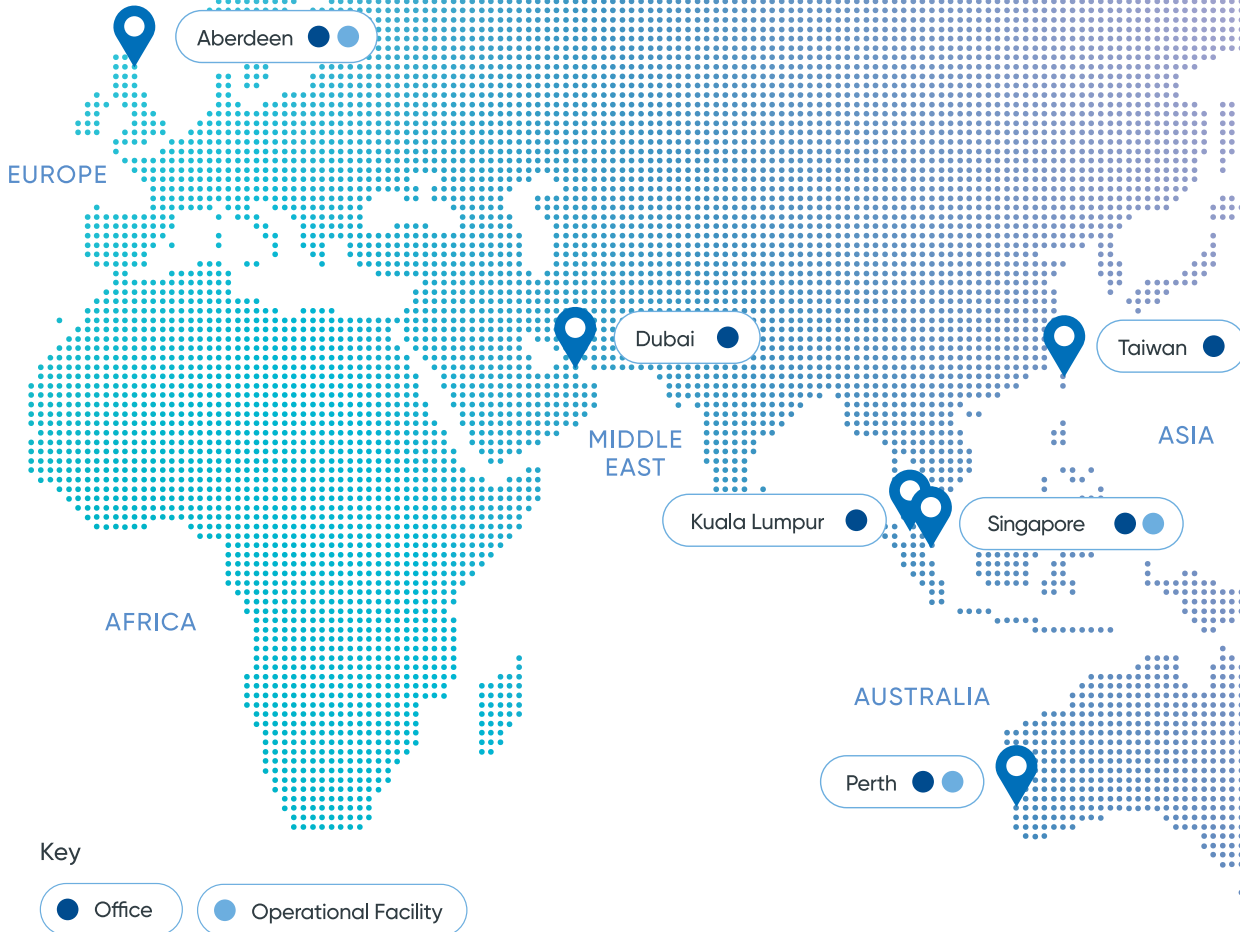
The Nganhurra Riser Turret Mooring (RTM) was located 38km off the Northwest coast of Western Australia. The RTM was previously used to support production from the Enfield development wells to the Nganhurra FPSO. The RTM system consists of an 80m riser column structure (weight >2,500MT in air) anchored to the seabed by nine mooring lines in approximately 400m water depth.

MMA was contracted to provide and operate a total of four vessels, consisting of one 400ft barge, one tow tug and two infield support tugs with an approximate total of 35,253 manhours executed in the field without an LTI. The key aspects of this campaign were the timely and safe cutting and disconnection of the mooring lines, wet tow to a sheltered location, RTM lift / set-down on barge and sea fastening for transportation to Henderson, Western Australia. This involved very close collaboration with the installation vessel and teams in the field to optimise the use of the assets.

MMA has supported every tug and barge scope on the North West Shelf over the past 15 years. We are a trusted partner to oil and gas majors and are the industry leader in managing the complexities of marine spreads with multiple vessels / vessel owners. MMA's experienced team have gained demonstrated experience from successfully managing and delivering complex projects, providing significant benefits to our clients.



Our Locations



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