

Japan Biomass Outlook:

Overview and analysis in the context of a changing power market



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About this report

This report provides unique insight into the Japanese renewable energy sector. FutureMetrics has gathered much of the data and information in this report from Japanese language documents and spreadsheets; some of which has not been reported in English before.

The Japanese biomass market has been showing growth and potentially offers significant opportunities for suppliers and investors. This report provides the background on the power generation market in general as well as the biomass power sector in particular. Insights are also provided regarding other renewable energy generation in Japan to understand the developments that are impacting the wood pellet, palm kernel shell, and wood chip power generation sector; especially with regard to pricing and interconnection.

This report is an update of our November 2019 publication. Full year 2019 statistics have been added as well as updated graphics, latest information on Feed in Tariffs (FITs) and information on the ongoing biomass sustainability discussions in Japan. The biomass power plant database has been reviewed and updated with new projects as well as fuel information where available.

Renewable energy generation sources are increasingly competing for grid capacity. FutureMetrics' forecasts on biomass demand as well as pricing as outlined in this report are based on various data along with our analysis of the ongoing power market reform and Japan's government policies past, present and future.

For firms that are engaged in strategic planning for industrial wood pellet demand, this report's analyses and forecasts regarding the evolution of the Japanese electricity markets and their current and future demand for biomass fuels, including wood pellets, are invaluable inputs to better decision making.

About the authors

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Annette Bossler has over 25 years of experience in international business development for private and public entities. One of her focus markets is Japan. She has been monitoring the Japanese energy market since 2010; especially with regard to renewable energy and the ongoing power market reform. Annette is the founder of Main(e) International Consulting LLC – an international consulting company providing market intelligence and business development services. Annette holds an MA Honors Degree from Bonn University, Germany in Japanese Studies and Public & International Law. In addition to her native language German she is fluent in English and Japanese and has basic knowledge of French and Chinese.

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William Strauss is the President and founder of FutureMetrics, LLC. Bill is globally recognized as a leading expert in the wood pellet sector. Bill continues to be a thought leader in the sector and has published numerous papers on a variety of subjects relevant to the wood pellet sector. Bill has been named as one of the most influential leaders in the biomass sector in 2016 and again in 2017 by Argus Media, and is the 2012 recipient of the International Excellence in Bioenergy award. He has more than forty years of strategic and policy planning, project management, data analysis, operations, and modeling experience in renewable energy. He has an MBA (specializing in finance) and a PhD (economics, earth systems science).

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Biomass Power Plants (1MW capacity and above) by Operation Start Year (incl. Future Plants) – Continued

Japanese Name	Plant Name in Alphabet	Operation Start Year	MW	Fuel Type
室蘭バイオマス発電合同会社	Muroran Biomass Power Generation LLC	2020	74.9	PKS 100%
オリックス（響灘バイオマス発電所）	ORIX (Hibonada Biomass Power Plant)	2020	50.0	Imported Wood Pellets
SB エナジー(株) 御坊市	SB Energy Gobo	2020	50.0	Change from Palm Oil to Imported Wood Pellets and PKS
清水建設株式会社(信州ウッドパワー)	Shimizu Corporation (Shinshu Wood Power)	2020	2.0	Domestic Woody Biomass
新宮フォレストエナジー(株)	Shingu Forest Energy Co., Ltd.	2020	1.8	Domestic Woody Biomass
(株)静岡バイオマス発電（御殿場バイオマス発電所）	Shizuoka Biomass Power Plant (Gotemba Biomass Power Plant)	2020	7.1	Domestic Woody Biomass
ソヤノウッドパワー（信州 F・Power プロジェクト）	Soyano Wood Power (Shinshu F・Power project)	2020	14.5	Waste Wood (140,000 MT p.a.)
(株)田村バイオマスエナジー	Tamura Biomass Energy	2020	7.1	Domestic Woody Biomass
WIND-SMILE 網走 3 号	WIND-SMILE Abashiri No.3	2020	9.9	Domestic Woody Biomass and PKS
WIND-SMILE 網走 2 号	WIND-SMILE II Abashiri No. 2	2020	9.9	Domestic Woody Biomass and PKS
エア・ウォーター&エネルギア・パワー小名浜(株)	Air Water & Energia Power Onahama	2021	75.0	Wood Pellets and PKS
バイオパワー苅田合同会社	BioPower Kanda LLC	2021	75.0	Imported Wood Pellets
株式会社中部プラントサービス(多気バイオパワー2号機)	Chubu Plant Service Co., Ltd. (Taki Bio Power Unit 2)	2021	2.0	Domestic Woody Biomass
フォレストエナジー株式会社・袋井市	Forest Energy Co., Fukuroi City	2021	7.1	Domestic Wood Chips (72,000 MT p.a.)
伏木万葉埠頭バイオマス発電合同会社(エクイスバイオエネルギー)	Fushiki Manyo Wharf Biomass Power Generation LLC (Equis Bio Energy)	2021	50.0	Domestic Woody Biomass, PKS
苅田バイオマス発電所（苅田バイオマスエナジー(株)）	Kanda Biomass Power Plant (Kanda Biomass Energy Co., Ltd. - Renova)	2021	75.0	Woody Biomass, PKS
前田建設・大船渡	Maeda Construction, Ofunato	2021	112.0	Wood Pellets
銘建工業(株) バイオマス発電設備	Meikken Kogyo Co., Ltd. Biomass Power Generation equipment	2021	5.0	Domestic Wood Pellets