North American Energy-as-a-Service Market

November 2023

www.verifymarkets.com

+1 210.595.9687

info@verifymarkets.com

Table of Contents

Table of Contents

Scope of Research

This study aims to provide a detailed analysis of the North American Energy-as-a-Service Market along with qualitative trends for the year 2023.

The market numbers included in this report represent revenues generated by companies operating in the EaaS Market in the United States and Canada. The base year for the study is 2023 and the forecast period is from 2023 until 2030.

This study captures the following information on the North American Energy-as-a-Service Market :

- Market Size, Growth Rate, Revenue Forecasts (2023-2030)
- Growth Drivers & Restraints
- Market Data
- Market Share Analysis
- Market Trends
- Quotes by Key Industry Participants

Methodology

Interviews with key market participants

The methodology adopted while creating this research involved conducting interviews with various key market participants, enabling Verify Markets to identify various trends in the North American Energy-as-a-Service Market. Furthermore, discussions with industry participants enabled us to provide a comprehensive country-level view of the overall market. Next, the information was validated through our internal databases, market experts, and secondary sources. The collected information was structured and collated into this report.

Macro-economic factors and industry parameters

Various country-level parameters including the GDP, construction spending, industrial spending, oil & gas prices, end-user power generation, and microgrid installed capacity, among others, were taken into consideration in our forecasting model. An in-depth analysis of such factors enabled Verify Markets to size and forecast the North American Energy-as-a-Service Market.

North American Energy-as-a-Service Market

Definitions

Energy-as-a-Service

Energy-as-a-Service (EaaS) is defined as a business model where energy service providers deliver electricity generation solutions to end users without the requirement for the customer to make capital investments in energy infrastructure. The scope of this study delves into EaaS with a focus on energy generation, emphasizing how Distributed Energy Resources (DERs) and microgrids are employed to cater to customer requirements for resilience, baseload power, and/or cost optimization. Customers have the option to engage in a fixed fee arrangement for enhanced resilience or pay per unit of energy consumed. This model leverages various Distributed Energy Resources (DERs) and microgrids managed by service providers to ensure a reliable power supply, thereby eliminating the need for customers to invest in or manage energy infrastructure.

Market Participants

The EaaS market accommodates a diverse array of participants, including Energy Service Providers (ESP), utilities, industrial corporations, technology enterprises, specialized renewable energy providers, and telecommunications companies.
ESP are companies that design, install, and provide all the necessary equipment, funding, operation, monitoring, and maintenance of power systems.

Segmentation by Equipment Service Model

Subscription-based

Customers pay a predetermined monthly or annual fee for resiliency, ensuring stability against disruptions. This fee covers equipment, maintenance, and service costs.

Usage - based

Pricing fluctuates with energy usage, particularly when the system provides primary power. Costs include a variable O&M charge based on actual kWh used, reflecting increased O&M cost and fuel consumption.

Shared Savings Agreement

Cost savings generated from the use of an energy system, such as a generator for peak shaving or demand response, are split between the service provider and the customer. The specific percentage of savings shared can vary based on individual customer agreements.

North American Energy-as-a-Service Market

Segmentation by end user

During the next few years, EaaS is expected to be widely adopted by industries like food & beverage, chemicals, paper, and data centers, as well as the oil and gas sector, to manage energy costs, ensure reliability, and enhance sustainability.

Commercial

Commercial refers to businesses involved in the storage, distribution, and sale of goods, including warehouses, distribution centers, cold storage, and retail outlets like grocery stores.

Water & Wastewater

Water and wastewater facilities encompass plants and infrastructure for purifying and distributing potable water and treating used water for safe environmental release or reuse.

Data centers

EaaS offers resilient energy solutions for data storage centers, guaranteeing continuous uptime, cooling, and energy optimization to maintain critical digital infrastructure.

Segmentation by end user

Oil & Gas

EaaS provides efficient power solutions for oil extraction, refining, and petrochemical processes, ensuring uninterrupted operations and reducing environmental impact.

Manufacturing

Refers to tailored energy services for manufacturing and processing sectors, such as semiconductors, pulp and paper, food & beverages, marine, chemicals, petrochemicals, agriculture, and rubber.

Institutional

Refers to energy offerings for educational, healthcare, and government facilities, enhancing sustainability and efficiency.

Others

All other opportunities not covered in the above categories. The ‘others’ category includes areas like residential and small commercial applications.

The rise of decentralized power generation, energy storage technologies, and the prevalence of "smart" devices has paved the way for innovative business models in the energy sector. The growing digitalization and smart meter usage facilitate the gathering and examination of extensive data, allowing for automation and forming the foundation for novel energy services.

Segmentation by application

Prime Power

Prime power refers to the provision of primary electricity generation in scenarios lacking utility power. EaaS providers can ensure a consistent supply of energy to meet electricity demand, often through a mix of traditional and renewable energy sources.

Energy Cost Optimization

Energy cost optimization entails the utilization of strategies such as demand response and peak shaving to reduce electricity costs. Demand response manages energy usage during peak times, while peak shaving lowers peak demand, thereby achieving cost savings and promoting efficient energy usage for service recipients.

Power Backup and Resilience

For grid-connected, mission-critical facilities, EaaS providers ensure uninterrupted power with backup solutions. Recognizing this value safeguards operations against outages and high-demand disruptions.

Renewable Energy Integration

Organizations worldwide are setting Environmental, Social, and Governance (ESG) objectives, frequently incorporating targets to achieve carbon-neutral operations by specific deadlines. Microgrids and DERs emerge as crucial instruments in attaining decarbonization goals.

Segmentation by fuel

Natural Gas

Natural gas is used in over one third of the installations, especially for peak shaving and demand response applications.

Diesel

Diesel is the second-most used fuel in the EaaS market.

Renewable Energy

Renewable energy sources are used in combination with generators and/or BESS.

Hybrid

Hybrid combines CHP or generators with renewables, optimizing energy efficiency.

Natural gas

In the EaaS market, natural gas generators are mostly used for energy cost optimization applications.

CHP are used for baseload applications

CHP microgrids mostly serve commercial and institutional areas with baseload power and heat.

About Verify Markets

Verify Markets

About us

Expert Advice and Strategy Consulting

Verify Markets is a Research Firm specializing in Industrial, Environmental, Energy and Water markets. Our Research & Consulting practice provides global industry analysis, custom engagements, end-user analysis, strategy consulting, strategic market intelligence, and forecasts that are designed to facilitate strategic decision-making. Our team of consultants, industry experts and analysts continually monitor and evaluate information to create insights for your business needs. We are comprised of a group of analysts that have been tracking their respective markets for a number of years.

Our goal is to help you reach yours.

Verify Markets

Methodology

The methodology when formulating market trend projection is outlined below.
Historical trends were determined through secondary research and Verify Markets in-house database.

Secondary Research

Secondary research was conducted. A list of key industry participants was put together.

Primary Research

Telephonic interviews were conducted. Most of the leading participants across North America were contacted.

Bottom-up

Bottom-up methodology was used to calculate the market size.

Drivers & Restraints

Market drivers and restraints were built into the forecasting model to estimate the revenue growth and market size figures.

Most of the primary interview data was captured through telephonic interviews. Pictures, company contacts, preliminary data was captured through secondary research. Images are derived from company websites and other web sources.

Disclaimer

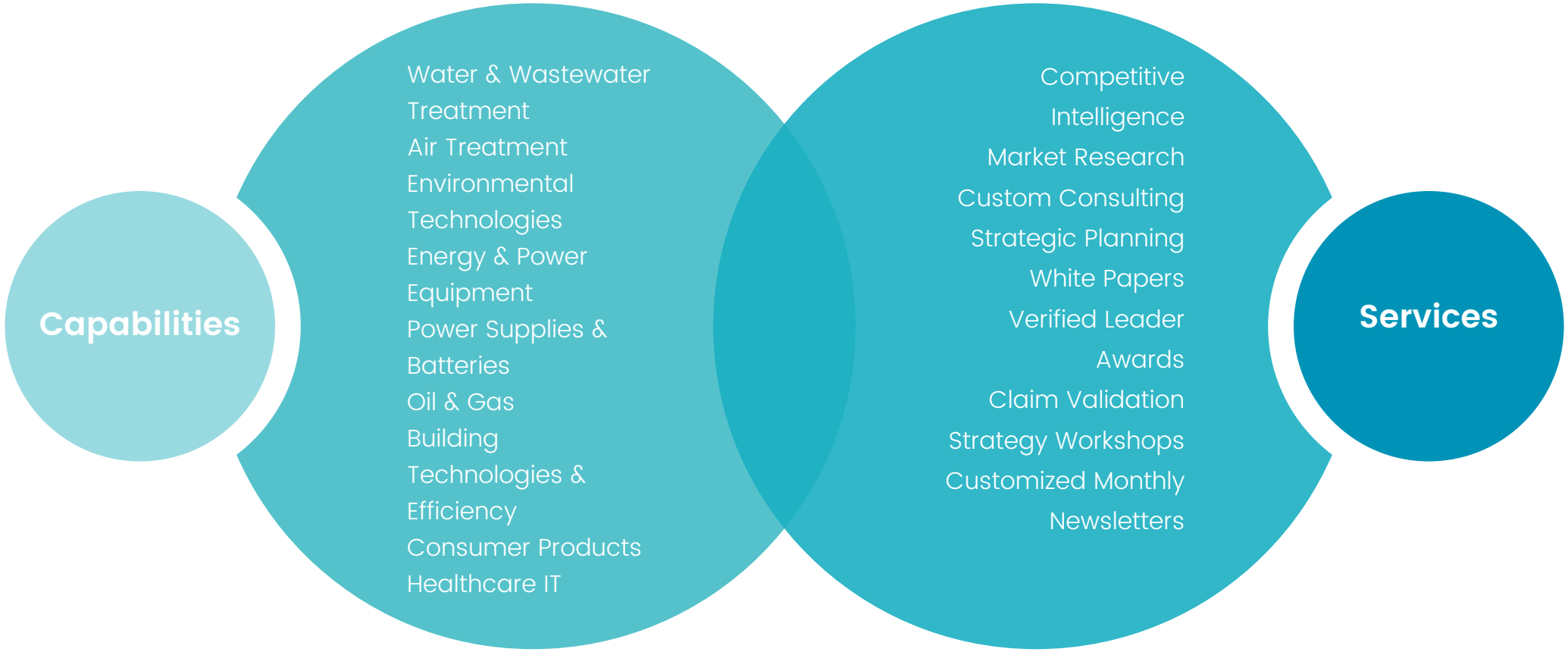
Despite Verify Markets' best efforts, certain challenges were encountered, and certain assumptions had to be made. The extremely competitive nature of the air compressor rental market often results in an increased reluctance on the part of several competitors to discuss their market position, future plans, or market trends. Verify Markets used its skills and experience to extract the relevant data in order to complete the analysis.

Verify Markets is not responsible for any incorrect information supplied to us by companies during our primary research process.

Verify Markets report is for customers' internal use and not for general publication. This research cannot be given, disclosed, or sold to non-customers or third parties. Since most of the data is based on company personnel views, it is subject to fluctuation.

Verify Markets

Capabilities



Verify Markets

Global Presence

Verify Markets

Have Any Question

Contact us and set up a time to speak with our analysts.

Verify Markets

Contact us:
We're social


+1.210.595.9687


info@verifymarkets.com


Facebook/verifymarkets


twitter/verify_markets


LinkedIn/company/verify-markets