



The Home Energy Management Systems Market

4th Edition

The Home Energy Management Systems Market is a comprehensive report from Berg Insight analysing the latest developments and trends on the home energy management systems market in Europe and North America. This strategic research report from Berg Insight provides you with 210 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.

The number of Home Energy Management Systems in Europe and North America reached 6.0 million in 2025

The residential sector accounts for around 25 percent of the total energy consumption in Europe and 15 percent in North America. Household electricity consumption is anticipated to increase substantially during the coming years due to the continued adoption of electric vehicles and heat pumps. Solutions that enable homeowners to reduce their overall energy consumption, optimise when electricity is consumed and increase the share of energy coming from renewable sources therefore play a vital role in the transition to carbon neutrality and mitigating climate change. In order to support this transition, governments in Europe and North America have introduced targeted incentives and subsidies to encourage residential investments in renewable energy and energy optimisation technologies. Higher and increasingly volatile electricity prices in some markets during recent years, combined with concerns over grid reliability and more frequent power outages in certain regions, have also strengthened homeowners' incentives to invest in such solutions.

In this report, a home energy management system (HEMS) is defined as a system that at a minimum consists of a solar PV system, battery storage system and a web-based management portal or smartphone app that enables remote monitoring and control of the system. A wider HEMS also integrates backup generators, EV chargers, heat pumps, home appliances and other connected devices and systems in the home. A HEMS enables households to actively participate in the electricity market, reduce their monthly electricity bills and help alleviate strain on the electricity grid during periods of high demand.

At the end of 2025, there were an estimated 5.1 million HEMS installed in European homes. An estimated 1.3 million systems were added to the installed base in 2025. This figure includes both new installations of solar PV + battery storage systems as well as installations of battery storage systems in existing solar PV systems (i.e. retrofits). The penetration rate is still low in Europe, at around 4.3 percent. Germany is by far the leading market, accounting for close to half of the installed base and shipments in Europe. Growing at a CAGR of 19.4 percent, the installed base of HEMS in Europe is estimated to reach 12.5 million systems at the end of 2030. This corresponds to a penetration rate of 10.0 percent.

The North American HEMS market is smaller in terms of the number of installed and shipped systems compared to Europe. At the end of 2025, there were an estimated 850,000 HEMS installed in North American homes. Shipments, including both new installations and retrofits, reached

200,000 systems in 2025. About 0.7 percent of the houses and MDUs in the region had a HEMS installed at the end of the year. The US is estimated to account for about 95 percent of the North American market while Canada accounts for about 5 percent. California, Texas, Hawaii, Arizona and Puerto Rico are among the largest HEMS markets in the US. Growing at a CAGR of 15.2 percent, the installed base of HEMS in North America is estimated to reach over 1.7 million systems at the end of 2030. This will correspond to a penetration rate of 1.4 percent.

The HEMS value chain includes a diverse range of companies operating across different parts of the residential energy ecosystem. Some companies offer complete HEMS solutions that combine proprietary hardware, software and energy management capabilities. Other companies specialise in individual components, such as battery storage systems, inverters, EV chargers or energy management hardware, which can be integrated with third-party products to form a complete HEMS. There are also companies that focus primarily on software and energy management platforms, enabling hardware manufacturers, utilities and other market participants to integrate, monitor and optimise distributed energy resources in the home. Leading US-based players include Tesla, Enphase Energy, Generac, FranklinWH Energy Storage, Base Power, Lunar Energy and Savant Systems. Leading Germany-based companies include E3/DC (Hager Group), Sonnen, Senec (EnBW), Solarwatt, SMA Solar, RCT Power, Fenecon and Viessmann Climate Solutions (Carrier). Austrian Fronius, UK-based Puredrive Energy and Denmark-based Emaldo are also leading providers. Several major players on the HEMS market in North America and Europe are based outside of the two regions. These include China-based Huawei, Growatt, Sungrow, Sigenergy, AlphaESS, and BYD Electronic; Israel-based SolarEdge; and South Korea-based LG Energy Solution.

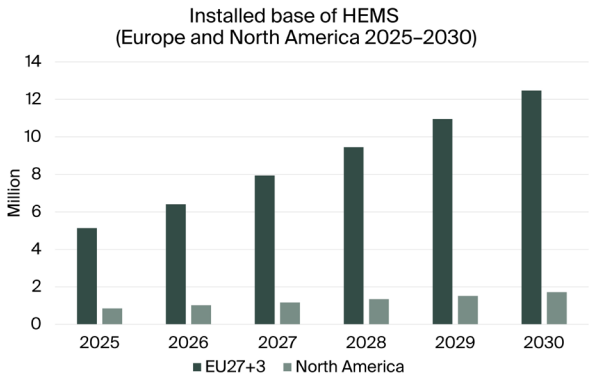


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Glossary

Highlights from the report

Insights from 20 executive interviews with market leading companies.

Comprehensive overview of the HEMS value chain and key applications.

In-depth analysis of market trends and key developments.

Statistical data on residential solar PV system adoption in Europe and North America.

Profiles of 81 companies active in the solar PV, battery storage and HEMS industry.

Detailed market sizing and forecasts lasting until 2030.

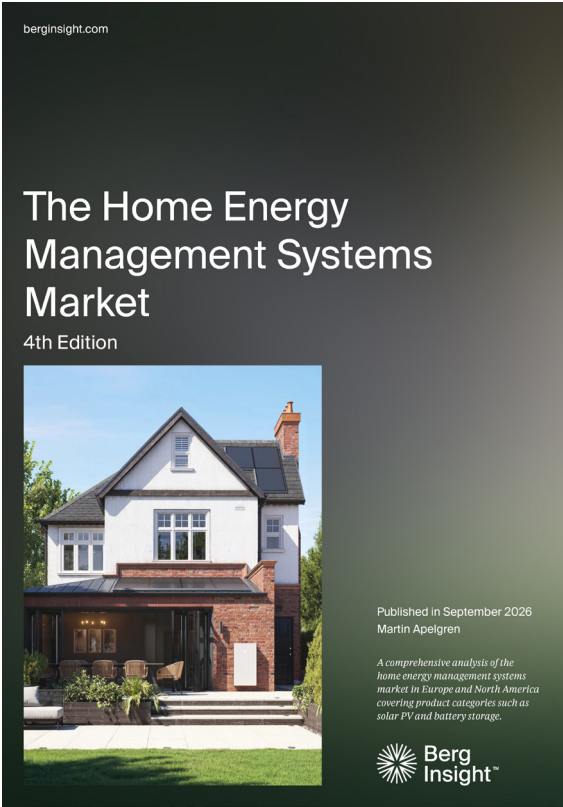
The report answers the following questions

- How will the HEMS market evolve in the next five years?
- What are the main drivers behind growth in Europe and North America?
- How important are government subsidies and tax reductions for adoption?
- What are the business models and channels-to-market for HEMS solutions?
- Which are the leading HEMS providers in Europe and North America?
- Which are the main connectivity technologies and standards?
- What is the potential market size for cellular IoT in the HEMS market?
- Which are the main trends in the industry?
- How is AI impacting the HEMS market?



About Berg Insight's IoT market research

Our market reports offer comprehensive information and analysis on key IoT technologies and markets, addressing important concerns including total addressable market, market penetration, market shares, industry landscape, regulatory environment, market trends and forecasts. Our research portfolio today comprises more than 85 items, where each market report focuses on a specific vertical application area or cover horizontal themes. All market reports come with complementary data sets in Excel format that can be easily analysed and converted into tables and charts. We offer a range of different license options together with bundled packages and subscriptions to suit your specific needs.



SMART BUILDINGS

The Home Energy Management Systems Market

How should the utility and mobile industries address the vast business opportunity in home energy management systems? Berg Insight estimates that the installed base of HEMS in Europe and North America will grow at a compound annual growth rate of 18.9 percent from 6.0 million in 2025 to 14.2 million in 2030. Get a 360-degree perspective on the rapid evolution of the HEMS market in this comprehensive 210-page strategy report.

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Who should read this report?

The Home Energy Management Systems Market is the foremost source of information about the fast-growing HEMS market in Europe and North America. Whether you are a product vendor, service provider, telecom operator, utility, investor, consultant, application developer or government agency, you will gain valuable insights from our in-depth research.

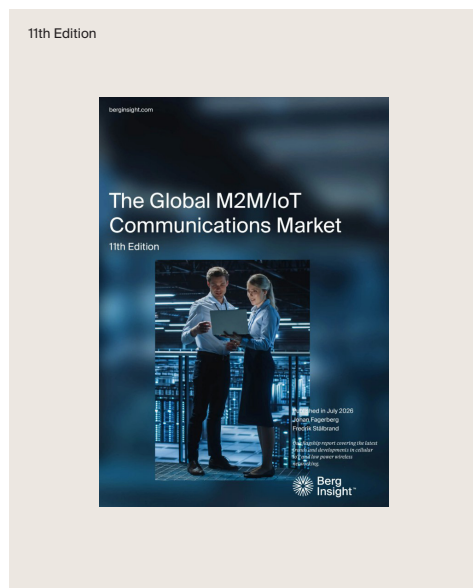
AUTHOR

Martin Apelgren



Martin is a principal analyst who specialises in IoT applications for the smart homes and buildings, transportation and security markets. He joined Berg Insight in 2018 and is the lead author of numerous research reports. In addition to published research, he has provided bespoke research to clients ranging from IoT solution providers, management consulting firms, private equity firms and others. Prior to joining Berg Insight, Martin worked as a supply chain analyst at Volvo Group. Martin holds a Master's degree in Industrial Engineering and Management from Chalmers University of Technology.

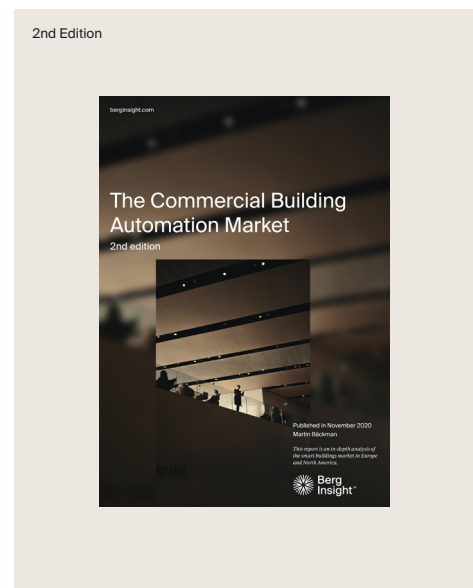
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CONTACT

Berg Insight AB
Viktoriagatan 3
411 25 Gothenburg
Sweden

+46 (0)31 711 30 91
info@berginsight.com
www.berginsight.com



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