



An ABL Group Company



Ports & Harbours

Marine and engineering consultancy driving safety and sustainability in **ports, harbours, shipyards** and **terminals** worldwide.



About ABL Ports & Harbours

ABL's Ports and Harbours team delivers an unrivalled global offering in marine and engineering consultancy to support ports and harbour infrastructure and operations throughout an asset's lifecycle.

From technical due diligence, and port development projects to single-service offerings including technical studies, mooring analysis, simulations and marine assurance – we have the expertise to support you in finding the optimal solutions for your project.

With our roots dating back to the world's first marine survey firm, The Salvage Association, we combine an entrenched legacy in maritime, with the deepest pool of multi-disciplined marine and engineering expertise, and a highly skilled team of ex-seafarers and port personnel.

Our Ports and Harbours team includes master mariners, past harbour masters, maritime pilots, naval architects, civil engineers, marine and geotechnical engineers, and specialists in metocean analysis.

Furthermore, our expansive geographical footprint enables us to offer global expertise and insights via local market and in-country knowledge. This means we can operate within our clients' time zones, facilitating real-time collaboration for the most seamless project execution.

Our added value in Ports & Harbours



Maritime legacy since 1856 to Seek the Truth to find the best technical solution for your port infrastructure.



Global Partner. Local Expert. With consultants based in 43+ countries, we provide a global service offering via local expertise.



Team of highly skilled ex-seafarers and port professionals, bringing unrivalled operational experience.



Multi-disciplined engineering and design expertise in-house in all relevant disciplines.



Recognised partner in ports' decarbonisation with expertise in electrification, alternative fuel engineering, renewable energy hybridisation and emissions consulting



Diverse project experience in ports worldwide.



Suite of in-house proprietary software solutions supporting port efficiency

Our Services

Technical Due Diligence

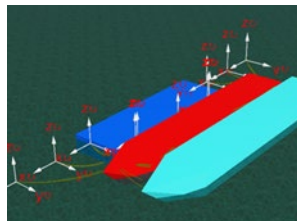
ABL is an experienced and trusted partner in technical due diligence and advisory services to support clients in evaluating risks and opportunities in port-related investments. We combine our significant operational experience with in-house multi-disciplined engineering expertise, to provide a comprehensive offering, designed to drive more accurate decision-making in financial transactions. Our services can be provided at a single project phase, or to accompany your asset through life for advanced risk mitigation.

Maritime Studies

Our team is experienced in providing a wide range of maritime studies, supporting design decisions in port development, enhanced operational safety and efficiency, and marine casualty investigations. Our marine studies cover but are not limited to:

- Ship manoeuvring simulations
- Operational simulation and business interruption – with **BRAEVURA** (ABL's in-house software)
- Dynamic mooring analysis

The team blends the use of intuitive software solutions with their own unique operational expertise to provide expert evaluations and studies that you can trust.



Civil Engineering

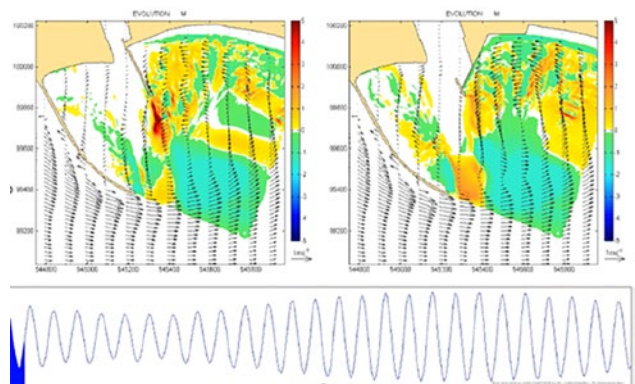
Our in-house maritime civil engineering team is experienced in a wide range of consultancy and advisory services, which add value to development, risk management and loss management scenarios. These include:

- Development advisory
- Owner's engineering advisory
- Feasibility studies and technical due diligence
- Concept design
- Master planning and business case development including CAPEX engineering
- Marine licencing and consent management and advisory
- Project management services
- Procurement advisory and contract drafting
- Contract management

Geotechnical Studies

ABL's parent company ABL Group, includes an in-house centre of excellence in multidisciplinary geoscience to support energy and oceans. This expertise includes:

- Site characterisation and ground modelling development
- 3D modelling, calculations and GIS analysis to support dredging operations
- Sediment transportation modelling



Metocean Studies

ABL provides expert services in metocean and coastal engineering, further enhanced by the numerical modelling services of its water management consultancy branch, Hidromod.

Our comprehensive technical offering drives significant value in port development projects, risk mitigation in port operations, as well as providing key analyses in fixed and floating object damage investigation. Services include:

- Desktop studies, including uptime and downtime analysis
- Metocean services for port and marina design
- Wave and hydrodynamic modelling
- Morphology and sediment transport assessment
- Seabed evolution modelling
- Tropical cyclone and tsunamic wave modelling
- Real-time modelling and visualisation of hydrological forecasting with **AquaSafe – software by Hidromod**



Renewable Port Infrastructure

Renewable port infrastructure services integrate early-stage port development with ABL's wider service portfolio in ports and harbours consulting. Drawing on our in-house expertise in offshore wind assets and development, we can provide a complete technical and commercial evaluation of a port's feasibility to support future offshore wind projects, both bottom-fixed and floating.



Port Decarbonisation & Emissions Consulting

A recognised industry partner in sustainability and energy transition engineering and consulting, our expertise in port decarbonisation is focussed on the following:

- **Emissions consulting with emiTr** – digital platform for greener ports
- Renewable energy integration for greener ports, including cold ironing facilities
- Electrification
- Vessel design from concept, FEED to detailed

Loss Prevention

Surveying and managing risk in marine assets and operations are at the heart of what we do at ABL. Our ports and harbours team brings together technical expertise, and practical experience with market-leading insights in marine assurance and risk, to provide a comprehensive service to help you reduce risk across the port value chain. Services include:

- Navigational risk assessment (Quantitative and Probabilistic)
- Port and Terminal Management
- Port assurance audit and due diligence
- National port safety legislation audits
- Safety management system (SMS)
- ISPS Plans and Audits
- Marine terminal management assessments
- Port marine personnel competency framework

Loss Management

With our legacy in The Salvage Association, we bring expertise that you can trust in loss management for fixed and floating object damage. Our global network enables us to provide a 24/7 casualty response service worldwide, mobilising the relevant expert on-site as quickly as possible, via local resources.

We provide services and advice for emergencies from oil spills to wreck salvage, develop emergency response plans and procedures, and conduct root cause analyses for port claims, casualties and dock damage incidents.

Our marine casualty investigation team employs a range of state-of-the-art software tools to facilitate accurate analyses, including QUICKVIEW and MADAS, AB IMPACT and remote navigational audits.

AquaSafe by Hidromod

Live dashboard platform showing real-time measured and modelled data for Ports & Harbours' efficiency.

AquaSafe is a dashboard solution for crystal clear-data presentation to support more accurate decision-making in water-related sectors, including ports, harbours, shipyards and terminals.

It delivers reliable metocean forecasts validated with real-time observations, offering multifactorial forecasts for navigational safety and efficiency, including guidance on port/harbour traffic management.

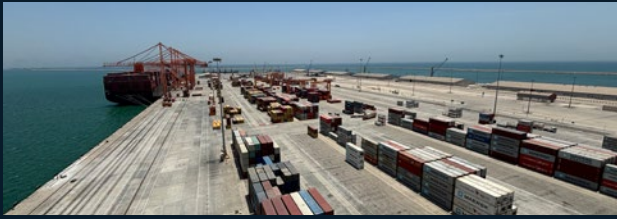
The tool also has modules to support oil spills, dynamic under keel clearance, and alarms.

Book a demo and find out more: hidromod@hidromod.com



Our Experience

Here is a small selection of case studies, which reflect the wide range of projects to which our services and expertise can add value.



Jubail Container Terminal Technical Due Diligence

Technical due diligence to support a concession agreement for the operation of the port and Public Private Partnership (PPP) potentials. This included a technical review of existing studies and designs related to the port's high-risk items, condition assessments, risk assessments of natural and allied hazards and social and environmental analysis of the impact of port development on surrounding areas.



Development of Port Marine Personnel Competency Framework for Nigerian Port

ABL provided a rigorous gap analysis of port personnel competency and a roadmap for improvement, implementation and control at a Nigerian port. The roadmap focussed on four key areas, addressing any skills dilution that had existed:

- Ship management
- Terminal management
- Maritime assurance
- Marine logistics



Port-la-Nouvelle: Wet storage solution for floating offshore wind turbine

ABL provided port infrastructure consultancy to assess the feasibility of assets at Port-la-Nouvelle to support the South of France's floating offshore wind market.

Specifically, the scope of work defined solutions for the wet storage of 20 MW floating wind turbines inside and outside of the port.



Climate change risk assessment and adaptation for Moroccan National Ports' Agency

ABL Group companies, OWC, ABL and Hidromod – part of ABL – provide an integrated service offering to ANP Morocco – Morocco's National Ports' Agency, to support them in identifying risk and level of resilience of port infrastructure against climate change impact.

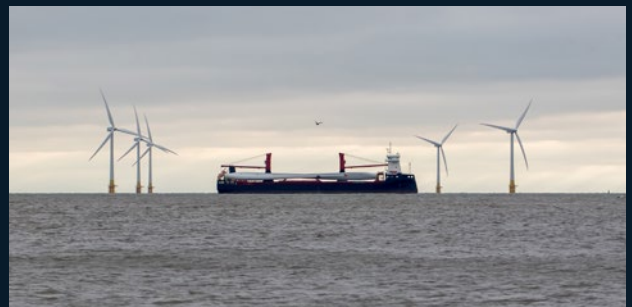
Our scope of work:

- Climate change risk assessment (CCRA)
- Numerical modelling of potential climate change impact risk
- Roadmap for resilience adaptation and personnel training



Emissions AAA (Audit, Analysis & Abatement) with emiTr

emiTr is ABL's emissions tracking software designed as a comprehensive digital inventory of a port's emissions, capturing both direct and indirect sources. Applied to the UK's Shoreham Port, the platform has supported them in the identification and tracking of their emissions' footprint, with a view to creating an informed roadmap for emissions reduction.



Navigational Risk Assessment to Finnish Offshore Wind

ABL provided a comprehensive navigational risk assessment, including quantitative modelling, stakeholder engagement and recommendations for risk mitigation measures – to support future construction plans for Finland's first open-sea offshore wind project.

This is to support the planned 2.5 GW Korsnäs offshore wind farm and will include consideration of risks from ice.

ABL Group

ABL Group ASA – a global brand family combining energy, marine and engineering excellence to offer technical advisory, consultancy, and software solutions, driving safety and sustainability throughout the lifecycle of an asset or project.

ABL: The Energy & Marine Consultants. Global, independent energy, marine and engineering consultant working to de-risk and drive sustainability across projects and assets in renewables, marine and oil & gas.

Longitude Engineering: The Engineering Consultants. Independent engineering, design and analysis consultants working across marine markets, renewables, oil & gas, maritime, small craft and defence, and infrastructure.

OWC: The Renewable Energy Consultants. Dedicated engineering, technical advisory and consultant for the commercial development of offshore and onshore renewable energy.

AGR: The Energy & Software Consultants. Multi-disciplinary engineering consultancy and software provider specialising in wells and reservoirs. We have the experience, agility and creativity to deliver a compelling solution that solves today and tomorrow's energy challenges.



Our global footprint

- 62 offices across 42 countries
- Presence in Europe, Africa, Middle East, Asia, Australasia, North America, and South America



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