



COMPANY PROFILE

Hydrography, Maritime Services, Navigational Safety & Training

Green Hub S.A.L. , Beirut, Lebanon



Who we are?

Beirut-based expertise. Internationally aligned delivery.

GreenHub provides integrated hydrographic and navigational-safety services—from technical assessment and field acquisition to processing, QA/QC, reporting and practical recommendations.

MARINE EVIDENCE → OPERATIONAL ACTION

Hydrography • Risk • AtoN • Training

WHO WE SUPPORT

Coastal & maritime authorities

Standards-aligned data and technical decision support

Ports & harbours

Safer navigation, chart adequacy and AtoN planning

Oil & gas operators

Survey evidence for complex marine operations

Marine contractors & private stakeholders

Integrated technical delivery and project coordination

One partner across the full survey cycle

Each stage is managed as part of one controlled workflow, reducing handover risk and preserving data integrity.

01



Assess & plan

Define objectives, coverage, standards, resources and field methodology.

02



Acquire

Mobilize, position, calibrate and collect controlled survey data.

03



Process & verify

Apply corrections, process datasets and complete disciplined QA/QC.

04



Report & advise

Deliver technical outputs, findings and practical recommendations.

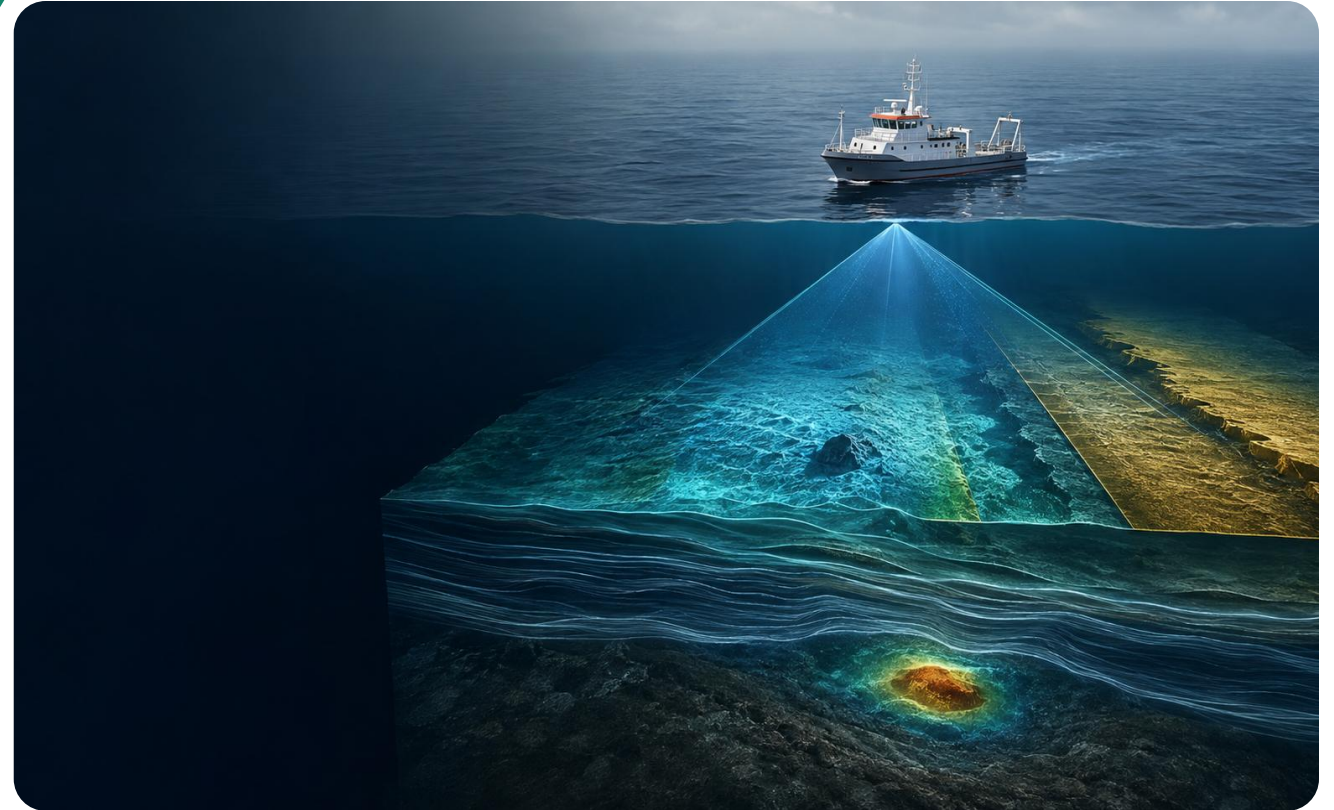
Outcome

Defensible datasets and decisions aligned with client, operational and regulatory needs.

Survey capability spans the water column and seabed

GREENHUB PROCESSING CAPABILITY

MBES	Bathymetry and high-density 3D seabed coverage
SSS	Seabed imagery and underwater target detection
MAG	Magnetic-anomaly and ferrous-object detection
SBP	Shallow sub-seabed structure and stratigraphy



PROCESSING • ANALYSIS • QA/QC

Survey evidence becomes decision-ready information

IHO

**Aligned with applicable
International Hydrographic
Organization standards and
guidelines.**

Focus: data quality, survey adequacy and
navigational requirements.

CONSULTANCY & DELIVERABLES

Processed survey products

Quality-controlled bathymetric and geophysical outputs

Nautical-charting support

Preparation, review and updating of hydrographic products

Adequacy reviews

Assessment of available data against operational needs

Technical reporting

Clear findings, limitations and actionable recommendations

Risk assessment turns complexity into practical controls

GreenHub applies internationally recognized IALA-aligned methods according to the scale and complexity of each waterway or port environment.

SIRA

Simplified IALA Risk Assessment

Structured, proportionate risk evaluation and mitigation planning.

PAWSA

Ports and Waterways Safety Assessment

Facilitated stakeholder assessment of navigation and waterway risks.

IWRAP Mk II

IALA Waterway Risk Assessment Programme

Model-based assessment of collision and grounding risk.

OUTPUTS Traffic analysis • hazard identification • mitigation plan • route and AtoN recommendations

AtoN support covers the full management lifecycle

GreenHub supports both physical and virtual Aids to Navigation across the complete management lifecycle.



Result: AtoN solutions selected and positioned around real traffic, risk and local operating conditions.

Capacity building strengthens in-house operational capability

TRAINING AREAS

- 01 Hydrographic survey planning and operations
- 02 Equipment operation and field-data acquisition
- 03 **Specialized acquisition and processing software**
- 04 Data processing, analysis and QA/QC
- 05 AtoN management and maintenance
- 06 Navigational-risk assessment methodologies

PRACTICAL DELIVERY MODEL

- 01 Understand**
Build the standards, methods and workflow foundation.
- 02 Practice**
Apply concepts through equipment, software and scenario exercises.
- 03 Deliver**
Prepare quality-controlled outputs and technical documentation.

Programs combine theoretical instruction with practical exercises and are delivered by qualified specialists.

Certified expertise, controlled delivery, regional experience

Credentials and field experience reinforce GreenHub's ability to deliver internationally aligned services adapted to local operating realities.

ISO 9001:2015

**Quality management system
certified by RINA Services S.p.A.**

Certified scope

Provision of consultancy in capacity building, risk assessment and Aids to Navigation (AtoN) design and hydrographic surveying.

IALA + IHO

**International qualifications within
the technical team**

- IALA Risk Assessment
- IALA AtoN Management
- IHO Category A and B trained hydrographers

REGIONAL DELIVERY

**Lebanon
Cameroon
Italy**

Plus additional regional engagements across complex maritime environments.

A complete maritime-safety capability, delivered from Beirut

Accurate hydrographic and maritime data. Risk-based decisions. Stronger client capability.

GreenHub SAL

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HYDROGRAPHIC DATA

RISK

AtoN

TRAINING

Integrated delivery.
Practical outcomes.

Thank you

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