

Autonomous Underwater Vehicles (AUVs)

ANMD-MRS22-216 · Marine AI Solutions

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

WHY THIS REPORT

Autonomous underwater vehicles bring uncrewed, AI-guided subsea capability to survey, inspection and long-range monitoring, turning costly crewed-vessel operations into scalable, lower-risk robotic missions. Purpose-built platforms — survey AUVs, inspection vehicles and long-range gliders — are engineered so that the seabed, offshore assets and the water column are mapped and monitored at depth. The pay-off is measurable: faster high-resolution survey, safer asset inspection, persistent ocean observation and reduced vessel time. This decision-grade study sizes the global market three ways — value, deployed vehicles and survey coverage — across segmentation, seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

The sustainability case is the report's backbone. Beyond capability, AUVs deliver measurable reduced survey-vessel fuel and emissions, safer subsea inspection, and improved ocean observation, while lower-impact robotic operations strengthen the marine-stewardship story. The analysis applies double materiality, maps outcomes to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, and Battery end-of-life, subsea-noise impact, dual-use concerns and lost-vehicle risk are treated as material risks — with greenwashing and SDG-washing screens applied throughout.

Mapped Sustainable Development Goals:

SDG 14 Life Below Water	SDG 9 Industry & Infrastructure	SDG 13 Climate Action
-----------------------------------	---	---------------------------------

Measurable sustainability outcomes assessed:

- Lower-impact subsea survey and inspection
- Reduced emissions versus crewed survey vessels
- Better ocean-floor and habitat mapping
- Endurance, recovery and dual-use governance as material risks

Framework alignment: Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

WHAT'S INSIDE AT A GLANCE

53 Chapters	9 Report Parts	7 Regions Covered	40+ Country Markets
2025–32 Forecast Horizon	4 Forward Scenarios	25+ Companies Profiled	3 SDGs Mapped

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. Europe (Nordics, UK) leads AUV technology; North America drives defence and offshore demand; Asia Pacific scales survey adoption; other regions on their own merits.

MARKET OVERVIEW

From towed systems to autonomous, long-range underwater operations.

AUV adoption is moving from specialist survey to mainstream subsea operations. Demand is driven by the convergence of offshore-energy expansion, defence-autonomy investment and ocean-science needs, supported by maturing resident-AUV and over-the-horizon concepts across Europe, North America and Asia Pacific. The market is read three ways — value, deployed vehicles and survey coverage — and forecast under four scenarios (conservative, base, accelerated and disruption), each region reported separately.

- **Europe leads early commercialisation** — anchored by Norway, the United Kingdom, France and Sweden, where offshore-survey AUVs, resident vehicles and defence programmes are most advanced.
- **Asia Pacific is the scale engine** — with China, Japan, South Korea, Australia and India combining offshore-energy and defence drivers with growing survey demand.
- **North America is accelerating** — supported by US Navy programmes, offshore-energy survey and a strong subsea-robotics venture base.
- **Type and endurance segment the value** — across survey, inspection and glider / long-range AUVs, and across short-range, mid-endurance and long-endurance / resident classes, each with distinct economics.

REGIONAL OUTLOOK

Across seven reporting regions, the report separates commercialisation and supply leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
Europe	Commercial leader	Norway, UK, Finland, Netherlands — class guidance, autonomy trials, smart-port & decarbonisation drivers
Asia Pacific	Scale engine	China, Japan, South Korea, Singapore, Australia — shipbuilding base, port efficiency, fleet scale
North America	Accelerating	United States, Canada — coast-guard & defence programmes, port modernisation, maritime-AI ventures
Latin America	Emerging	Brazil, Chile — ports, fisheries and offshore-energy adoption
Africa	Frontier	South Africa, Kenya, Morocco — port development, fisheries protection, blended finance
Middle East	Frontier	Saudi Arabia, UAE, Israel — port investment, maritime security, sovereign capital

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> • Offshore-energy survey & inspection demand • Defence & mine-countermeasures autonomy • Ocean-science & seabed-mapping needs • Vessel-time & cost savings vs crewed survey • Energy-density, navigation & autonomy gains 	<ul style="list-style-type: none"> • Subsea comms, navigation & positioning limits • Energy density & endurance constraints • Recovery, launch & operational logistics cost • Pressure-tolerant electronics & reliability • Regulatory & deconfliction barriers at depth

SEGMENTATION SNAPSHOT

By Type	Survey · inspection · glider / long-range
By Endurance	Short-range · mid-endurance · long-endurance / resident
By Application	Shallow · mid-water · deep / full-ocean
By End User	Offshore energy · defense · research · survey contractors
By Business Model	Hardware sale · lease · survey-as-a-service · outcome-based
By Scale	Pilot · fleet rollout · resident operations

TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

Part I — Report Foundation, Discovery and Strategic Intelligence

- › Chapter 1. Scope, Methodology and Report Architecture
- › Chapter 2. Industry Discovery Summary — Autonomous Underwater Vehicles
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- › Chapter 5. Industry Overview and Market Evolution
- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
- › Chapter 8. Market Segmentation Analysis
- › Chapter 9. End-User and Demand-Side Intelligence
- › Chapter 10. Pricing, Cost and Commercial Model Intelligence

Part III — Regional and Country Intelligence

- › Chapter 11. Global Regional Intelligence Framework
- › Chapter 12. North America Market Intelligence
- › Chapter 13. Europe Market Intelligence
- › Chapter 14. Asia Pacific Market Intelligence
- › Chapter 15. Latin America Market Intelligence
- › Chapter 16. Africa Market Intelligence
- › Chapter 17. Middle East Market Intelligence
- › Chapter 18. Rest of World Market Intelligence

Part IV — Technology, Innovation and Category-Specific Intelligence

- › Chapter 19. Technology Landscape and Architecture
- › Chapter 20. Emerging and Next-Generation Technology Intelligence
- › Chapter 21. Category-Specific Intelligence Module
- › Chapter 22. Research, Innovation and Funding Landscape

Part V — Company, Competition, Patent and Project Intelligence

- › Chapter 23. Competitive Landscape
- › Chapter 24. Company Profiles
- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
- › Chapter 26. Patent Landscape and Intellectual Property Intelligence
- › Chapter 27. Project, Deployment and Case-Study Intelligence

Part VI — Sustainability, ESG, SDG, Climate and Natural-Capital Intelligence

- › Chapter 28. Sustainability Intelligence Suite
- › Chapter 29. ESG Intelligence and Double Materiality
- › Chapter 30. ESG and Sustainability Framework Alignment
- › Chapter 31. SDG Intelligence
- › Chapter 32. Carbon, Net-Zero and Climate-Mitigation Intelligence
- › Chapter 33. Water, Biodiversity and Natural-Capital Intelligence
- › Chapter 34. Circular Economy and Resource-Security Intelligence
- › Chapter 35. Social Impact, Human Capital and Community Intelligence
- › Chapter 36. Climate Risk, Adaptation and Resilience Intelligence

Part VII — Supply Chain, Policy, Legal, Economics and Finance

- › Chapter 37. Value Chain, Supply Chain and Geopolitical Intelligence
- › Chapter 38. Policy, Regulation and Incentive Intelligence
- › Chapter 39. Legal, Contracting and Risk-Allocation Intelligence
- › Chapter 40. Unit Economics, CAPEX, OPEX and Return Analysis
- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

- › Chapter 42. Scenario Analysis and Future Intelligence
- › Chapter 43. Sustainability Due Diligence Framework and Data-Room Index
- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
- › Chapter 46. Implementation Roadmap and Stakeholder Playbooks

Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
- › Chapter 48. Corporate Directory and Company Intelligence Annex
- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans subsea-robotics specialists, established marine-systems manufacturers, and defence-autonomy innovators.

Representative players profiled in the full report:

Kongsberg Gruppen ASA · Teledyne Marine (Teledyne Technologies Incorporated) · Saab AB · Ocean Infinity Limited · ECA Group SAS · and 20+ further profiled players across AUV and subsea-robotics innovators.

Investment intelligence: venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a clear, decision-ready investment verdict.

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global autonomous underwater vehicles market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How does autonomy and endurance change subsea-survey value versus towed or ROV systems?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the category align with the SDGs, circular-economy and resource-security and disclosure regulation?

WHY ANMD — THE DIFFERENCE

Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.

- **Triangulated sizing** — every market read three ways (value, deployed vehicles and survey coverage) so value-led and volume-led views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, decision-ready investment verdict.

WHO SHOULD BUY THIS REPORT

Investors and ocean-tech / PE funds, offshore-energy and survey operators, navies and research agencies, OEMs and integrators, regulators and lenders, and strategic corporate planners and decision-makers.

Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at www.anewmarketdynamics.com · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at www.anewmarketdynamics.com. The full detailed table of contents will be sent directly to your registered company email address.