

Europe Energy Harvesting Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

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Abstracts

Europe Energy Harvesting Market was valued at USD 126.6 million in 2024 and is estimated to grow at a CAGR of 8.6% to reach USD 278 million by 2034, fueled by the growing demand for sustainable energy solutions and the advancements in low-power electronics. As awareness about renewable energy increases and the need for energy optimization grows, energy harvesting systems are becoming increasingly popular in various sectors. Government initiatives, such as the European Union's Green Deal, which aims to achieve climate neutrality by 2050, contribute to this growth by promoting investments in renewable energy and energy-efficient technologies.

The energy harvesting market is evolving rapidly, driven by the need for more efficient products and the growing demand from diverse industries. This trend leads to more collaborations and innovations as companies adapt to changing market dynamics. The rise of smart cities and advancements in wireless sensor networks open new opportunities for energy harvesting applications. While there are still challenges like high initial costs and technical barriers, ongoing research and development are helping overcome these obstacles.

The solar energy segment is anticipated to generate USD 100 million by 2034, driven by favorable policies and abundant sunlight in key European countries. Additionally, the demand for vibration and kinetic energy harvesting is rising due to its versatility in converting mechanical energy into electrical power, especially in industries where machinery is exposed to continuous vibrations. The building automation sector is another key driver, with energy harvesting technologies being integrated to power sensors and control systems, which help improve energy efficiency and support green building initiatives.

The building automation sector accounted for a 41% share in 2024 and is expected to grow at a CAGR of 9% through 2034. The growing interest in energy-efficient building systems has led to a surge in energy harvesting technologies to power various devices, including sensors and controls. These technologies help reduce the reliance on external power sources, resulting in improved energy efficiency and a significant contribution to green building initiatives. Energy harvesting in building automation is particularly valuable for self-powered sensors, which can now be deployed even in hard-to-reach areas.

Germany Energy Harvesting Market was valued at USD 35.5 million in 2024 and is expected to reach USD 76.5 million by 2034. The country is witnessing increased adoption of solar and kinetic energy harvesting technologies, bolstered by policies that support the sale of renewable energy on the open market. These initiatives strengthen decentralized generation and storage units, driving a positive outlook for energy harvesting applications.

Major players in the Europe Energy Harvesting Market include companies like STMicroelectronics, Texas Instruments, Renesas Electronics, Honeywell, Fujitsu, EnOcean, and ZF Friedrichshafen. To enhance their market presence, companies are focusing on strategic partnerships, technological advancements, and expanding their product portfolios. Key players are also investing in R&D to improve the efficiency of energy harvesting systems and make them more accessible for various industries. Furthermore, they are increasing their involvement in green building and smart city initiatives to capitalize on the growing demand for sustainable solutions.

Companies Mentioned

ABB, Advanced Linear Devices, Azelio, EnOcean, e-peas, Fujitsu, Honeywell, Mouser Electronics, Octopus Energy, Renesas Electronics, STMicroelectronics, Texas Instruments, ZF Friedrichshafen

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