



APEM Group

The partner you need

for Australian offshore
wind development

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Acknowledgement of Country

We acknowledge the Traditional Owners of the land, sea and sky where our staff work, our offices are located and where our projects take place.

We pay our respects to Elders past, present and emerging, as well as to all Aboriginal peoples and Torres Strait Islanders.

We recognise and celebrate their cultures, traditions and protocols.

About Us

APEM Group is a leading global environmental consultancy providing expert advice to clients across a wide range of industries including renewables, water and infrastructure.

Clean power, clean water and clean infrastructure are some of our planet's biggest challenges and delivering on these ambitions is key to achieving a thriving shared natural environment.

We support our clients in working towards these significant environmental sustainability goals. Partnering with key decision makers across the globe, we bring the brightest minds in environmental science to the toughest challenges and achieve environmental and social outcomes that matter.

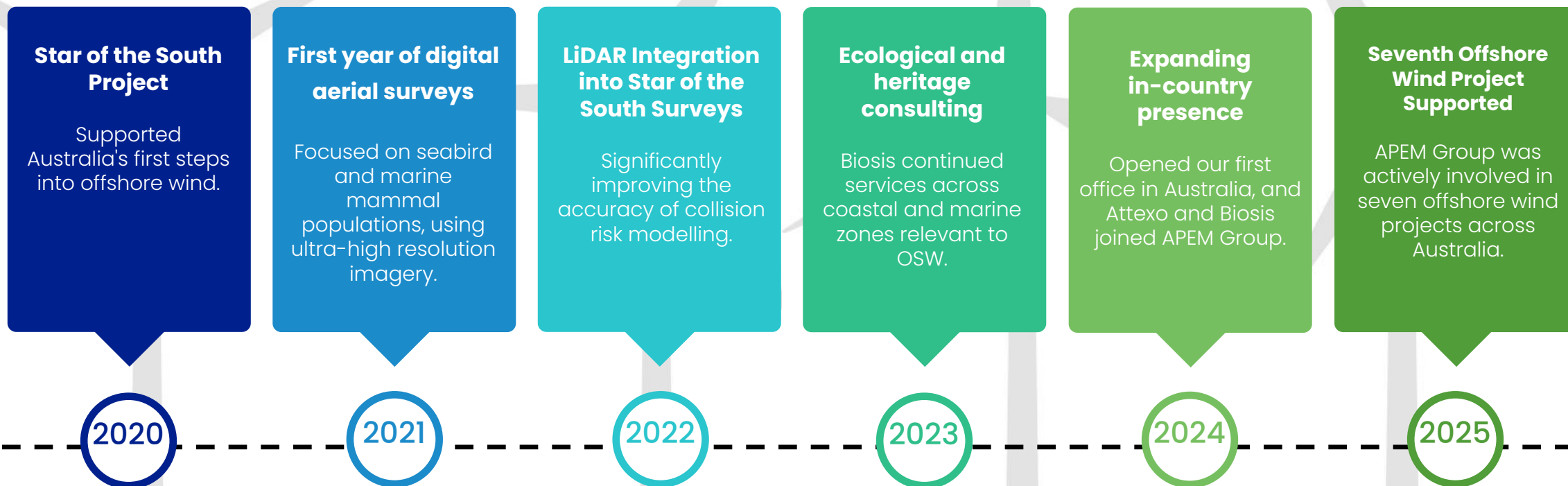


APEM Group



Our role in Australian offshore wind

Since supporting the Star of the South offshore wind project in 2020, we have gone on to build a strong track record.



The partner you need

for Australian offshore
wind development.



>50GW

Offshore Wind
Approvals



1500+

Digital Aerial
Surveys



200+ People

Dedicated to the
Offshore Wind Sector



>60

Offshore Wind
Projects



Quality Focused

ISO, IEMA, NMBAQC

Gippsland Offshore Wind Projects – Key Stats & Highlights

1st

Australia's first aerial and boat-based survey fusion

6 Years

Collecting MMO and DAS data for marine mammals in Gippsland

60+

Boat-based surveys conducted in Gippsland

70+

Digital Aerial and LiDAR surveys conducted in Gippsland

Expertise, Innovation, and Collaboration



Expertise and Market Focus

Leveraging deep experience and understanding



Data-Driven and Quality-Focused

Ensuring high standards and innovative solutions



Risk-Aware Approach

Addressing development drivers and challenges



Strong Relationships

Collaborating with stakeholders, suppliers and delivery partners



Tackling Key Challenges

Nature-positive development, derogation and compensation, regulatory changes, and market uncertainties



03

Project Lifecycle Support



Offshore Wind Lifecycle Management



01

Site Feasibility & Selection

- Due diligence
- Environmental constraints analysis
- Route planning/landfall selection
- Consenting strategy and risk analysis
- Early data collection

02

Environmental Surveys

- Digital aerial wildlife surveys
- Ecological data collection
- Vessel data collection
- Benthic surveys
- Geospatial insights
- Invasive species surveys



03

Environmental Impact Assessment

- Management and delivery of Environmental Impact Assessments (EIAs)
- Stakeholder engagement /consultation

04

Securing Approval

- Strategic advice and technical services during the approval decision-making process
- Risk appraisal and mitigation
- Stakeholder engagement / consultation
- Associated approval /permitting documentation
- Design development process integration
- Compensation and offsetting assessments and calculations



05

Post Approval Construction & Monitoring

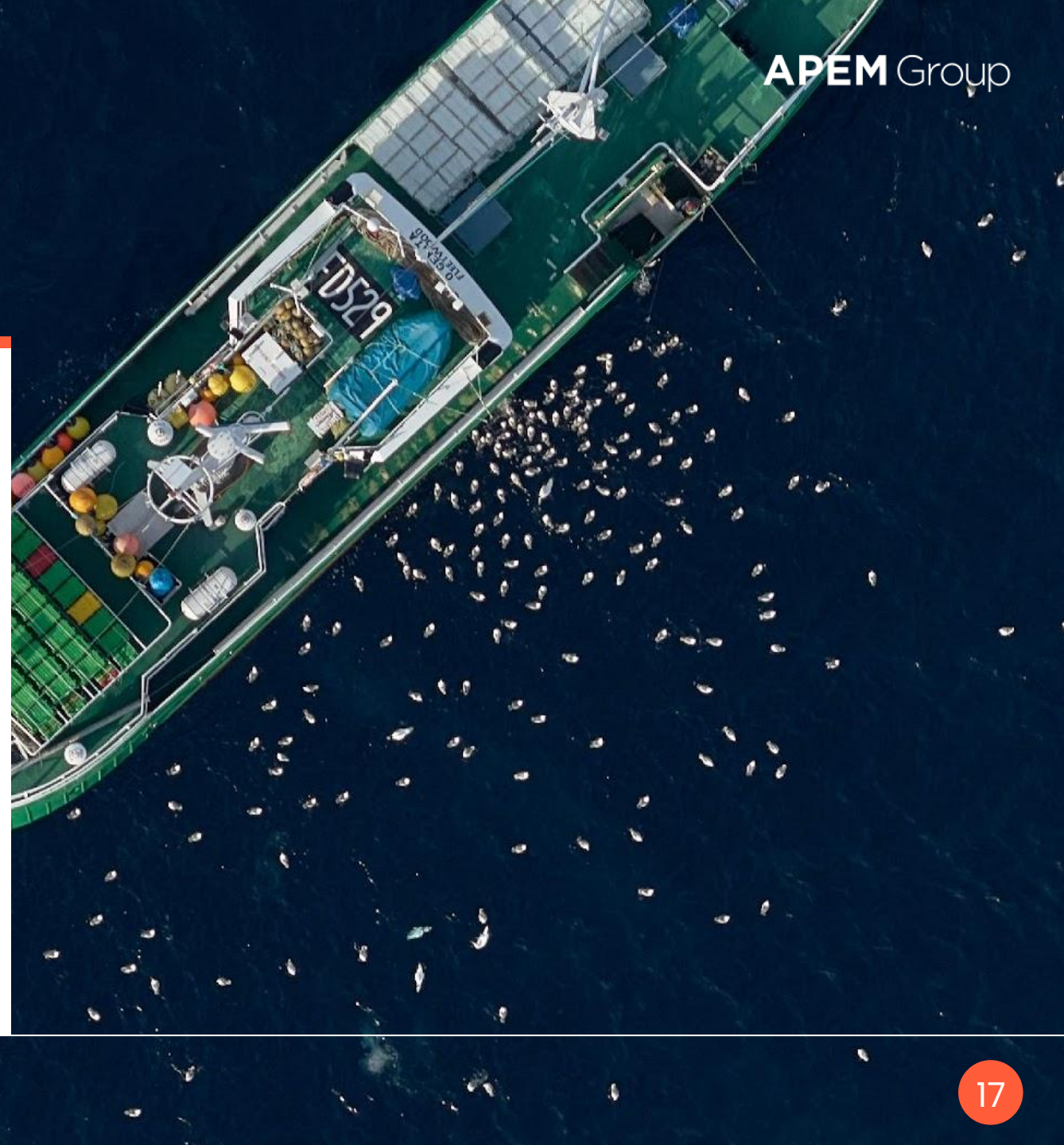
- Approval conditions compliance
- Approval variations and additional licensing
- Environmental monitoring
- Technical advice to facilitate smooth project progression
- Regulatory requirements compliance
- Mitigation measures
- Development of plans and strategy
- Design support for array layout



06

Decommissioning & Repowering

- Ongoing environmental surveys and monitoring
- Report on real-time impacts on wildlife
- Later stage project options appraisal
- Delivery of EIA and appraisals to support decommissioning consent
- Decommissioning plans
- Regulatory compliance management
- Strategic advice to minimise environmental impacts



04

**Our
Integrated
Capability**



Expertise, Innovation, and Collaboration



Expertise and Market Focus

Leveraging deep experience and understanding



Data-Driven and Quality-Focused

Ensuring high standards and innovative solutions



Risk-Aware Approach

Addressing development drivers and challenges



Strong Relationships

Collaborating with stakeholders, suppliers and delivery partners



Tackling Key Challenges












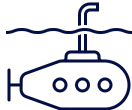


Nature-positive development, derogation and compensation, regulatory changes, and market uncertainties



Data Collection Methods

A Toolbox Approach

Technology spotlight

Marine Mammals	Digital Aerial Surveys	Visual Aerial Surveys	Visual boat-based surveys	Biologging	Passive Acoustic Monitoring
					
Seabirds	Digital Aerial Surveys	Visual boat-based surveys	Biologging	LiDAR	
					
Benthic Monitoring	Grab sampling / Core sampling	Drop-down video / Towed camera surveys	ROV surveys	Benthic landers	eDNA sampling
					

05

Innovations

Investment in Innovation

APEM Group's commitment to innovation is evident through our significant investments in new technologies and approaches.



LiDAR

Aerial surveys for offshore wind



Advanced Visualisation Tools

Presentations of project impacts



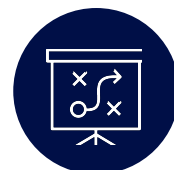
Population Consequences of Disturbance Modelling

Quantifying impacts on species



Autonomous Data Collection and Processing

Using drones and autonomous vessels and improving efficiencies with AI



Regulatory and Legislative Adaption

Adapting to evolving standards



Collision Risk Modelling

Predicts wildlife-turbine collisions using advanced ecological modelling



Mitigation and Offsetting Measures

Preventing or reducing bird collisions



WILDetect

Machine learning to identify marine species

Technology Spotlight: Digital Aerial Survey

Marine Wildlife Surveys

The highest quality data in the market:

- Statistically robust and defensible data meeting regulator standards
- Project-specific survey design to meet site needs and manage risk
- Superior 3D spatial accuracy
- High-resolution camera (1.5cm GSD)
- Comprehensive survey-to-data package with no hidden costs
- Unique LiDAR add-on for centimetric flight height accuracy, meeting emerging regulator requirements
- OSPREY cloud-based image analysis and movement into using AI. **To watch the video, [click here](#).**

06

**Sustainability
& Environmental
Impact**



Commitment to sustainability



Innovative Technology

We use LiDAR, AI, and drones to improve data accuracy and reduce environmental impact globally.



Sustainable Practices

We implement noise abatement and compensatory habitats to protect marine life during offshore wind farm development.



Comprehensive Services

Our marine ecology services consider all environmental factors in global assessments and solutions.



Global Expertise, Local Focus

We combine global insights with local knowledge to create effective strategies for unique environmental conditions.



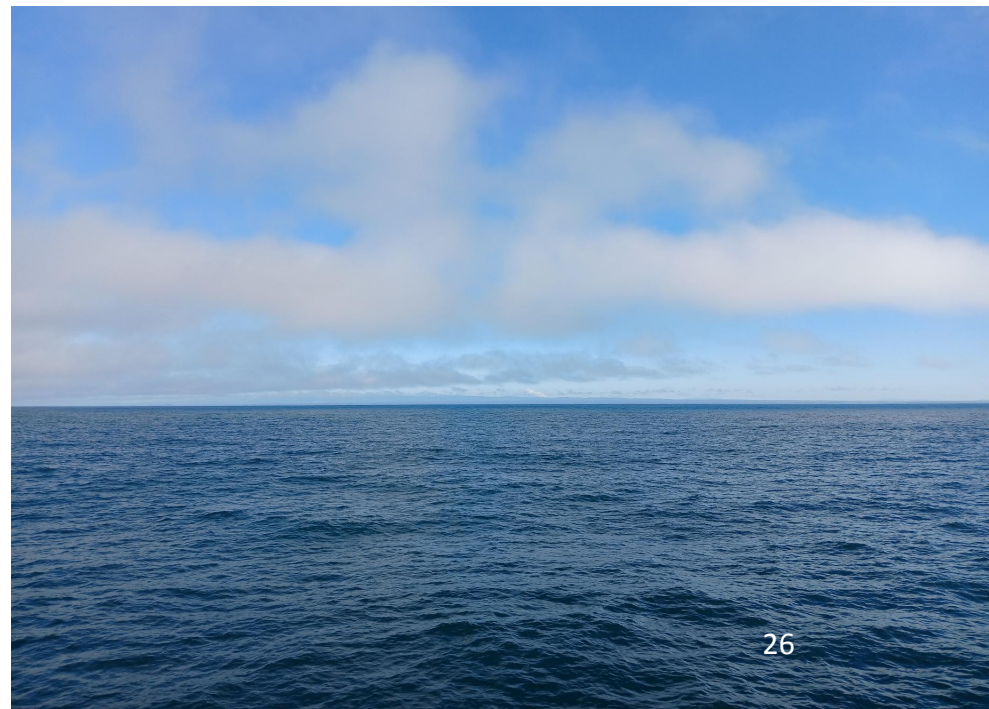
Proactive Stakeholder Engagement

We work with communities, governments, and NGOs to build consensus and address issues early.



Biosecurity Planning

We create and implement biosecurity plans, underpinned by best-practice, to protect ecosystems and industry from invasive species.





Partner with APEM Group

to support your Australian
offshore wind project
development

apemgroup.com