

Sector Snapshot

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# Smart Grid

Architecture, Engineering,  
Construction

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# Smart Grid Definition\*

- Digitalized, self-monitoring electricity network with automation, real-time control, and self-healing capabilities
- Bi-directional electricity flow & real-time data exchange between generation, storage, and consumers
- Integrates renewables, demand response, and smart devices for efficiency, reliability, and sustainability



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# Sector Segmentation

## **Architecture, Engineering and Construction**

## **Hardware and Components**

Transformers, switchgear,  
cables, smart meters,  
sensors, energy storage  
systems, inverters etc.

## **Software and IT**

Energy management systems, data analysis, demand  
response platforms, virtual power plant software etc.

## **Grid Operators and Energy Suppliers**

## **Independent Service Providers**

Grid maintenance, certification services



# Market Size & Growth\*

- **Global Market:** Valued at USD 60 bn in 2024, projected to reach 289 bn in 2034 (CAGR 16.9%)
- **Main Growth Areas:** Renewable energy integration, grid automation & digitalization, electric vehicle infrastructure, energy storage
- **Regional:** North America leads the market, with rapid growth expected in Asia-Pacific due to urbanization and renewable energy adoption



# Underlying Key Drivers\*

- **Energy Efficiency & Modernization:**  
Demand for grid optimization, distributed energy resources (DERs), renewables integration & EV charging
- **Tech Advancements & Growth:**  
Integration of smart meters, sensors, AI and IoT enables real-time monitoring, and digitalized grid management
- **Investments & Government Support:**  
Policies, incentives & investments for grid modernization, e.g. U.S. Inflation Reduction Act and EU's Green Deal



# Recent Key Trends\*

- **Technological Advancements:**  
Growth in AI-driven grid optimization, demand-side management, real-time monitoring & predictive maintenance
- **Decentralization & Grid Resilience:**  
Shift towards decentralized energy production, microgrids, and resilience measures to prevent outages
- **Cybersecurity & Data Management:**  
Increased focus on protecting grid infrastructure & managing vast amounts of real-time data



# Sector Definition

- **Purpose:** Plan, engineer and construct modern smart grids to enhance grid reliability, efficiency, and sustainability
- **Key Customers & Applications:** Utilities, government entities, and industrial sectors driving grid modernization and renewable energy integration
- **Products/Services:** Develop smart grid infrastructure, incl. integration of renewables, storage, intelligent buildings, microgrids, digital substations, EV charging etc.





# Market Structure

- **Dominated by Multinational Corporations:** Large companies provide end-to-end smart grid architecture, engineering and construction services
- **Specialized Firms:** While major players lead, smaller specialized firms contribute to smaller and/or regional projects as well as niche solutions



# Selected Key Players



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# Transaction Market

## Historical Activity:

- Increasing deal flow driven by grid expansion, retrofits and distributed energy rollouts, reflecting strong investment interest
- Strong M&A activity in North America; Europe increasingly active due to energy transition targets



# Transaction Market

## Key Drivers of Potential Deal Activity:

- Surge in grid & renewables projects fuels demand for AEC capabilities
- Utilities & infra players seeking to establish integrated full-stack project delivery expertise via acquisitions
- Sector fragmentation encourages consolidation to gain scale and regional presence

# Transaction Market

## Outlook & Potential Opportunities:

- **Strategic M&A in Large-Scale Infra:** Major firms may expand capabilities and geographic reach through M&A
- **Buy-and-Build in Distributed Energy Solutions:** Fragmented segments like EV charging, PV installation or smart metering offer opportunities for roll-ups
- **Vertical Integration & Synergies:** Deals across energy storage, digital grids, or automation to enhance offerings



# Selected Deals





Sale to <sup>1)</sup>





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24/02/25 <sup>2)</sup>





Sale to





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01/01/25





Sale to





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04/12/24 <sup>2)</sup>





Sale to





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27/03/24 <sup>2)</sup>





Sale to





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22/03/24





Sale to





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12/09/24





Sale to <sup>1)</sup>





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19/04/24





Sale to





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17/07/23

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- 1) Undisclosed stake  
2) Announced, subject to approval



# Get in Touch



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