

**Biopower Market By Feedstock (Solid Biofuel, Liquid Biofuel, Biogas), By Technology (Direct Combustion, Gasification, Anaerobic Digestion, Landfill Gas, Others), By End Use (Residential, Commercial, Industrial): Global Opportunity Analysis and Industry Forecast, 2021-2031**

Market Report | 2022-08-01 | 338 pages | Allied Market Research

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**Report description:**

The global biopower market was valued at \$14.2 billion in 2021, and is projected to reach \$26.3 billion by 2031, growing at a CAGR of 6.4% from 2022 to 2031.

The extraction of power from the biogas and various other biofuels are known as bio power. The ease of availability of resources across the globe has driven the construction of bio gas and biofuel production plants. According to the United States Environmental Protection Agency (USEPA), carbon dioxide generated from electricity constitutes is approximately 25 % of U.S. greenhouse emissions. To tackle the environmental problem, sustainable options are being considered, such as the use of biomass.

The increase in the capacity to generate renewable power and the use of new kinds of technologies to boost the process relating to biomass conversion has driven the biopower market. The demand for sustainable and energy-efficient solutions has also played a major role in strengthening the market growth. Biogas, which is a part of bio power is majorly composed of methane and carbon dioxide, which is produced by the process of anaerobic digestion and it can be also produced through the thermal process of solid biofuel. Biomass power can be utilized for various applications, such as power generation, heating, and cooking. .

Europe was the largest regional market in 2021 and accounted for a revenue share of more than 36.3%. The European Union, in its long-term strategy, has aimed to be carbon-neutral by 2050. This objective is in line with the European Union's commitments as part of the Paris Agreement. According to the European Green Deal, the European Commission in March 2020 has passed the first-ever European Climate Law to achieve its 2050 climate-neutrality goal. Furthermore, the European Union member countries are required to develop and implement national long-term strategies to achieve their commitments as per the Paris Agreement. North America also accounted for a significant share of the global market revenue in 2021. The demand for biomass power across

North America is primarily driven by the U.S. and Canada. The North America region is majorly dependent on coal for power generation. The recent discovery of shale gas reserves in the region has resulted in gas-based power generation, which is gaining higher growth over coal-based power generation. On the other hand, the market in Asia-Pacific is estimated to register the fastest growth rate over the forecast period.

The biopower market is segmented on the basis of feedstock, technology, end use and region. On the basis of feedstock, it is fragmented into solid biofuel, liquid biofuel, and biogas. On the basis of technology, the market is categorized into direct combustion, gasification, anaerobic digestion, landfill gas, and other. The landfill gas is segment further classified into electricity, direct use, combined heat and power, and alternate fuels. In addition, on the basis of end use, the biopower market is divided into residential, commercial, and industrial.

Region wise, the market is studied across North America, Europe, Asia-Pacific, and LAMEA. Presently, North America accounts for the largest share of the market, followed by Europe and Asia-Pacific.

The major companies profiled in this report include Dalkia, EnviTec Biogas AG, Schmack Biogas GmbH, Orsted A/S, Babcock & Wilcox Enterprises Inc., Ameresco, MVV Energie AG, Enerkem, Drax Group, Helius Energy Plc, Alstom SA, Veolia, Ramboll Group A/S, and Mitsubishi Heavy Industries Ltd. Owing to rapid industrialization, urbanization has led to the demand for power from sustainable resources, which led to the increase in the demand for bio power market. The presence of demand for portable electronics and construction of smart cities has fuelled the construction of landfill gas facilities which will drive the bio power market. Additional growth strategies such as expansion of production capacities, acquisition, partnership and research & innovation in the type of electronic load devices have led to attain key developments in the global biopower market trends.

#### Covid-19 Analysis

The global COVID-19 pandemic has negative impact on the biopower market. This market has experienced lower than anticipated demand across all regions compared to pre pandemic levels. The global market has exhibited a decline by about 25% in 2020 compared to 2019 due to shutdown of various food processing industries and agricultural activities from where feedstock is used as raw material for the production of biopower.

COVID-19 has negatively impacted the biopower market due to decline in manpower and material resources. Owing to stringent lockdown restrictions, the manufacturing activity got severely affected, which hampered the market growth and profitability. However, during the forecast period, the market is expected to recover due to eased lockdown restrictions in most nations. Furthermore, the government of various countries across the globe has issued policies regarding sustainable development in coming years which will have positive impact on the market. The presence of investment in the biofuel and biogas production plant in the developing countries such as India and China due to low availability of fossil fuel resources lead to surge in the market growth after the pandemic

#### Key Benefits For Stakeholders

- This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the biopower market analysis from 2021 to 2031 to identify the prevailing biopower market opportunities.
- The market research is offered along with information related to key drivers, restraints, and opportunities.
- Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.
- In-depth analysis of the biopower market segmentation assists to determine the prevailing market opportunities.
- Major countries in each region are mapped according to their revenue contribution to the global market.
- Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.
- The report includes the analysis of the regional as well as global biopower market trends, key players, market segments, application areas, and market growth strategies.

#### Key Market Segments

##### By Feedstock

- Solid Biofuel
- Liquid Biofuel
- Biogas

By Technology

- Direct Combustion
- Gasification
- Anaerobic Digestion
- Landfill Gas
- Application
- Electricity
- Direct Use
- Combined Heat and Power
- Alternate Fuels
- Others

By End Use

- Residential
- Commercial
- Industrial

By Region

- North America
  - U.S.
  - Canada
  - Mexico
  - Europe
  - Germany
  - France
  - Italy
  - Spain
  - UK
  - Rest Of Europe
- Asia-Pacific
  - China
  - Japan
  - India
  - South Korea
  - Rest Of Asia-Pacific
- LAMEA
  - Brazil
  - Turkey
  - South Africa
  - Rest Of LAMEA
- Key Market Players
  - Dalkia
  - EnviTec Biogas AG
  - Schmack Biogas GmbH
  - Weltec Biopower GmbH
  - Orsted A/S
  - ElectraTherm
  - Babcock & Wilcox Enterprises Inc.
  - Ameresco

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- Enerkem
- Drax Group
- Sodra
- Helius Energy Plc
- Alstom SA
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- Veolia
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- Ramboll Group A/S
- General Electric
- Mitsubishi Heavy Industries Ltd.

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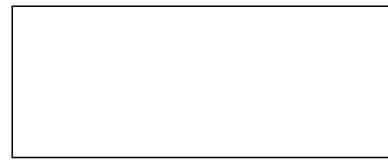
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