



# Capability Statement



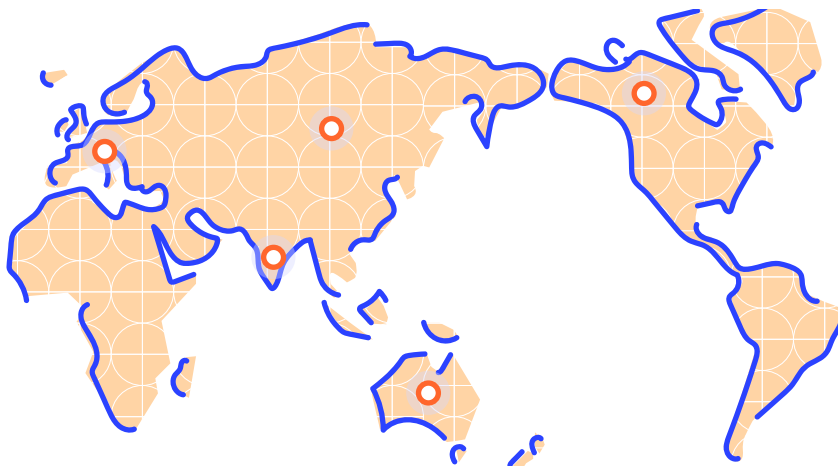
# Global Reach, Local Expertise

**Wave International is a global implementer of resource & renewables projects.**

Built on a history of more than two decades, our business has evolved to be a leading global firm in the emerging green and circular economies.

We are now at the forefront of developing new industries and supply chains to support global decarbonization. Our future is in evolving these supply chains toward circular economic business models.

Wave International's services include advisory, engineering and project delivery for natural resources, downstream refining, enabling infrastructure and water projects.

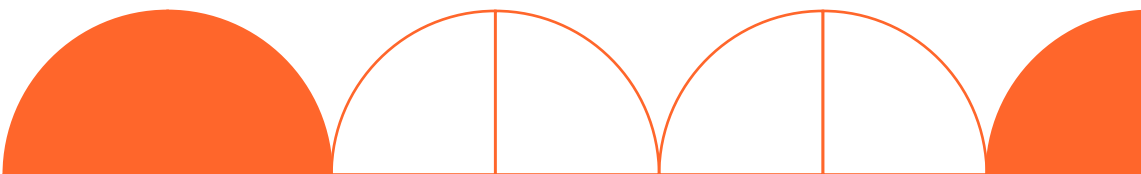
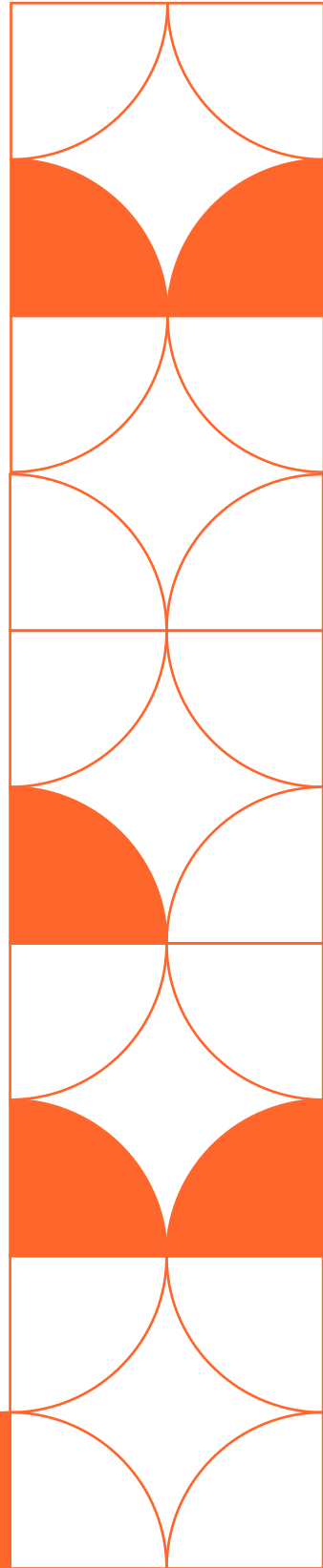



Australia

Netherlands

Canada

India





“At Wave International, we are committed to delivering successful projects through sound thinking, which results in sustainable outcomes for our company, our clients, and our people.”

Ryan Hanrahan / CEO

Creating a more  
**resourceful** world.



# How Europe Became Our Home: Bridging Continents

At Wave, we are proud to have established a strong presence in Europe. We have several compelling reasons for choosing Europe as a strategic location:

## **/ Recognition and Support of CRMA Aspirations**

We understand the aspirations of the CRMA (Critical Raw Materials Act) and are committed to supporting their goals.

## **/ Proximity to Clients**

Being located close to our clients in Europe offers several advantages, such as operating within the same time zone which allows for more efficient communication and collaboration. Moreover, being in Europe enables us to better understand and cater to the needs of our European clients.

## **/ Bringing Global CRM and Supply Chain Expertise to Europe**

We are proud to bring our expertise in CRM and supply chain management from Australia to Europe, specifically in the area of DLE. Our team brings valuable skills in process engineering and modelling, which are highly sought after in the industry.

## **/ Supporting EU Companies with Offshore Upstream Facilities**

We are committed to supporting EU companies with off-shore upstream facilities, providing them with the necessary resources and expertise for their operations.

## **/ Accessing CRM Projects in Northern Europe**

Being in Europe has granted us access to exciting CRM projects in Northern Europe. We are thrilled to have the opportunity to contribute our knowledge and skills to these projects.

# Harnessing the Resources of the World: A Path to Excellence

## / Why Wave?

At Wave International, we understand that effective supply chain management is the backbone of any successful business. That's why we offer a comprehensive suite of services that set us apart.

### **Market Intelligence and Strategic Engagement**

We have an unparalleled ability to determine strategic supply chain needs through our market intelligence. By engaging with projects and proponents at the inception stage, we ensure that our solutions are tailor-made to meet your specific requirements.

### **Business Case Design and Feasibility**

Our team of experts will work closely with you to design a solid business case that aligns with your strategic direction. We meticulously assess the technical and commercial feasibility of your project, providing you with the confidence to make informed decisions.

### **End-to-End Project Support**

Wave International is not just about designing the perfect plan - we also excel at project delivery and asset management. Our experienced team will guide you through every step of the process, ensuring that your project is brought to life according to the expectations of your business plan.



## ✓ Our Difference

### Unparalleled Expertise

At Wave International, we foster a high-performance culture and strive for engineering excellence. Our diverse team brings together industry recognized leaders in battery mineral domain and experts in digital transformation technologies. With our expertise, you can be confident that your project is in capable hands.

### Flexibility and Versatility

We understand that each project is unique, which is why we empower our teams to remain flexible and responsive. Our approach is tailored to meet the specific requirements of every project we undertake, ensuring that we deliver the results you need.

### Building Long-Term Partnerships

We believe that long-term client relationships are the key to our success. That's why we are dedicated to building ongoing, mutually sustainable partnerships with our clients. We prioritize quality, trust, and reliability in every interaction, ensuring that you can depend on us to deliver.

# Excellence in Engineering

**Wave International is an industry-leading provider of engineering services for clients globally.**

Our expert team is well-versed in civil, structural, mechanical, piping, electrical Instrumentation and controls engineering, which can meet a wide range of engineering requirements.

Our services are tailored to meet our clients' needs, from multidisciplinary integrated engineering and management services for large-scale projects to specialised technical support in a single discipline. Our team is highly experienced in engineering and design verification services, ensuring quality assurances and solutions to make your plant more efficient and designs more effective.

We understand the importance of finishing projects on time and within budget, which is why we combine a rigorous understanding of our clients' project objectives with the integrated knowledge and experience of our project team.

With a robust **Safety-in-Design** process, we take pride in producing cost-effective designs that meet all relevant Australian and/or International standards.

## ✓ Advisory and Study Management

When it comes to complex and technical projects, there's a lot to think about, from scoping and pre-feasibility through to bankable definitive studies. That's why we work with you every step of the way—from concept design development to value engineering and project execution strategy development, we'll tailor our expertise to suit you and your project.

### Advisory Services

- Market intelligence
- Cost curve analysis
- Due Diligence
- Project strategic positioning
- Supply chain assessment
- Feasibility studies
- Financial modelling

## Engineering and Design

Wave International provides Civil, Structural, Mechanical, Piping, Electrical Instrumentation and Controls Engineering services for clients at a national and international level. The Wave International team has significant experience in engineering design verification services and offers its clients assurances and solutions for their designs and plant. We place the utmost importance on delivering our clients' projects on time and within budget by combining a thorough understanding of their objectives with integrated knowledge and experience from our project team members.

### Land Development

Our experience in land development is broad, ranging from large master planned communities to urban infill projects; from metropolitan locations to remote communities throughout Australia.

#### Land Development Services

- Land acquisition due diligence investigations
- Greenfields residential and commercial subdivisions
- Brownfields and urban renewal projects
- Drainage strategies and water management plans
- Urban infrastructure – roads, drainage water and wastewater
- Contract management services
- Engineering input to planning studies

### Civil Engineering

Wave International has successfully provided civil and infrastructure services on a multitude of projects of varying size and value.

#### Civil Services

- Construction management
- Roads, haul roads and bulk earthworks
- Tailings dams, dewatering pumps and pipelines
- Mine camps and non-process infrastructure
- Water and wastewater treatment, conveyance and pumping systems



## ✓ Structural Mechanical Piping (SMP)

Wave International employs a dedicated team of engineers and designers who offer a wealth of design and project experience. Our SMP team is adept at brownfields expansions and maintenance projects, as well as greenfields projects from feasibility studies right through to detail design. We employ the latest technologies in the office and onsite, and work collaboratively with clients, contractors and fabricators to ensure all solutions are feasible and practical.

### **SMP Services**

- Design, 3D modelling, detail design and shop detailing
- Industrial structures – static and dynamic analysis
- Bulk materials handling, storage, processing and loading systems
- Specification audit technical management for bulk materials handling machines (stackers, reclaimers, shiploaders)
- Coal, base and precious metals process management
- Piping and process equipment
- Dynamic simulation modelling (plant/logistics chain debottlenecking)
- Advanced analysis – FEA, DEM and CFD

## Electrical Instrumentation & Controls (EI&C)

Wave International provides electrical expertise for clients across the public and private sectors, including resource companies, power providers, heavy industry and materials handling vendors.

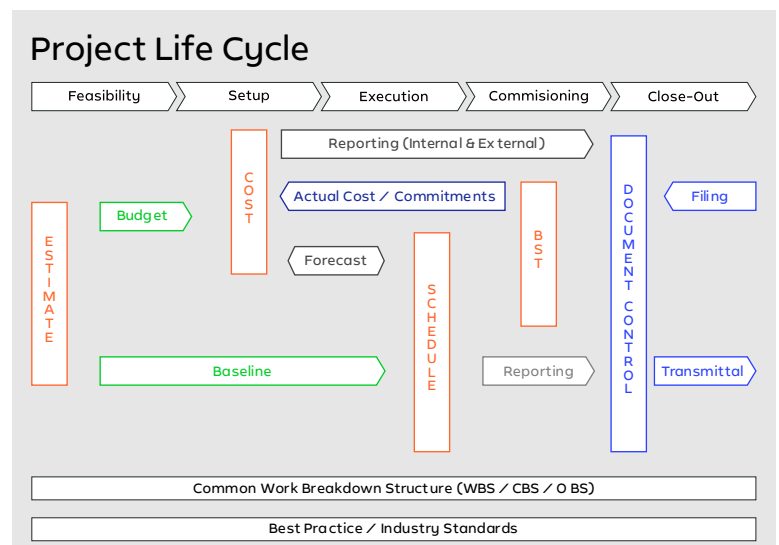
### **EI&C Services**

- Electrical LV, MV and HV engineering and design services
- Project studies and definition
- HV and MV simulation modelling to produce load flow and protection studies
- SCADA and control system architectural design and automation application engineering
- Factory testing, installation, site testing and commissioning
- Compliance auditing, hazardous areas classification, design, inspection and review
- Electrical equipment design and construction
- Site installation and supervision
- Site operations and technical training
- Remote operations and power station support
- Integrated power system renewable energy solutions
- Safety system design and implementation

## Project Services and Control

Project Services are primarily concerned with three key independent project constraints: scope, cost and time. Project Services include the management, data gathering, analysis and risk mitigation techniques used to predict, influence and report time and cost outcomes of a project. Central to the effective management of these controls is a carefully considered Work Breakdown Structure (WBS), Cost Breakdown Structure (CBS) and Operational Breakdown Structure (OBS). This definition includes all phases of the project life cycle from feasibility through close-out:

- Estimating
- Cost control
- Planning and scheduling
- Procurement and subcontract management
- Tender specification, contracts preparation and reference design
- Document control
- Project health assessments
- Claims and dispute resolutions



## Project Delivery and Implementation Management

The Project Delivery division of Wave International provides services designed to ensure projects are clearly defined, properly managed and effectively controlled throughout all stages of execution. We focus on creating and maintaining successful partnerships to design the most suitable and cost-effective solutions. We can provide either comprehensive Project Delivery Management for an entire project, or individual Project Delivery services in an advisory capacity.

Wave International prioritizes operational readiness to ensure a smooth transition from project execution to operational phase. We provide expert guidance and support to ensure that all systems, processes, and personnel are in place to effectively operate and maintain the project. Our team has extensive experience in fixed plant remediation, offering tailored solutions for repairing, upgrading, and optimizing equipment and infrastructure. We address safety, compliance, and performance issues to deliver effective outcomes. Through our expertise in debottlenecking projects, we help identify and remove constraints that limit performance and capacity. Our advice and support optimize system performance and operational efficiency. Wave International's comprehensive shutdown management services minimize downtime during planned maintenance events. Our planning, coordination, and execution support ensure that safe and efficient shutdowns are executed, while maximizing the effectiveness of maintenance activities. With our expert team of consultants at Wave International, you can rest assured that your project will receive the highest level of support and execution.

## Asset Management

Our experienced and knowledgeable Asset Management team provides assistance with strategic asset management, operational readiness and optimisation of existing fixed plant, mobile equipment and infrastructure.

### Strategic Asset Management

Logical and well defined business processes are critical for the successful operation of any asset intensive organisation. At Wave International, we work with clients to establish proven asset management systems and processes.

#### Strategic Services

- Criticality assessment methods
- Operational readiness processes
- Asset management plans
- Asset management maturity assessments
- Whole-of-life asset management
- Life cycle costing
- Baseline audit, gap analysis and strategy implementation
- Alignment to ISO 55000 standard



### New plant

We specialise in the development of the planned maintenance activities which are developed through the application of Reliability Centred Maintenance (RCM) principles and Failure Modes and Effect Analysis (FMEA). We apply these principles through our cloud-based Maintenance Tactics Toolkit (MTT) to rapidly develop and deploy optimised maintenance tactics into the CMMS and document management system. Applying various modelling tools and methodologies, we conduct asset life cycle studies, deliver life cycle cost profiles and optimal life determination.

#### New Plant Services:

- Create comprehensive inspection documents and standard work procedures
- Perform equipment criticality analysis
- Load developed data into clients' computerised maintenance management systems (CMMS)
- Asset life cycle planning
- Asset management strategy and asset management systems development based on balanced scorecard methodology and ISO 55001 requirements

## Existing plant

Wave International offers several services to assist clients with issues related to the maintenance and reliability of assets to ensure their equipment and plant functions safely and successfully with as little down time as possible.

### **Existing Plant Services:**

- Plant maintenance operations
- Spare parts review
- Defect elimination and reliability support
- Maintenance procedure development
- Work management support and development
- Condition assessments (structural, mechanical and electrical)
- Structural integrity and remediation (steel, concrete and marine)
- Structural integrity management strategy development

## Work Management Support & Development

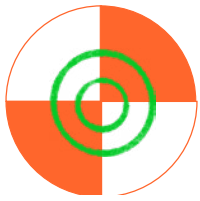
Wave International has has proven experience in the development of Work Management Processes that are tailored to support our clients' specific operations.

### **Work Management Services:**

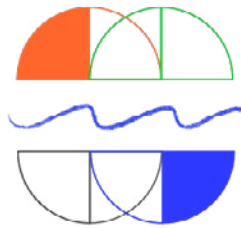
- Data upload to your CMMS
- Work management process coaching
- Maintenance budgeting and cost control support
- Maintenance process development and support for:
  1. Shutdown management
  2. Capital/Major maintenance projects
  3. Planned maintenance
  4. Daily maintenance management
  5. Key Performance Indicator (KPI) review and development

# The Wave Way

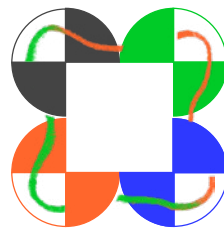
The Wave Way is a way of working, communicating and delivering that we believe enables us to deliver exceptional results for our clients.



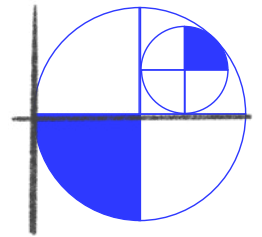
Personally  
Invested



Relentlessly  
Adaptable



Together  
we're better



Engineering  
Excellence



### Perth

QV1, Level 3, 250 St Georges Tce  
Perth, Western Australia 6000  
Western Australia 6850  
(08) 9204 0700

---

### Queensland

Level 11, 145 Eagle Street  
Brisbane, Queensland 4000  
+61 (07) 3226 3700

---

### Rotterdam

Wave Europe BV  
Coolsingel 104  
3011 AG Rotterdam  
Netherlands

[waveinternational.com](http://waveinternational.com)  
[enquiries@wavelinternational.com](mailto:enquiries@wavelinternational.com)