September 1, 2022 Tokyo Century Corporation Shunan Power Corporation

## **Commercial Operations Begin at Shunan Power Corporation's Power Plant**

Tokyo Century Corporation (head office: Chiyoda-ku, Tokyo; President and CEO: Koichi Baba) has announced that the power plant operated by Shunan Power Corporation (head office: Shunan City, Yamaguchi Prefecture; President: Hiroaki Ogino), a consolidated subsidiary of Tokyo Century, began commercial operations on September 1, 2022, as described below.

The power plant (installed capacity: 300 MW) is a joint venture<sup>\*1</sup> based on a shareholders' agreement signed between Tokyo Century, Tokuyama Corporation, and Marubeni Corporation in September 2017. The biomass co-firing power plant was constructed on the premises of Tokuyama Corporation's Tokuyama Factory. Operation of this power generation business will be handled by Shunan Power, a consolidated subsidiary of Tokyo Century (Tokyo Century: 60%, Tokuyama Corporation: 20%, Marubeni Clean Power Corporation: 20%).

The co-firing ratio is estimated to be around 20cal% when using white pellets at the start of commercial operations. Given the urgency to reduce GHG emissions, however, we plan to increase the co-firing ratio with white pellets as soon as possible and to introduce black pellets (biomass with high thermal efficiency) to raise the co-firing ratio to about 29cal%. Assuming that the necessary technical and economic conditions are in place, we will strive to mainly use black pellets to raise the co-firing ratio to 50cal% by around 2025, thereby reducing GHG emissions by approximately 33% compared to the start of operations.

The Japanese government's 2050 Carbon Neutrality Declaration mandates decarbonization efforts in the electric power sector. In particular, thermal power sources with large GHG emissions are now required to develop and demonstrate technologies for utilizing hydrogen and ammonia and to put these technologies to practical use as soon as possible. Accordingly, we will be considering the use of ammonia as the main fuel for the power plant toward achieving net zero emissions by 2040. We have also entrusted the preparation of a Transition Roadmap<sup>\*2</sup> to Sumitomo Mitsui Trust Bank, Ltd., which has expertise in formulating strategies on GHG reduction targets. To ensure the reliability and validity of the plan, we have obtained an evaluation report from a third party, Japan Credit Rating Agency, Ltd. (JCR). The project received the highest JCR rating under both the Green/Transition Finance Evaluation and Management, Operation and Transparency Evaluation, as well as the highest overall evaluation of Green 1<sup>\*3</sup>. In its report, JCR also evaluated our Transition Roadmap as containing technologically feasible measures for each period.

Generating electricity at this power plant will enable Tokyo Century and Shunan Power to contribute to providing a stable supply of energy for the daily lives of the Japanese people and the development of sustainable economic activities. At the same time, both companies will also focus on various initiatives that will lead to net zero emissions by 2040, including collaborating with companies possessing advanced technological capabilities for achieving carbon neutrality, toward realizing a decarbonized society.

<sup>\*1 &</sup>lt;u>Conclusion of Shareholders Agreement on Power Generation Joint Business Utilizing "Compensation Program for Promoting</u> <u>Enterprises' Investment in Cutting-Edge Facilities Using Lease Methods"</u>

\*2 Transition Roadmap for Shunan Power Corporation's Power Plant in Shunan City, Yamaguchi Prefecture (Currently, we have only

the Japanese version, but an English version will be released at a later date)

\*3 <u>Climate Transition Finance Evaluation by Japan Credit Rating Agency, Ltd.</u> <u>JCR Assigned Green 1 (T) (F) to the Transition Finance Framework of Shunan Power Corporation</u> (Currently, we have only the Japanese version, but an English version will be released at a later date)

## Transition Roadmap for Shunan Power Corporation Power Plant\*<sup>4</sup>

WP: White pellets, BP: Black pellets



\*4 This roadmap is subject to appropriate technical and economic conditions. It is also assumed that the breakdown of the fuel consumption ratio will be adjusted to align with economic advantages and other factors. \*5 Percentage reductions in GHG emissions compared to at the start of operations.

Location	Shunan City, Yamaguchi Prefecture
Power generation method	Biomass co-firing power generation
Completion of construction/start of operations	End of August 2022 and in September 2022
Grid connection	September 2021
Power output	300 MW
Power generation efficiency	43%
Power generation company	Shunan Power Corporation
Cost of power generation facility related to	
biomass co-firing power generation project	102.0 billion yen
(tentative)	

## **Overview of Power Plant**

## **Overview of Shunan Power Corporation**

Company name	Shunan Power Corporation
Head office address	7-46 Harumi Town, Shunan City, Yamaguchi Prefecture
Representative	Hiroaki Ogino, President
Business	Electricity sales business
Major shareholders and shareholding ratios	Tokyo Century Corporation: 60%, Tokuyama Corporation: 20%, Marubeni Clean Power Corporation: 20%