

Marine Battery Market by Ship Type (Commercial, Defense, Unmanned), Sales Channel (OEM, Aftermarket), Battery Function, Nominal Capacity, Propulsion Type, Ship Power, Battery Design, Battery Type, Energy Density and Region - Global Forecast to 2030

Market Report | 2023-02-17 | 237 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

Report description:

The Marine Battery market size is projected to grow from USD 527 Million in 2022 to USD 2,056 Million by 2030, at a CAGR of 18.6% from 2022 to 2030. The increase in global commercial operations and the surge in alternative propulsion systems in marine vessels are the primary factors driving the growth of the Marine Battery market. Furthermore, the demand for advanced battery systems onboard marine vessel is boosting the adoption of Marine Battery, which reduces harmful emissions and decreases end-user operating and maintenance costs.

Dual Purpose Battery segment is expected to account for the largest share in 2022.

Based on Battery Function, the dual-purpose battery segment is projected to lead the Marine Battery market during the forecast period. Dual purpose batteries are suitable for applications requiring strong cranking power and low amp cycle service to meet the extended auxiliary power needs of electrical accessories. These batteries can tolerate deep discharge rates that cannot be handled by starting batteries. Although they have a lower storage capacity, small-sized vessels prefer dual-purpose batteries for operations. A rise in the number of small-sized vessels across the globe will lead to the demand for dual-purpose batteries during the forecast period.

The Lithium battery segment is projected to dominate the market share in the By BatteryType segment during the forecast period. Based on Battery Type, the lithium battery segment is projected to dominate the market share during the forecast period. The market is further segmented into lead-acid, nickel cadmium, sodium-ion and fuel-cells. The growth of lithium batteries is

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

influenced by the rapidly increasing adoption of light-weight and high-energy density lithium batteries and energy storage systems that offer low operational cost per kWh and can be fitted as per any configuration, unlike sealed lead-acid batteries. With increasing modernization of fleets with hybrid and fully electric propulsion systems the lithium battery segment is set to witness a significant growth during the forecasted period.

The Liquid/Gel based battery is projected to dominate market share in the battery design segment during the forecast period. Based on Battery Design, the liquid/gel based battery segment is projected to dominate the market share in 2030, growing at a CAGR of 14.1% from 2022 to 2030. Enhanced safety features of liquid/gel based battery systems such as anti-corrosion, prevention of gas leakages and evaporation are some of the factors that will increase the adoption rates of liquid/gel-based batteries during the forecasted period.

The OEM segment is projected to lead Marine Battery market during the forecast period

Based on Sales Channel, the OEM segment is projected to lead the Marine Battery market during the forecast period. The OEM section of the market is driven by the continuous fleet expansion projects of numerous end users, including commercial passenger vessels, as well as cargoes, oil tankers and military operators. Several ship manufacturers and merchant vessel owners are expanding their fleets by investing in fully-electric propulsion systems.

Europe is expected to account for the largest market share in 2022

The Marine Battery market industry has been studied in North America, Europe, Asia Pacific, and Rest of the World. Europe accounted for the largest market share in 2022, and it is also projected to witness the highest CAGR during the forecast period. The presence of major players, OEMs, and component manufacturers are some of the factors projected to drive the European marine battery market. Additionally, the growing need for sustainable marine vessels, through hybrid and fully electric propulsion systems for civil and commercial purposes, for increased distances of freight travel and trade operations, are factors affecting market expansion in the region.

The break-up of the profile of primary participants in the Marine Battery market:

-□By Company Type: Tier 1 - 55%, Tier 2 - 25%, and Tier 3 - 20%

-□By Designation: C Level - 50%, Director Level - 25%, Others-25%

-□By Region: North America - 47%, Europe - 21%, Asia Pacific - 21%, Rest of the World - 11%.

Prominent companies include Corvus Energy (Norway), Leclanche S.A. (Switzerland), Siemens AG (Germany), Saft SA (France) and Shift Clean Energy (Canada) among others.

Research Coverage:

The report segments the Marine Battery market based on Ship Type, Battery Function, Nominal Capacity, Propulsion Type, Ship Power, Battery Design, Battery Type, Sales Channel, Energy Density, and Region. Based on Ship Type, the market is segmented into commercial, defense, and unmanned vessels. The marine battery market, based on battery function, has been segmented into starting batteries, deep-cycle batteries, and dual purpose batteries. The marine battery market, based on nominal capacity, has been segmented into <100 AH, 100-250 AH, and >250 AH. The marine battery market, based on propulsion type, has been segmented into fully electric, hybrid, and conventional. The marine battery market, based on ship power, has been segmented into <75 kW, 75-150 kW, 150-745 kW, 745-7,560 kW, and >7,560 kW. The marine battery market, based on battery design, is segmented into solid state and liquid/gel-based. The marine battery market, based on battery type, is segmented into lithium, lead-acid, nickel cadmium, sodium-ion, and fuel cells. On the basis of sales channel, the marine battery market has been segmented into OEM and aftermarket. The marine battery market, based on energy density, has been segmented into <100 Wh/kg, 100-500 Wh/kg, and >500 Wh/kg. The Marine Battery market has been studied for North America, Europe, Asia Pacific, and Rest of the World. The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the Marine Battery market. A detailed analysis of the key industry players

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

has been done to provide insights into their business overviews, solutions, and services; key strategies; Contracts, partnerships, agreements, new product & service launches, mergers and acquisitions; and recent developments associated with the Marine Battery market. Competitive analysis of upcoming startups in the Marine Battery market ecosystem is covered in this report.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall Marine Battery market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□Market Penetration: Comprehensive information on Marine Battery offered by the top players in the market

-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the Marine Battery market

-□Market Development: Comprehensive information about lucrative markets - the report analyses the Marine Battery market across varied regions

-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the Marine Battery market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players in the Marine Battery market

Table of Contents:

1□INTRODUCTION□	24
1.1□STUDY OBJECTIVES□	24
1.2□MARKET DEFINITION□	24
1.3□MARKET SCOPE□	25
1.3.1□MARKETS COVERED□	25
FIGURE 1□MARINE BATTERY MARKET SEGMENTATION□	25
1.3.2□REGIONAL SCOPE□	25
FIGURE 2□MARINE BATTERY MARKET: REGIONAL SCOPE□	25
1.3.3□YEARS CONSIDERED□	26
1.4□INCLUSIONS AND EXCLUSIONS□	26
TABLE 1□INCLUSIONS AND EXCLUSIONS IN MARINE BATTERY MARKET□	26
1.5□CURRENCY CONSIDERED□	27
1.6□LIMITATIONS□	27
1.7□MARKET STAKEHOLDERS□	27
1.8□SUMMARY OF CHANGES□	28
2□RESEARCH METHODOLOGY□	29
2.1□RESEARCH DATA□	29
FIGURE 3□REPORT PROCESS FLOW□	29
FIGURE 4□MARINE BATTERY MARKET: RESEARCH DESIGN□	30
2.1.1□SECONDARY DATA□	31
2.1.1.1□Key data from secondary sources□	31

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

2.1.2	PRIMARY DATA	31
2.2	RECESSION IMPACT ANALYSIS (RIA)	32
2.2.1	DEMAND-SIDE INDICATORS	32
	FIGURE 5	US: NAVAL DEFENSE BUDGET
	FIGURE 6	BREAKDOWN OF US NAVAL DEFENSE BUDGET
2.2.2	SUPPLY-SIDE ANALYSIS	34
2.3	FACTOR ANALYSIS	34
2.3.1	INTRODUCTION	34
2.3.2	DEMAND-SIDE INDICATORS	34
2.3.2.1	Growing maritime tourism industry	35
2.3.3	SUPPLY-SIDE ANALYSIS	35
2.3.3.1	Advanced batteries for electric and hybrid ships	35
2.4	MARKET SCOPE	36
2.4.1	SEGMENTS AND SUBSEGMENTS	36
2.4.2	EXCLUSIONS	37
2.4.3	PRIMARY INTERVIEWEE DETAILS	37
2.5	MARKET SIZE ESTIMATION AND METHODOLOGY	37
2.5.1	BOTTOM-UP APPROACH	37
	FIGURE 7	MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH
2.5.2	TOP-DOWN APPROACH	38
	FIGURE 8	MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH
2.6	DATA TRIANGULATION	39
	FIGURE 9	DATA TRIANGULATION: MARINE BATTERY MARKET
2.7	MARKET SIZING AND FORECASTING	40
	FIGURE 10	RESEARCH ASSUMPTIONS
2.8	LIMITATIONS	41
2.9	GROWTH FORECAST	41
3	EXECUTIVE SUMMARY	42
	FIGURE 11	CONVENTIONAL SEGMENT PROJECTED TO LEAD MARINE BATTERY MARKET DURING FORECAST PERIOD
	FIGURE 12	LITHIUM BATTERIES TO LEAD MARKET FROM 2022 TO 2030
	FIGURE 13	BY SALES CHANNEL, OEM SEGMENT PROJECTED TO LEAD MARINE BATTERY MARKET DURING FORECAST PERIOD
	FIGURE 14	EUROPE TO ACCOUNT FOR HIGHEST CAGR IN MARINE BATTERY MARKET FROM 2022 TO 2030
4	PREMIUM INSIGHTS	45
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN MARINE BATTERY MARKET	45
	FIGURE 15	IMPLEMENTATION OF SULFUR 2020 RULE AND DEVELOPMENT OF LITHIUM-ION BATTERIES TO DRIVE MARINE BATTERY MARKET
4.2	MARINE BATTERY MARKET, BY SHIP TYPE	45
	FIGURE 16	COMMERCIAL SEGMENT TO DOMINATE MARINE BATTERY MARKET DURING FORECAST PERIOD
4.3	MARINE BATTERY MARKET, BY SHIP POWER	46
	FIGURE 17	150-745 KW SEGMENT TO LEAD MARINE BATTERY MARKET FROM 2022 TO 2030
4.4	MARINE BATTERY MARKET, BY REGION	46
	FIGURE 18	FINLAND TO ACCOUNT FOR HIGHEST CAGR IN MARINE BATTERY MARKET, 2022-2030
5	MARKET OVERVIEW	47
5.1	INTRODUCTION	47
5.1.1	ROADMAP OF MARINE ELECTRIFICATION	47
	TABLE 2	MILESTONES OF IMPLEMENTATION PLAN FOR ELECTRIFICATION IN MARINE TRANSPORT (2025-2035-2050)
5.2	MARKET DYNAMICS	49

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

FIGURE 19 MARINE BATTERY MARKET DYNAMICS: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 49

5.2.1 DRIVERS 49

5.2.1.1 Implementation of sulphur 2020 rule 49

TABLE 3 SULFUR CONTENT REGULATIONS IN BUNKER FUEL 50

5.2.1.2 Rising demand for electric and hybrid passenger vessels 50

5.2.1.3 Increased global seaborne trade 51

5.2.1.4 Growing maritime tourism industry 51

5.2.1.5 Development of lithium batteries 52

FIGURE 20 MOST COMMON LITHIUM-ION BATTERIES WITH KEY FEATURES 52

TABLE 4 CURRENT BATTERY CAPACITY AND REQUIREMENTS OF SOME SHIPS 52

5.2.2 RESTRAINTS 53

5.2.2.1 Long downtime during retrofitting 53

5.2.2.2 Limited range and capacity of fully electric ships 53

5.2.3 OPPORTUNITIES 53

5.2.3.1 Potential for marine battery manufacturers 53

5.2.3.2 Potential for battery charging 54

5.2.3.3 Hybrid propulsion technology for large ships 54

5.2.4 CHALLENGES 55

5.2.4.1 Inadequate charging infrastructure 55

5.2.4.2 High initial capital expenditure 55

TABLE 5 CAPITAL EXPENDITURE AND ANNUAL SAVINGS 55

TABLE 6 CAPITAL EXPENDITURE AND PAYBACK 56

TABLE 7 CAPITAL EXPENDITURE, SAVINGS, AND PAYBACK 56

5.3 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 56

5.3.1 REVENUE SHIFT AND NEW REVENUE POCKETS FOR MARINE BATTERY MARKET 56

FIGURE 21 REVENUE SHIFT AND NEW REVENUE POCKETS FOR MARINE BATTERY MARKET 56

5.4 VALUE CHAIN ANALYSIS 57

FIGURE 22 VALUE CHAIN ANALYSIS: MARINE BATTERY MARKET 57

5.5 AVERAGE SELLING PRICE 58

TABLE 8 AVERAGE SELLING PRICE, BY BATTERY TYPE 58

5.6 MARKET ECOSYSTEM MAP 58

5.6.1 PROMINENT COMPANIES 58

5.6.2 PRIVATE AND SMALL ENTERPRISES 58

5.6.3 END USERS 58

FIGURE 23 MARKET ECOSYSTEM MAP: MARINE BATTERY MARKET 59

TABLE 9 MARINE BATTERY MARKET ECOSYSTEM 59

5.7 PORTER'S FIVE FORCES MODEL 60

TABLE 10 PORTER'S FIVE FORCES ANALYSIS 60

FIGURE 24 MARINE BATTERY MARKET: PORTER'S FIVE FORCES ANALYSIS 61

5.8 RECESSION IMPACT ANALYSIS 62

FIGURE 25 RECESSION IMPACT ANALYSIS 62

5.9 CASE STUDY ANALYSIS 63

5.9.1 ROLLS-ROYCE MARINE - 2020 63

5.9.2 KONGSBERG AND YARA - 2020 63

5.9.3 JAPANESE CONSORTIUM - 2025 63

5.10 TARIFF AND REGULATORY LANDSCAPE 64

5.11 KEY STAKEHOLDERS AND BUYING CRITERIA 65

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

5.11.1	KEY STAKEHOLDERS IN BUYING PROCESS	65
FIGURE 26	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF MARINE BATTERY PRODUCTS AND SYSTEMS	65
TABLE 11	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS OF MARINE BATTERY PRODUCTS AND SYSTEMS (%)	65
5.11.2	BUYING CRITERIA	66
FIGURE 27	KEY BUYING CRITERIA FOR MARINE BATTERY PRODUCTS AND SYSTEMS	66
TABLE 12	KEY BUYING CRITERIA FOR MARINE BATTERY PRODUCTS AND SYSTEMS	66
6	INDUSTRY TRENDS	67
6.1	INTRODUCTION	67
6.2	ROADMAP TOWARD EMISSION-FREE SHIPPING INDUSTRY	67
FIGURE 28	ROADMAP TOWARD EMISSION-FREE SHIPPING INDUSTRY	67
6.3	PHASING OF MARINE PROPULSION TECHNOLOGIES	68
FIGURE 29	POTENTIAL PHASING OF DIFFERENT PROPULSION TECHNOLOGIES IN MARINE INDUSTRY	68
6.4	EMERGING TRENDS	69
FIGURE 30	EMERGING TRENDS	69
6.4.1	ELECTRIFICATION OF LEISURE BOATS	69
6.4.2	POTENTIAL OF HYBRID TECHNOLOGY	70
6.4.3	FULLY ELECTRIC FERRIES FOR PASSENGER TRANSPORT	70
6.4.4	SOLAR SAILS	70
6.4.5	ADVANCED BATTERIES FOR ELECTRIC SHIPS	70
6.4.6	POTENTIAL OF HYDROGEN AS ZERO-EMISSION FUEL FOR SHIPPING INDUSTRY	71
6.4.7	BATTERY-POWERED NAVAL VESSELS	72
6.4.8	NEXT-GENERATION SOLID-STATE BATTERY TECHNOLOGY	72
6.4.8.1	Summary of Commercial Batteries	72
6.5	SUPPLY CHAIN ANALYSIS	73
FIGURE 31	SUPPLY CHAIN ANALYSIS	73
6.6	INNOVATION AND PATENT REGISTRATIONS	74
7	MARINE BATTERY MARKET, BY SHIP TYPE	75
7.1	INTRODUCTION	76
FIGURE 32	COMMERCIAL SHIPS SEGMENT TO DOMINATE MARINE BATTERY MARKET DURING FORECAST PERIOD	76
TABLE 13	MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	76
TABLE 14	MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	77
7.2	COMMERCIAL	77
TABLE 15	MARINE BATTERY MARKET, BY COMMERCIAL SHIP, 2018-2021 (USD MILLIONS)	77
TABLE 16	MARINE BATTERY MARKET, BY COMMERCIAL SHIP, 2022-2030 (USD MILLION)	77
7.2.1	PASSENGER VESSELS	78
TABLE 17	PASSENGER VESSELS: MARINE BATTERY MARKET, BY TYPE, 2018-2021 (UNITS)	78
TABLE 18	PASSENGER VESSELS: MARINE BATTERY MARKET, BY TYPE, 2022-2030 (UNITS)	78
7.2.1.1	Yachts	78
7.2.1.1.1	Use solar power to charge batteries	78
7.2.1.2	Ferries	79
7.2.1.2.1	High adoption of electric ferries in North America and Europe	79
7.2.1.3	Cruise ships	79
7.2.1.3.1	Increased adoption of hybrid-electric propulsion technology	79
7.2.2	CARGO VESSELS	80
TABLE 19	CARGO VESSELS: MARINE BATTERY MARKET, BY TYPE, 2018-2021 (USD MILLION)	80
TABLE 20	CARGO VESSELS: MARINE BATTERY MARKET, BY TYPE, 2022-2030 (USD MILLIONS)	80
7.2.2.1	Container vessels	80

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 7.2.2.1.1 First to adopt fully electric setup 80
- 7.2.2.2 Bulk carriers 81
- 7.2.2.2.1 Fitted with hybrid-electric propulsion systems due to constraints faced by pure battery systems 81
- 7.2.2.3 Tankers 81
- 7.2.2.3.1 Improved energy and battery systems 81
- 7.2.2.4 Gas tankers 81
- 7.2.2.4.1 Transitioning to sustainable mode of propulsion 81
- 7.2.2.5 Dry cargo ships 81
- 7.2.2.5.1 Increased demand to handle cargo volume 81
- 7.2.2.6 Barges 82
- 7.2.2.6.1 Development of battery-driven barges for emission-free sailing 82
- 7.2.3 OTHERS 82
- TABLE 21 OTHER VESSELS: MARINE BATTERY MARKET, BY TYPE, 2018-2021 (USD MILLION) 82
- TABLE 22 OTHER VESSELS: MARINE BATTERY MARKET, BY TYPE, 2022-2030 (USD MILLION) 82
- 7.2.3.1 Fishing vessels 83
- 7.2.3.1.1 Fuel consumption of fully electric fishing vessels reduced by 80% 83
- 7.2.3.2 Tugs and workboats 83
- 7.2.3.2.1 Electrification to significantly reduce emissions at ports 83
- 7.2.3.3 Research vessels 83
- 7.2.3.3.1 Market for retrofitting research vessels larger than newbuilds 83
- 7.2.3.4 Dredgers 83
- 7.2.3.4.1 Increasing adoption of electric systems to reduce emissions 83
- 7.3 DEFENSE 84
- TABLE 23 MARINE BATTERY MARKET, BY DEFENSE SHIP, 2018-2021 (USD MILLION) 84
- TABLE 24 MARINE BATTERY MARKET, BY DEFENSE SHIP, 2022-2030 (UNITS) 84
- 7.3.1 DESTROYERS 85
- 7.3.1.1 Integration of electric propulsive destroyers by navies 85
- 7.3.2 FRIGATES 85
- 7.3.2.1 Plans by naval forces to install hybrid propulsion systems for frigates 85
- 7.3.3 CORVETTES 85
- 7.3.3.1 High reliance of defense forces on all-electric propulsion corvettes 85
- 7.3.4 AMPHIBIOUS SHIPS 85
- 7.3.4.1 Naval forces to use amphibious ships with hybrid propulsion 85
- 7.3.5 OFFSHORE SUPPORT VESSELS (OSVS) 86
- 7.3.5.1 Available in hybrid and electric propulsion setup 86
- 7.3.6 MINESWEEPERS 86
- 7.3.6.1 Designed to remove or detonate naval mines 86
- 7.3.7 MISSILE-CARRYING BOATS AND SUPPLY BOATS 86
- 7.3.7.1 Wider adoption in developing countries 86
- 7.3.8 SUBMARINES 86
- 7.3.8.1 Development of electric propulsion systems 86
- 7.4 UNMANNED 86
- TABLE 25 MARINE BATTERY MARKET, BY UNMANNED, 2018-2021 (USD MILLION) 87
- TABLE 26 MARINE BATTERY MARKET, BY UNMANNED, 2022-2030 (USD MILLIONS) 87
- 7.4.1 REMOTELY OPERATED VEHICLES (ROVS) 87
- 7.4.1.1 Utilized for offshore exploration and security checks 87
- 7.4.2 AUTONOMOUS UNDERWATER VEHICLES (AUVS) 87

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

7.4.2.1 Provide more accurate data due to better payload capacity 87

8 MARINE BATTERY MARKET, BY BATTERY FUNCTION 88

8.1 INTRODUCTION 89

FIGURE 33 DUAL PURPOSE BATTERIES TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD 89

TABLE 27 MARINE BATTERY MARKET, BY BATTERY FUNCTION, 2018-2021 (USD MILLION) 89

TABLE 28 MARINE BATTERY MARKET, BY BATTERY FUNCTION, 2022-2030 (USD MILLION) 90

8.2 STARTING BATTERIES 90

8.2.1 PROVIDE QUICK AND POWERFUL ENERGY 90

8.3 DEEP-CYCLE BATTERIES 90

8.3.1 SUPPORT LONGER VOYAGES FOR LARGE SHIPS 90

8.4 DUAL PURPOSE BATTERIES 90

8.4.1 PREFERRED BY SMALL-SIZED VESSELS 90

9 MARINE BATTERY MARKET, BY NOMINAL CAPACITY 91

9.1 INTRODUCTION 92

FIGURE 34 >250 AH SEGMENT TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD 92

TABLE 29 MARINE BATTERY MARKET, BY NOMINAL CAPACITY, 2018-2021 (USD MILLION) 92

TABLE 30 MARINE BATTERY MARKET, BY NOMINAL CAPACITY, 2022-2030 (USD MILLION) 92

9.2 <100 AH 93

9.2.1 USED IN INLAND FERRIES 93

9.3 100-250 AH 93

9.3.1 OPERATES DRY CARGO VESSELS AND BARGES 93

9.4 >250 AH 93

9.4.1 HIGHER DEMAND DUE TO RISE IN SEAFARING VESSELS GLOBALLY 93

10 MARINE BATTERY MARKET, BY PROPULSION TYPE 94

10.1 INTRODUCTION 95

FIGURE 35 FULLY ELECTRIC SEGMENT TO HAVE HIGHEST GROWTH DURING FORECAST PERIOD 95

TABLE 31 MARINE BATTERY MARKET, BY PROPULSION TYPE, 2018-2021 (USD MILLION) 95

TABLE 32 MARINE BATTERY MARKET, BY PROPULSION TYPE, 2022-2030 (USD MILLION) 96

10.2 FULLY ELECTRIC 96

10.2.1 HIGH ENERGY STORAGE IN BATTERIES AND OPTIMIZED POWER CONTROL 96

TABLE 33 ALL ELECTRIC SHIP PROJECTS (GLOBAL) 96

10.3 HYBRID 97

10.3.1 REDUCES NOX AND SOX EMISSIONS 97

10.4 CONVENTIONAL 98

10.4.1 RETROFITTING HYBRID-ELECTRIC PROPULSION TO REDUCE GREENHOUSE EMISSIONS 98

11 MARINE BATTERY MARKET, BY SHIP POWER 99

11.1 INTRODUCTION 100

FIGURE 36 BY SHIP POWER, 150-745 SEGMENT TO LEAD MARINE BATTERY MARKET DURING FORECAST PERIOD 100

TABLE 34 MARINE BATTERY MARKET, BY SHIP POWER, 2018-2021 (USD MILLION) 100

TABLE 35 MARINE BATTERY MARKET, BY SHIP POWER, 2022-2030 (USD MILLIONS) 100

11.2 <75 KW 101

11.2.1 EQUIPPED IN YACHTS 101

11.3 75-150 KW 101

11.3.1 MORE DEMAND FOR FULLY ELECTRIC FERRIES 101

11.4 150-745 KW 101

11.4.1 LARGE RETROFIT POTENTIAL FOR CARGO VESSELS IN 150-745 KW RANGE 101

?

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

11.5 □ 740-7,560 KW □ 101

11.5.1 □ HELP REDUCE FUEL CONSUMPTION □ 101

11.6 □ >7,560 KW □ 101

11.6.1 □ EXPECTED TO HAVE SMALLEST MARKET □ 101

12 □ MARINE BATTERY MARKET, BY BATTERY DESIGN □ 102

12.1 □ INTRODUCTION □ 103

FIGURE 37 □ LIQUID/GEL-BASED SEGMENT TO REGISTER HIGHER CAGR DURING FORECAST PERIOD □ 103

TABLE 36 □ MARINE BATTERY MARKET, BY BATTERY DESIGN, 2018-2021 (USD MILLION) □ 103

TABLE 37 □ MARINE BATTERY MARKET, BY BATTERY DESIGN, 2022-2030 (USD MILLION) □ 103

12.2 □ SOLID STATE □ 104

12.2.1 □ HIGHER ENERGY DENSITY AND SAFETY AGAINST FIRE HAZARDS □ 104

12.3 □ LIQUID/GEL-BASED □ 104

12.3.1 □ ENABLES SAFER BATTERY SERVICING □ 104

13 □ MARINE BATTERY MARKET, BY BATTERY TYPE □ 105

13.1 □ INTRODUCTION □ 106

FIGURE 38 □ FUEL CELLS SEGMENT TO GROW FASTEST IN MARINE BATTERY MARKET FROM 2022 TO 2030 □ 106

TABLE 38 □ MARINE BATTERY MARKET, BY BATTERY TYPE, 2018-2021 (USD MILLION) □ 106

TABLE 39 □ MARINE BATTERY MARKET, BY BATTERY TYPE, 2022-2030 (USD MILLION) □ 107

13.2 □ LITHIUM □ 107

13.2.1 □ LONG LIFE CYCLE AND HIGH POWER STORAGE □ 107

13.3 □ LEAD-ACID □ 107

13.3.1 □ DURABLE, EASILY RECYCLABLE, COST-EFFECTIVE, AND SIMPLE TO CHARGE □ 107

13.3.2 □ FLOODED □ 108

13.3.3 □ GEL □ 108

13.3.4 □ AGM □ 108

13.4 □ NICKEL CADMIUM □ 108

13.4.1 □ USED IN EMERGENCY LIGHTING, BACKUP SYSTEMS, SECONDARY POWER, AND OTHER SIMILAR APPLICATIONS □ 108

13.5 □ SODIUM-ION □ 109

13.5.1 □ HIGH ENERGY DENSITY AND LOW CHARGING TIME □ 109

13.6 □ FUEL CELLS □ 109

13.6.1 □ ALTERNATIVE TECHNOLOGY TO LITHIUM-ION AND LEAD-ACID BATTERIES □ 109

13.6.2 □ HYDROGEN-BASED □ 110

13.6.3 □ AMMONIA-BASED □ 110

13.6.4 □ OXIDE-BASED □ 110

13.6.5 □ CARBON-BASED □ 110

?

14 □ MARINE BATTERY MARKET, BY SALES CHANNEL □ 111

14.1 □ INTRODUCTION □ 112

FIGURE 39 □ OEM SEGMENT TO REGISTER HIGHEST GROWTH DURING FORECAST PERIOD □ 112

TABLE 40 □ MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) □ 113

TABLE 41 □ MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) □ 113

14.2 □ OEM □ 113

14.2.1 □ HYBRID TECHNOLOGY USED FOR SUSTAINABLE EXPEDITION □ 113

14.3 □ AFTERMARKET □ 114

14.3.1 □ RETROFITTING WITH BATTERIES TO REDUCE DEPENDENCY ON CONVENTIONAL PROPULSION □ 114

15 □ MARINE BATTERY MARKET, BY ENERGY DENSITY □ 115

15.1 □ INTRODUCTION □ 116

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 42 ENERGY DENSITY AND SYSTEM ENERGY OF VARIOUS BATTERY TYPES 116

FIGURE 40 > 500WH/KG SEGMENT TO REGISTER HIGHER CAGR THAN OTHER SEGMENTS DURING FORECAST PERIOD 116

TABLE 43 MARINE BATTERY MARKET, BY ENERGY DENSITY, 2018-2021 (USD MILLION) 116

TABLE 44 MARINE BATTERY MARKET, BY ENERGY DENSITY, 2022-2030 (USD MILLION) 117

15.2 <100 WH/KG 117

15.2.1 USED FOR SECONDARY AND EMERGENCY POWER APPLICATIONS 117

15.3 100-500 WH/KG 117

15.3.1 USED FOR PRIMARY POWER STORAGE AND PROPULSION 117

15.4 > 500 WH/KG 117

15.4.1 USED FOR APPLICATIONS LIKE PROPULSION 117

16 REGIONAL ANALYSIS 118

16.1 INTRODUCTION 119

FIGURE 41 MARINE BATTERY MARKET: REGIONAL SNAPSHOT 119

16.1.1 REGIONAL RECESSION IMPACT ANALYSIS 120

FIGURE 42 NAVAL BUDGET TREND, BY REGION (2019-2022) 120

FIGURE 43 REGIONAL RECESSION IMPACT ANALYSIS 121

TABLE 45 MARINE BATTERY MARKET, BY REGION, 2018-2021 (USD MILLION) 122

TABLE 46 MARINE BATTERY MARKET, BY REGION, 2022-2030 (USD MILLION) 122

16.2 NORTH AMERICA 122

FIGURE 44 NORTH AMERICA: MARINE BATTERY MARKET SNAPSHOT 123

16.2.1 NORTH AMERICA: PESTLE ANALYSIS 123

TABLE 47 NORTH AMERICA: MARINE BATTERY MARKET, BY COUNTRY, 2018-2021 (USD MILLION) 124

TABLE 48 NORTH AMERICA: MARINE BATTERY MARKET, BY COUNTRY, 2022-2030 (USD MILLION) 125

TABLE 49 NORTH AMERICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 125

TABLE 50 NORTH AMERICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 125

TABLE 51 NORTH AMERICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 125

TABLE 52 NORTH AMERICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 126

16.2.2 US 126

16.2.2.1 Increased adoption of electric boats 126

TABLE 53 US: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 127

TABLE 54 US: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 127

TABLE 55 US: MARINE BATTERY MARKET SIZE, BY SHIP TYPE, 2018-2021 (USD MILLION) 127

TABLE 56 US: MARINE BATTERY MARKET SIZE, BY SHIP TYPE, 2022-2030 (USD MILLION) 127

16.2.3 CANADA 127

16.2.3.1 Strategic decision to develop indigenous marine industry 127

TABLE 57 CANADA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 128

TABLE 58 CANADA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 128

TABLE 59 CANADA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 128

TABLE 60 CANADA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 129

16.3 EUROPE 129

16.3.1 EUROPE: PESTLE ANALYSIS 129

FIGURE 45 EUROPE: MARINE BATTERY MARKET SNAPSHOT 130

TABLE 61 EUROPE: MARINE BATTERY MARKET, BY COUNTRY, 2018-2021 (USD MILLION) 131

TABLE 62 EUROPE: MARINE BATTERY MARKET, BY COUNTRY, 2022-2030 (USD MILLION) 131

TABLE 63 EUROPE: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 131

TABLE 64 EUROPE: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 132

TABLE 65 EUROPE: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 132

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 66 EUROPE: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 132

16.3.2 NORWAY 132

16.3.2.1 Implementation of IMO rule 132

TABLE 67 NORWAY: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 133

TABLE 68 NORWAY: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 133

TABLE 69 NORWAY: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 133

TABLE 70 NORWAY: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 133

16.3.3 SWEDEN 134

16.3.3.1 Stringent IMO 2020 rule 134

TABLE 71 SWEDEN: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 134

TABLE 72 SWEDEN: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 134

TABLE 73 SWEDEN: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 134

TABLE 74 SWEDEN: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 135

16.3.4 NETHERLANDS 135

16.3.4.1 Push toward zero-emission ships 135

TABLE 75 NETHERLANDS: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 135

TABLE 76 NETHERLANDS: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 135

TABLE 77 NETHERLANDS: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 136

TABLE 78 NETHERLANDS: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 136

16.3.5 DENMARK 136

16.3.5.1 Stringent environmental regulations 136

TABLE 79 DENMARK: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 136

TABLE 80 DENMARK: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 137

TABLE 81 DENMARK: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 137

TABLE 82 DENMARK: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 137

16.3.6 UK 137

16.3.6.1 Rising focus on adoption of batteries by shipbuilders 137

TABLE 83 UK: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 138

TABLE 84 UK: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 138

TABLE 85 UK: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 138

TABLE 86 UK: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 138

16.3.7 FINLAND 139

16.3.7.1 Major focus on green marine technologies 139

TABLE 87 FINLAND: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 139

TABLE 88 FINLAND: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 139

TABLE 89 FINLAND: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 139

TABLE 90 FINLAND: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 139

16.3.8 REST OF EUROPE 140

TABLE 91 REST OF EUROPE: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 140

TABLE 92 REST OF EUROPE: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 140

TABLE 93 REST OF EUROPE: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 141

TABLE 94 REST OF EUROPE: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION) 141

16.4 ASIA PACIFIC 141

FIGURE 46 ASIA PACIFIC: MARINE BATTERY MARKET SNAPSHOT 142

TABLE 95 ASIA PACIFIC: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION) 142

TABLE 96 ASIA PACIFIC: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION) 143

TABLE 97 ASIA PACIFIC: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION) 143

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 98	ASIA PACIFIC: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	143
TABLE 99	ASIA PACIFIC: MARINE BATTERY MARKET VOLUME, BY COUNTRY, 2018-2021 (USD MILLION)	143
TABLE 100	ASIA PACIFIC: MARINE BATTERY MARKET, BY COUNTRY, 2022-2030 (USD MILLION)	144
16.4.1	CHINA	144
16.4.1.1	Presence of several shipbuilding companies	144
TABLE 101	CHINA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	144
TABLE 102	CHINA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	145
TABLE 103	CHINA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	145
TABLE 104	CHINA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	145
16.4.2	SOUTH KOREA	145
16.4.2.1	Development of fuel cells for propulsion systems	145
TABLE 105	SOUTH KOREA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	146
TABLE 106	SOUTH KOREA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	146
TABLE 107	SOUTH KOREA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	146
TABLE 108	SOUTH KOREA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	146
16.4.3	JAPAN	147
16.4.3.1	Increasing focus on reducing greenhouse gas emissions from international shipping	147
TABLE 109	JAPAN: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	147
TABLE 110	JAPAN: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	147
TABLE 111	JAPAN: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	147
TABLE 112	JAPAN: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	148
16.4.4	AUSTRALIA	148
16.4.4.1	Switch from diesel-driven ships to battery-propelled ships	148
TABLE 113	AUSTRALIA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	148
TABLE 114	AUSTRALIA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	148
TABLE 115	AUSTRALIA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	149
TABLE 116	AUSTRALIA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	149
16.4.5	INDIA	149
16.4.5.1	Demand to reduce carbon emissions	149
TABLE 117	INDIA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	149
TABLE 118	INDIA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	150
TABLE 119	INDIA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	150
TABLE 120	INDIA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	150
16.4.6	REST OF ASIA PACIFIC	150
16.4.6.1	Development of electric passenger ferries	150
TABLE 121	REST OF ASIA PACIFIC: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	151
TABLE 122	REST OF ASIA PACIFIC: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	151
TABLE 123	REST OF ASIA PACIFIC: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	151
TABLE 124	REST OF ASIA PACIFIC: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	151
16.5	REST OF THE WORLD	152
FIGURE 47	REST OF THE WORLD: MARINE BATTERY MARKET SNAPSHOT	152
TABLE 125	REST OF THE WORLD: MARINE BATTERY MARKET, BY REGION, 2018-2021 (USD MILLION)	152
TABLE 126	REST OF THE WORLD: MARINE BATTERY MARKET, BY REGION, 2022-2030 (USD MILLION)	153
TABLE 127	REST OF THE WORLD: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	153
TABLE 128	REST OF THE WORLD: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	153
TABLE 129	REST OF THE WORLD: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	153
TABLE 130	REST OF THE WORLD: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	154

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

16.5.1	LATIN AMERICA	154
16.5.1.1	Large fleet size of ships to adopt hybrid propulsion	154
TABLE 131	LATIN AMERICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	154
TABLE 132	LATIN AMERICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	155
TABLE 133	LATIN AMERICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	155
TABLE 134	LATIN AMERICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	155
16.5.2	MIDDLE EAST & AFRICA	155
16.5.2.1	Retrofitting of existing ship fleet	155
TABLE 135	MIDDLE EAST & AFRICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2018-2021 (USD MILLION)	155
TABLE 136	MIDDLE EAST & AFRICA: MARINE BATTERY MARKET, BY SALES CHANNEL, 2022-2030 (USD MILLION)	156
TABLE 137	MIDDLE EAST & AFRICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2018-2021 (USD MILLION)	156
TABLE 138	MIDDLE EAST & AFRICA: MARINE BATTERY MARKET, BY SHIP TYPE, 2022-2030 (USD MILLION)	156
17	COMPETITIVE LANDSCAPE	157
17.1	INTRODUCTION	157
17.2	COMPETITIVE OVERVIEW	157
TABLE 139	KEY DEVELOPMENTS BY LEADING PLAYERS IN MARINE BATTERY MARKET BETWEEN 2018 AND 2021	157
17.3	MARKET RANKING ANALYSIS OF KEY PLAYERS, 2021	158
FIGURE 48	RANKING ANALYSIS OF TOP FIVE PLAYERS: MARINE BATTERY MARKET, 2021	158
17.4	MARKET SHARE ANALYSIS, 2021	159
TABLE 140	DEGREE OF COMPETITION	159
FIGURE 49	MARKET SHARE OF TOP PLAYERS MARINE BATTERY MARKET, 2021 (%)	159
17.5	REVENUE ANALYSIS OF TOP FIVE MARKET PLAYERS, 2021	160
FIGURE 50	REVENUE ANALYSIS OF TOP FIVE MARKET PLAYERS IN MARINE BATTERY MARKET	160
17.6	COMPANY EVALUATION QUADRANT	161
17.6.1	STARS	161
17.6.2	EMERGING LEADERS	161
17.6.3	PERVASIVE PLAYERS	161
17.6.4	PARTICIPANTS	161
FIGURE 51	MARINE BATTERY MARKET COMPETITIVE LEADERSHIP MAPPING, 2021	162
TABLE 141	COMPANY PRODUCT FOOTPRINT	163
TABLE 142	COMPANY FOOTPRINT BY TECHNOLOGY	164
TABLE 143	COMPANY FOOTPRINT BY INDUSTRY	165
TABLE 144	COMPANY REGION FOOTPRINT	166
17.7	STARTUPS/SME EVALUATION QUADRANT	167
17.7.1	PROGRESSIVE COMPANIES	167
17.7.2	RESPONSIVE COMPANIES	167
17.7.3	DYNAMIC COMPANIES	167
17.7.4	STARTING BLOCKS	167
FIGURE 52	MARINE BATTERY MARKET: STARTUPS/SME COMPETITIVE LEADERSHIP MAPPING, 2021	168
TABLE 145	MARINE BATTERY MARKET: DETAILED LIST OF KEY STARTUPS/SMES	169
17.8	COMPETITIVE SCENARIO	169
17.8.1	DEALS	169
TABLE 146	DEALS, 2018-2022	169
TABLE 147	PRODUCT LAUNCHES, 2018-2022	180
18	COMPANY PROFILES	181
18.1	INTRODUCTION	181
	(Business overview Products/Solutions/Services offered, Recent developments & MnM View)*	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

18.2	KEY PLAYERS	181
18.2.1	SIEMENS	181
TABLE 148	SIEMENS: BUSINESS OVERVIEW	181
FIGURE 53	SIEMENS: COMPANY SNAPSHOT	182
TABLE 149	SIEMENS PRODUCTS/SOLUTIONS/SERVICES OFFERED	182
TABLE 150	SIEMENS: DEALS	183
18.2.2	LECLANCHE SA	185
TABLE 151	LECLANCHE SA: BUSINESS OVERVIEW	185
FIGURE 54	LECLANCHE SA: COMPANY SNAPSHOT	186
TABLE 152	LECLANCHE SA: PRODUCTS/SOLUTIONS/SERVICES OFFERED	186
TABLE 153	LECLANCHE SA: NEW PRODUCT DEVELOPMENTS	187
TABLE 154	LECLANCHE SA: DEALS	187
18.2.3	SAFT	189
TABLE 155	SAFT: BUSINESS OVERVIEW	189
TABLE 156	SAFT: PRODUCTS/SOLUTIONS/SERVICES OFFERED	189
TABLE 157	SAFT: NEW PRODUCT DEVELOPMENTS	190
TABLE 158	SAFT: DEALS	190
18.2.4	CORVUS ENERGY	192
TABLE 159	CORVUS ENERGY: BUSINESS OVERVIEW	192
TABLE 160	CORVUS ENERGY PRODUCTS/SOLUTIONS/SERVICES OFFERED	192
TABLE 161	CORVUS ENERGY: DEALS	193
18.2.5	ECHANDIA MARINE AB	198
TABLE 162	ECHANDIA MARINE AB: BUSINESS OVERVIEW	198
TABLE 163	ECHANDIA MARINE AB: PRODUCTS/SOLUTIONS/SERVICES OFFERED	198
TABLE 164	DEALS	199
18.2.6	EST-FLOATTECH	201
TABLE 165	EST-FLOATTECH: BUSINESS OVERVIEW	201
TABLE 166	EST-FLOATTECH: PRODUCTS/SOLUTIONS/SERVICES OFFERED	201
TABLE 167	EST-FLOATTECH: DEALS	202
18.2.7	SHIFT CLEAN ENERGY	203
TABLE 168	SHIFT CLEAN ENERGY: BUSINESS OVERVIEW	203
TABLE 169	SHIFT CLEAN ENERGY: PRODUCTS/SOLUTIONS/SERVICES OFFERED	203
TABLE 170	SHIFT CLEAN ENERGY: DEALS	204
18.2.8	SENSATA TECHNOLOGIES, INC.	206
TABLE 171	SENSATA TECHNOLOGIES, INC.: BUSINESS OVERVIEW	206
TABLE 172	SENSATA TECHNOLOGIES, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED	206
TABLE 173	SENSATA TECHNOLOGIES, INC.: DEALS	207
18.2.9	POWERTECH SYSTEMS	208
TABLE 174	POWERTECH SYSTEMS: BUSINESS OVERVIEW	208
TABLE 175	POWERTECH SYSTEMS: PRODUCTS/SOLUTIONS/SERVICES OFFERED	208
TABLE 176	POWERTECH SYSTEMS: DEALS	209
18.2.10	LIFELINE BATTERIES	210
TABLE 177	LIFELINE BATTERIES: BUSINESS OVERVIEW	210
TABLE 178	LIFELINE BATTERIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED	210
18.2.11	FURUKAWA BATTERY CO., LTD.	211
TABLE 179	FURUKAWA BATTERY CO., LTD.: BUSINESS OVERVIEW	211
FIGURE 55	FURUKAWA BATTERY CO., LTD.: COMPANY SNAPSHOT	212

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 180 FURUKAWA BATTERY CO., LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 212

TABLE 181 FURUKAWA BATTERY CO., LTD.: DEALS 213

18.2.12 LITHIUM WERKS 214

TABLE 182 LITHIUM WERKS: BUSINESS OVERVIEW 214

TABLE 183 LITHIUM WERKS: PRODUCTS/SOLUTIONS/SERVICES OFFERED 214

TABLE 184 LITHIUM WERKS: DEALS 215

18.2.13 EXIDE TECHNOLOGIES 216

TABLE 185 EXIDE TECHNOLOGIES: BUSINESS OVERVIEW 216

TABLE 186 EXIDE TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED 216

18.2.14 EVEREXCEED INDUSTRIAL CO., LTD. 217

TABLE 187 EVEREXCEED INDUSTRIAL CO., LTD.: BUSINESS OVERVIEW 217

TABLE 188 EVEREXCEED INDUSTRIAL CO., LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 217

18.2.15 US BATTERY MFG. CO. 218

TABLE 189 US BATTERY MFG. CO.: BUSINESS OVERVIEW 218

TABLE 190 US BATTERY MFG. CO.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 218

18.2.16 KOKAM CO., LTD. 219

TABLE 191 KOKAM CO., LTD.: BUSINESS OVERVIEW 219

18.2.16.2 Products/Solutions/Services offered 219

TABLE 192 KOKAM CO., LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 219

18.2.17 TOSHIBA CORPORATION 220

TABLE 193 TOSHIBA CORPORATION: BUSINESS OVERVIEW 220

TABLE 194 TOSHIBA CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED 220

FIGURE 56 TOSHIBA CORPORATION: COMPANY SNAPSHOT 221

18.2.18 XALT ENERGY 222

TABLE 195 XALT ENERGY: BUSINESS OVERVIEW 222

TABLE 196 XALT ENERGY: PRODUCTS/SOLUTIONS/SERVICES OFFERED 222

18.2.19 FORSEE POWER 223

TABLE 197 FORSEE POWER: BUSINESS OVERVIEW 223

TABLE 198 FORSEE POWER: PRODUCTS/SOLUTIONS/SERVICES OFFERED 223

18.2.20 EAST PENN MANUFACTURING 224

TABLE 199 EAST PENN MANUFACTURING: BUSINESS OVERVIEW 224

TABLE 200 EAST PENN MANUFACTURING: PRODUCTS/SOLUTIONS/SERVICES OFFERED 224

18.2.21 ENERSYS 225

TABLE 201 ENERSYS: BUSINESS OVERVIEW 225

FIGURE 57 ENERSYS: COMPANY SNAPSHOT 225

TABLE 202 ENERSYS: PRODUCTS/SOLUTIONS/SERVICES OFFERED 226

18.2.22 KOREA SPECIAL BATTERY CO., LTD. 227

TABLE 203 KOREA SPECIAL BATTERY CO., LTD.: BUSINESS OVERVIEW 227

TABLE 204 KOREA SPECIAL BATTERY CO., LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED 227

18.2.23 ECOBAT BATTERY TECHNOLOGIES 228

TABLE 205 ECOBAT BATTERY TECHNOLOGIES: BUSINESS OVERVIEW 228

TABLE 206 ECOBAT BATTERY TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED 228

18.2.24 SONNENSCHNEIN 229

TABLE 207 SONNENSCHNEIN: BUSINESS OVERVIEW 229

TABLE 208 SONNENSCHNEIN: PRODUCTS/SOLUTIONS/SERVICES OFFERED 229

18.2.25 OPTIMA BATTERIES 230

TABLE 209 OPTIMA BATTERIES: BUSINESS OVERVIEW 230

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE 210 OPTIMA BATTERIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED 230

*Details on Business overview Products/Solutions/Services offered, Recent developments & MnM View might not be captured in case of unlisted companies.

19 APPENDIX 231

19.1 DISCUSSION GUIDE 231

19.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL 233

19.3 CUSTOMIZATION OPTIONS 235

19.4 RELATED REPORTS 235

19.5 AUTHOR DETAILS 236

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Marine Battery Market by Ship Type (Commercial, Defense, Unmanned), Sales Channel (OEM, Aftermarket), Battery Function, Nominal Capacity, Propulsion Type, Ship Power, Battery Design, Battery Type, Energy Density and Region - Global Forecast to 2030

Market Report | 2023-02-17 | 237 pages | MarketsandMarkets

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	\$4950.00
	Multi User	\$6650.00
	Corporate License	\$8150.00
	Enterprise Site License	\$10000.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Zip Code*

Country*

Date

2026-03-10

Signature

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com