

Japan Biomass Power Market Forecast 2024-2032

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Report description:

KEY FINDINGS

The Japan biomass power market is evaluated to develop with a CAGR of 6.89% over the forecasting years of 2024 to 2032, reaching a revenue of \$9828.23 million by 2032. In terms of volume, the market was valued at 84.89 million MWh in 2023 and is set to reach 174.83 million MWh by 2032, growing with a CAGR of 8.45% during the forecasted period.

MARKET INSIGHTS

The Japan biomass power market is anticipated to experience significant growth over the forecasting years, driven by increasing energy demand, supportive government policies, and a focus on renewable energy sources to reduce greenhouse gas emissions. The country's commitment to diversifying its energy mix, especially after the Fukushima disaster, has led to greater investment in biomass power generation. The abundant availability of biomass feedstocks-such as agricultural residues, forestry by-products, and municipal waste-also contributes to market expansion. However, challenges such as high initial capital investments, supply chain complexities, and competition from other renewable energy sources may hinder market growth.

Japan is a significant player in the Asia-Pacific biomass power market, with government initiatives and technological advancements driving its progress. According to the Agency for Natural Resources and Energy, Japan aims to increase its renewable energy share in the power generation mix to 22-24% by 2030, with biomass power playing a crucial role in achieving this target.

SEGMENTATION ANALYSIS

The Japan biomass power market is segmented into feedstock, technology, and application. The technology segment is further divided into combustion, anaerobic digestion, gasification, co-firing and CHP, and landfill gas (LFG).

Co-firing & combined heat and power (CHP) is a significant technology segment in the Japan biomass power market. Co-firing involves burning biomass along with coal or other fossil fuels in existing power plants, allowing for the gradual integration of biomass into the energy mix without the need for entirely new infrastructure. This method reduces greenhouse gas emissions by substituting a portion of fossil fuels with renewable biomass feedstocks.

Combined heat and power (CHP), also known as cogeneration, is the simultaneous production of electricity and heat from a single fuel source, such as biomass. CHP systems are highly efficient, capturing and utilizing heat that would otherwise be wasted in electricity generation. In Japan, CHP systems are widely adopted in industrial facilities, commercial buildings, and district heating systems, enhancing energy efficiency and reducing overall energy costs.

COMPETITIVE INSIGHTS

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Key companies operating in the Japan biomass power market include Hitachi Zosen Corporation, Mitsubishi Heavy Industries Ltd, Ramboll Group AS, etc.

Hitachi Zosen Corporation, headquartered in Osaka, Japan, is a leading engineering and manufacturing company specializing in environmental systems, industrial plants, infrastructure, and machinery. The company has a significant presence in the biomass power market, particularly in the development and construction of waste-to-energy and biomass power plants.

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