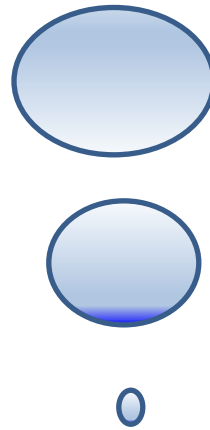


WinterGreen Research, INC.



**Progressing Cavity Pumps:
Market Shares, Strategies, and Forecasts,
EMEA (Europe, Middle East and Africa), 2018 to 2024**



www.wintergreenresearch.com
(781) 863-5078

WinterGreen Research, Inc.
Lexington, Massachusetts

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING



The Best Market Research, Backed by a Superb Research Team with Integrity

We are the best in the industry at answering your research questions after you purchase the report, even two years later.

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

CHECK OUT THESE KEY TOPICS

Progressing Cavity Pumps: Lowering the Total Cost of Wind Turbine Construction and Implementation

Progressing Cavity Pumps
Progressing Cavity Pump
Types
Dosing Pump
Flanged Pump
Hopper Pump
Food Grade
Immersion Pump

Progressing Cavity Pump
Thermal Recovery
Electric Submersible Pump
Systems
Fluid Handling Progressing
Cavity Pumps
Oil & Gas
Chemicals & Paper

Metering Technology
Foods & Pharmaceuticals
Mining
Rig Count
Geothermal Power

Progressing Cavity Pumps: Technology Evolves To Provide Better Management of Energy Production

Progressing Cavity Pumps: Market Shares, Strategies, and Forecasts, EMEA (Europe, Middle East and Africa), 2018-2024

LEXINGTON, Massachusetts (February 28, 2018) – WinterGreen Research announces that it has published a new study **Progressing Cavity Pumps: Market Shares, Strategy, and Forecasts, EMEA, 2018 to 2024**. The 2018 study has 211 pages, 80 tables and figures. Worldwide markets are poised to achieve continuing growth as progressing cavity pumps types include dosing pumps, flanged pumps, hopper pumps, food grade pumps, and immersion Pumps. The ability to meet demands for energy production is a key benefit. Conventional methods of crude oil recovery have been modified using he pumps to optimize production from existing reserves

Progressing Cavity Pump (PCP) systems are designed to produce heavy and viscous crudes up to 1,000cSt in low-production and deviated wells with low inflow, high GOR at the pump intake, scales and solids, providing the long term and reliable operation, impossible to achieve by ESP or other Artificial Lift Systems.

The offshore oil fields in northern Europe and the massive sand oilfields in the middle east and nearby are primary application users of Progressing Cavity Pump (PCP) systems, supporting oil and gas pumping.

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

A \$2.7 billion market for EMEA in 2017, the Progressing Cavity Pumps market has evolved steadily. It is expected to reach \$5.97 billion by 2024, growing in the oil and gas segment to increase yields from existing wells and to develop new applications in other industries. With the world recognizing the continuing need to extract oil from ground from existing wells, the pumps are being put in place as demand technology.

Demand prospects remain positive. Emerging markets continue to play a role. Renewal of auctions is reactivating mature markets. Southern Europe is reactivating mature markets with auctions. Activating new markets in Argentina and Russia is being achieved. Excluding China, the global market demand for installations is expected to increase by 8% from 36 GW in 2017 to 45 GW in 2020.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Key Words: Progressing Cavity Pumps, Progressing Cavity Pump Types, Dosing Pump, Flanged Pump, Hopper Pump, Food Grade, Immersion Pump, Progressing Cavity Pump Thermal Recovery, Electric Submersible Pump Systems, Fluid Handling Progressing Cavity Pumps, Oil & Gas, Chemicals & Paper, Metering Technology, Foods & Pharmaceuticals, Mining, Rig Count, Geothermal Power,,

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

Companies Profiled

Market Leaders

Schlumberger Limited
Weatherford International plc
The Verder Group
GE Baker Hughes Incorporated
Halliburton Company
Johstadt
Sulzer
Sydex
Borets
Bellin S.p.a
Nova rotors
Seepex
CSF
Varisco S.p.A.
Gevelot PCM
Colfax Fluid Handling
Pumpenfabrik Wangen GmbH
Netzsch
Beinlich

**Progressing Cavity Pumps: Market Shares, Strategies, and
Forecasts, EMEA (Europe, Middle East and Africa),
2018 to 2024**

Report Methodology

This is the 736th report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2017. With 2012 and several years prior to that baseline, market projections were developed for 2018 through 2024. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes reference to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

YOU MUST HAVE THIS STUDY

Progressing Cavity Pumps: Market Shares, Strategies, and Forecasts, EMEA, 2018-2024

Table of Contents

Progressing Cavity Pumps: Executive Summary

The study is designed to give a comprehensive overview of the Wind Turbines market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of w Abstract: Wind Turbine Markets Bring Strong Growth to Renewable Energy Projects

Table of Contents

Abstract: Progressing Cavity Pumps Unique Pumping Capability	1
EMEA (EUROPE, MIDDLE EAST AND AFRICA) PROGRESSING CAVITY PUMPS EXECUTIVE SUMMARY	14
1. EMEA (EUROPE, MIDDLE EAST AND AFRICA) PROGRESSING CAVITY PUMPS : MARKET DESCRIPTION AND MARKET DYNAMICS	17
1.1 Progressing Cavity Pump (PCP) Systems	17
2. EMEA PROGRESSING CAVITY PUMPS MARKET SHARES AND FORECASTS	18
2.1 EMEA Progressing Cavity Pumps Market Driving Forces	18
2.2 Progressing Cavity Pumps Market Shares	19
2.2.1 Schlumberger Limited	22
2.2.2 - Weatherford International plc	22
2.2.3 General Electric Company - Baker Hughes	22
2.2.4 Halliburton Company	23
2.2.5 Progressing Cavity Pumps Market Shares, Notes on Applications, Dollars, EMEA, 2017	24
2.3 Progressing Cavity Pumps Market Forecasts	25
2.3.1 Progressing Cavity Pumps Market Sectors	26
2.3.2 Continued Volatility In Oil Prices And Severe Market Contraction	29
2.3.3 Opportunity for Geothermal Power	34
2.3.4 Baker Hughes Rig Count	35
2.3.1 Progressing Cavity Pump Thermal Recovery	36
2.3.2 ITT 36	
2.4 Progressing Cavity Pumps Types	37
2.4.1 Dosing Pump	47
2.4.2 Flanged Pump	49
2.4.3 Hopper Pump	49

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

2.4.4	Food Grade	53
2.4.5	Immersion Pump	54
2.5	Progressing Cavity Pumps Applications	54
2.5.1	Oil & Gas Progressing Cavity Pumps	54
2.6	Progressing Cavity Pumps Prices	55
2.7	180 psi Progressive Cavity Metering Pump, 1750 Max. RPM	57
2.8	Progressing Cavity Pumps Regional Analysis	61
3. PROGRESSING CAVITY PUMPS PRODUCT ISSUES		65
4. PROGRESSING CAVITY PUMPS SEASONALITY, RESEARCH, AND TECHNOLOGY		77
4.1	Seasonality	77
4.2	WellPilot FCT Thermal Cooling	77
5. PROGRESSING CAVITY PUMPS COMPANY PROFILES		80
5.1	Atlas Copco / Varisco S.p.A.	80
5.1.1	Varisco Progressing Cavity Pumps Operating Range	83
5.1.2	Varisco Export	83
5.2	Beinlich	84
5.2.1	- Beinlich Progressing Cavity Pumps	84
5.3	Bellin S.p.a Progressing Cavity Pumps	85
5.3.1	Bellin S.P.A.	86
5.3.2	Bellin Production Capacity	86
5.4	Borets Progressing Cavity Pumps	87
5.4.1	Borets Electric Submersible Pump Systems	88
5.4.2	Borets Progressing Cavity Pump (PCP) systems	88
5.5	Circor International / Colfax Fluid Handling Progressing Cavity Pumps	89
5.5.1	Colfax Fluid Handling Revenue	89
5.6	CSF 90	
5.6.1	CSF Facilities - Personnel	90
5.6.2	CSF Progressive Cavity Pumps	91
5.6.3	CSF Market Segments	94
5.10	General Electric GE Baker Hughes	95
5.10.1	General Electric GE / Baker Hughes Revenue	104
5.11	Halliburton	113
5.11.1	Halliburton Revenue	117
5.11.2	Haliburton Technology	119
5.11.3	Halliburton	121
5.11.4	Halliburton Company Revenue	122
5.11.5	Haliburton PCPs	125
5.12	- ITT Bornemann	125
5.12.1	Bornemann Pump and Drive	128
5.12.2	Bornemann Electric motor	128
5.12.3	Bornemann Gas Engines	129
5.12.4	Bornemann Diesel Engine	129
5.13	- JOHSTADT	130
5.13.1	Johstadt Export Ratio	131
5.14	Moyno 132	
5.15	Netzsch 134	
5.15.1	Netzsch Production	135
5.15.2	Netzsch Core Expertise	135
5.15.3	NEMO® Progressing Cavity Pumps	136
5.15.4	- Netzsch Production	138
5.15.5	Netzsch Oil & Gas	141
5.15.6	Netzsch Chemicals & Paper	141
5.15.7	Netzsch Metering Technology	141
5.15.8	Netzsch Foods & Pharmaceuticals	142
5.15.9	Netzsch Mining	142
5.16	Nova Rotors	142
5.16.1	Nova Rotor Export	146

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

5.17	PCM / Gévelot Group	147	
5.17.1	Gevelot PCM Worldwide Local Presence	149	
5.17.2	Gévelot Group / PCM	150	
5.17.3	Progressing Cavity Pump Principle	151	
5.17.4	PCM Ecomoineau™ M Progressing Cavity Pump	152	
5.18	Pumpenfabrik Wangen GmbH	155	
5.19	Robbins & Myers / Moyno	160	
5.20	Schlumberger	160	
5.20.1	Schlumberger Regional Analysis	161	
5.20.2	Schlumberger Competition	164	
5.20.3	Schlumberger Revenue	165	
5.21	Seepex 167		
5.21.1	Seepex Pumps Germany	167	
5.21.2	43 psi Progressive Cavity Metering Pump, 1150 Max. RPM, 230/460VAC	170	
5.22	Sulzer 170		
5.22.1	Sulzer Revenue	172	
5.22.2	Sulzer Export of Progressing Cavity Pumps	172	
5.22.3	Sulzer Progressing Cavity Pumps	173	
5.23	Sydex 174		
5.23.1	Sydex K Range	174	
5.23.2	Sydex Materials Constructon	176	
5.23.3	Sydex Progressing Cavity Pump	176	
5.23.4	H Range	178	
5.23.5	FM Range	178	
5.24	Verder Group	181	
5.24.1	Verder Group Food And Beverage Industry	182	
5.24.2	- The Verder Group Revenue	182	
5.25	Weatherford International	188	
5.25.1	Weatherford Progressing Cavity Pump (PCP) Systems Materials and Technology	188	
5.25.2	Weatherford Progressing Cavity Pumping (PCP) Systems Specifications	190	
5.25.3	Weatherford Progressing Cavity Pumping (PCP) Systems Description	191	
5.25.4	Weatherford Third Quarter 2017 Revenue	191	
5.25.5	Weatherford International Largest Customer in Venezuela	195	
5.25.6	Weatherford International Raw Materials and Work in Progress	196	
5.25.7	Weatherford Technology Highlights	197	
6.	SUMMARY AND CONCLUSIONS	204	
6.1	Mature Oil And Gas Fields	204	
6.1.1	Rig Count	205	
7.	APPENDIX A: SELECTED COMPANY LISTS	206	
	WINTERGREEN RESEARCH,	207	
	WinterGreen Research Methodology	207	
	WinterGreen Research Process	209	
	Market Research Study	209	
	WinterGreen Research Global Market Intelligence Company	210	
	Abstract: Progressing Cavity Pumps Unique Pumping Capability	1	
Figure 1.	Oil and Gas Progressing Cavity Pump Risks And Uncertainties	17	
Figure 2.	Progressing Cavity Pumps Market Shares, Notes on Applications, Dollars, EMEA, 2017	24	
Figure 3.	Progressing Cavity Pumps Market Forecasts Dollars, 2017 – 2024	25	
Figure 4.	Progressing Cavity Pumps Markets, Dollars, Worldwide, 2017-2024	25	
Figure 5.	Progressing Cavity Pumps Segment Forecasts Percent, 2018 - 2024	26	

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

Figure 6.	Progressing Cavity Pumps Segment Forecasts, Oil and Gas, Food, Industry, and Other, Dollars, Worldwide, 2018 - 2024	27
Figure 7.	Progressing Cavity Pumps Segment Forecasts, Oil and Gas, Food, Industry, and Other, Dollars, Worldwide, 2012 - 2017	28
Figure 8.	Progressing Cavity Pumps Segment Forecasts, Oil and Gas, Food, Industry, and Other, Percent, 2017 - 2024	28
Figure 9.	Progressing Cavity Pumps Market Type Segments	37
Figure 10.	Progressing Cavity Pumps Market Segments, Dosing, Flanged, Hopper, Food Grade, Dollars, Worldwide, 2012-2017	43
Figure 11.	Progressing Cavity Pumps Market Segments, Dosing, Flanged, Hopper, Food Grade, Percent, Worldwide, 2012 - 2017	44
Figure 12.	Progressing Cavity Pumps Market Segments, Dosing, Flanged, Hopper, Food Grade, Dollars, Worldwide, 2017-2024	45
Figure 13.	Progressing Cavity Pumps Market Shares, Percent, Worldwide, 2017 - 2024	46
Figure 14.	Seepex Dosing Pump	47
Figure 15.	VerderPro VDP Dosing Pump	48
Figure 16.	Hopper Progressing Cavity Pump	49
Figure 17.	Seepex Open Hopper Pump	52
Figure 18.	-Selected Seepex Progressing Cavity Pump Prices	55
Figure 19.	Progressing Cavity Pumps Regional Analysis Percent, 2012 – 2017	62
Figure 20.	Progressing Cavity Pumps Regional Analysis Dollars 2012 – 2017	63
Figure 21.	Progressing Cavity Pumps Regional Analysis Revenue, Dollars, 2017 - 2024	64
Figure 22.	Atlas Copco Varisco Consistent Presence In The Dewatering Market	80
Figure 23.	- VARISCO S.p.A. Progressing Cavity Pumps	81
Figure 24.	VARISCO S.p.A. Progressive Cavity Pumps Range Of Fields Of Application	82
Figure 25.	Bellin S.p.a. Pumps	85
Figure 26.	Bellin Production Site	87
Figure 27.	CSF Factory building	90
Figure 28.	CSF Progressive Cavity Pumps	91
Figure 29.	Parmigiano Reggiano Food Production Area	94
Figure 30.	GE Baker Hughes Progressing Cavity Pump Applications	96
Figure 31.	Baker Hughes Progressing Cavity Pump Specifications	96
Figure 32.	Baker Hughes Progressing Cavity Pump Features and Benefits	97
Figure 33.	Baker Hughes Progressing Cavity Pumps RDPCP and ESPCP System	99
Figure 34.	Baker Hughes Rod Driven Progressing Cavity Pumps Applications	103
Figure 35.	Baker Hughes Rod Driven Progressing Cavity Pumps Competitive Performance	104
Figure 36.	GE Industrial Operating Segments	105
Figure 37.	GE Equipment and Services Revenues	107
Figure 38.	GE Oil and Gas Segment Revenue	108
Figure 39.	Baker Hughes, a GE company Segment Revenues	112
Figure 40.	Halliburton Progressive Cavity Pumps	113
Figure 41.	Halliburton Company Pump Specifications	114
Figure 42.	- Halliburton Company Progressive Cavity Pump Applications	115
Figure 43.	- Halliburton Company Progressive Cavity Pump	116
Figure 44.	Haliburton Pumps	123
Figure 45.	ITT Bornemann Progressing Cavity Pump	130
Figure 46.	Moyno Progressing Cavity Pumps	134
Figure 47.	Nemo Progressing Cavity Pumps	136
Figure 48.	Netzsch Progressing Cavity Pumps Applications and Solutions	137
Figure 49.	- Netzsch Progressing Cavity Pump Product line	139
Figure 50.	NEMO® BO/BS hopper-Shaped Progressing Cavity Pump Uses And Substance Properties	140
Figure 51.	Nova Rotors Waste Treatment	142
Figure 52.	Nova Rotors Biogas Industry	143

REPORT # SH27362472

211 PAGES

80 TABLES AND FIGURES

2018

\$4,300 SINGLE GROUP COPY -- \$8,600 WEB SITE POSTING

WinterGreen Research, INC.

Figure 53.	Nova Rotors Offshore Oil and Gas	143
Figure 54.	Nova Rotors Wine Industry	144
Figure 55.	Nova Rotors Water Well Drilling	144
Figure 56.	Nova Rotors Olive Oil Industry	145
Figure 57.	Nova Rotors Offshore Marine Sector	145
Figure 58.	Nova Rotors Paper Industry	146
Figure 59.	PCM Progressing Cavity Pump Environment	150
Figure 60.	Progressing Cavity Pump Principle	151
Figure 61.	PCM Progressing Cavity Pump	152
Figure 62.	PDPs for Renewable Energy, Pulp and Paper, and Slurry	153
Figure 63.	PDPs for Waste Water, Mechanical, and Chemical	154
Figure 64.	Pumpenfabrik Wangen GmbH Hygienic Progressing Cavity Pumps	156
Figure 65.	Pumpenfabrik Wangen GmbH Progressing Cavity Pump Used for the Following Media	157
Figure 66.	Pumpenfabrik Wangen GmbH Progressing Cavity Pumps	158
Figure 67.	Wangen Progressing Cavity Pump	159
Figure 68.	Schlumberger Regional Revenue by Segment, 2016 and 2017	162
Figure 69.	Seepex Smart Dosing Pump	168
Figure 70.	Sulzer Progressing Cavity Pumps Market	173
Figure 71.	Sydex K Range General Industry, Waste Water, Oil & Gas, Marine	175
Figure 72.	Sydex Pumps	178
Figure 73.	THE VERDER GROUP Food Progressing Cavity Pump	182
Figure 74.	- THE VERDER GROUP Progressing Cavity Pumps Applications	184
Figure 75.	Verder Group Industries	186
Figure 76.	Weatherford Progressing Cavity Pumping (PCP) System	189
Figure 77.	Weatherford International Revenue 2012 to 2016	192
Figure 78.	Weatherford International Quarterly Revenue 2015 to 2017	192
Figure 79.	Weatherford International Raw Materials and Work in Progress	196
Figure 80.	Weatherford International Regional Analysis	197

ABOUT THE COMPANY

WinterGreen Research, research strategy relates to identifying market trends through reading and interviewing opinion leaders. By using analysis of published materials, interview material, private research, detailed research, social network materials, blogs, and electronic analytics, the market size, shares, and trends are identified. Analysis of the published materials and interviews permits WinterGreen Research senior analysts to learn a lot more about markets. Discovering, tracking, and thinking about market trends is a high priority at WinterGreen Research. As with all research, the value proposition for competitive analysis comes from intellectual input.

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology.

Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

The studies provide primary analytical insight about the market participants. By publishing material relevant to the positioning of each company, readers can look at the basis for analysis. By providing descriptions of each major participant in the market, the reader is not dependent on analyst assumptions, the information backing the assumptions is provided, permitting readers to examine the basis for the conclusions.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

About The Principal Authors

Susan Eustis, President, co-founder of WinterGreen Research, is a senior analyst. She has done research in communications, healthcare equipment, and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, multiprocessing, electronic voting, and oxygen management. She is the author of recent studies of the drone and robot marketing strategies, Internet equipment, biometrics, biomaterials, a study of Internet Equipment, Artificial Intelligence, IoT, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst in 2012, 2013, 2014, 2015, and 2016. She has been twice featured on the cover of the Women of Distinction magazine. She was cited in a recent Time Magazine article and major media articles on Youth Sports market growth. Recently she has been quoted by Bloomberg and others on blockchain and cryptocurrency.

About the WinterGreen Research Team: The WinterGreen Research Team is comprised of senior analysts that prepare the market research and analysis that is offered to the client and developed using an iterative process to achieve a final study. Typical projects include providing market/viability research. The team can look at how drones can be applied to critical infrastructures safety, including: type of market existing, Barriers, Forecast demand and competitors, SWOT and competitive advantages, Price Analysis, product design recommendations (marketing orientation).

Research is typically for many different regions or localities, for example EU countries including Spain, UK, Nordic, Germany, and France. Typical projects profile the United States and areas of Asia. It is common to three representative countries from South America, Brazil, Argentina, Chile, and Mexico. Representative countries from Asia APAC typically include Japan, China, India, and Australia.

Critical infrastructure safety, including: type of market existing, barriers to entry and to faithful execution of product provision, forecast of demand, market share, SWOT, competitive advantage of major competitors, identification of new technologies and new companies, price performance analysis, product design recommendations, and marketing considerations are typical topics covered.