

Business Plan That Reflects Integration of the Existing Thermal Power Generation Businesses

JERA Co., Inc. April 2, 2019

© 2019 JERA Co., Inc. All Rights Reserved.

This Page Is Left Intentionally Blank

(1) New JERA Profile

- (2) Change of Business Environment Foreseen
- (3) Re-building of Business Models Based on Changed Environment and the Way Forward for Each Function
- (4) Business Strategies
- (5) Targeted Income/Expenditure Level
- (6) Environmental Policy

(1) New JERA Profile

New JERA Profile (Upon Step3 Completion)

- Existing Domestic Thermal Power Generation business integrated with the Step2 businesses (Fuel Transportation/Trading, Upstream/Procurement, Overseas Power Generation/Energy Infrastructure)
- This concludes the entire integration process and completes JERA's energy value chain



*1: Estimated value. Total Assets as of the end of FY2019. Number of Employees and Domestic Thermal Power Generation as of the beginning of FY2019. *2: For the companies inherited in April 2019, only the secondees from JERA are indicated.

(Reference)

Àiming to be a global energy company with roots in Japan, JERA has integrated businesses in steps, starting off from the domains with value creation potential and less difficulties



(2) Change of Business Environment Foreseen

© 2019 JERA Co., Inc. All Rights Reserved.

The World Is Undergoing an Energy Transition

- Change of supply structure due to global shift to renewable energy/gas (This goes in parallel with depression in demand for electricity in Japan)
- Management of spread between fuel/electricity markets becoming a new source of profits due to marketization progress
- Change of power plant O&M methodology thanks to progress in digital technologies including AI, IoT etc. Advanced O&M services are required to support the connection of distributed power sources and batteries to the grid



Japan-specific Factors Are Also Relevant



(3) Rebuilding of Business Models Based on Changed Environment and the Way Forward for Each Function

Reorganizing Our Business Model to Respond Properly to the Changing Circumstances in Japan and Abroad

Reorganized into Business Development, Optimization and O&M, with each department aiming to be a profit center, respectively from investment, market trading and O&M services.



3 Functions (Profit Centers): Current Status and the Way Forward

The newly-formed 3 functions should each secure and strengthen excellent skills that enable them to meet the changing circumstances, turn the changes into business opportunities and grow profits





Mission	To Provide Cutting-edge Solutions to the World's Energy Issues
Vision 2025	Global Leader in LNG and Renewables Sparking the Transition to a Clean Energy Economy

Through enhancing the LNG value chain and undertaking large-scale renewable energy development, construct a complementary relationship between LNG-fired power and renewables. Provide stable, economic and clean energy.



- Flexible LNG-fired power supply complementing intermittent renewable energy
- Flexible fuel procurement backed by resource trading
- Balanced development of portfolio of renewable resources promoting diversification from solar only into offshore wind and others
- Stable supply of renewable energy with storage battery technologies

(4) Business Strategies

Implement "6 Measures" to Achieve Our Mission & Vision

- For LNG, maintain and expand our fuel procurement scale through replacement of domestic power plants with more efficient facilities and expansion of global power generation. Leverage that scale for trading expansion and upstream project participation and improve profitability of the entire value chain
- For renewable energy, leverage our large-scale project development competence that we gained from the existing projects, promote the development focusing on offshore wind power in particular, and grow it as one of the main pillars of business in our future portfolio.



Goals in 2025

Consolidated Net Profit JPY200B Credit Rating of A-grade or higher			
Business Development LNG value chain and large-scale renewable energy development excellence	Optimization Resource & electricity trading and market creation	O&M World's top-class agility and operational efficiency	
 Develop domestic replacement: 7~9GW (5 to 7 sites) Win Gas to Power project 	 LNG transaction volume: Around 35 MTPA Optimization taking advantage of LNG vessels 	 Operation/maintenance of power plants: equivalent to 80GW globally 	
 LNG fleet: Around 25 vessels Equity output of renewable energy: 5GW 	 Profit through trading 	 Reduce O&M cost by 20% (vs. current TEPCO/Chubu) Shorten the time needed for regular inspection: ▲50% 	
<	Organization and Management to Realize One Global JERA		

(Reference) Governance Structure

- Segregation of functions Supervision, Audit, Execution to build a structure that enables autonomous business operations
- 4 external persons with expertise in global power generation, trading, M&A etc. appointed as Director



Organizational Structure (1)

Reorganized per function based on the business model , and introduced a responsibility accounting on a business division level



Organizational Structure (2)

Expand the corporate functions, and establish a robust corporate infrastructure to support our business plans



(5) Target Income/Expenditure Level

© 2019 JERA Co., Inc. All Rights Reserved.

Income/Expenditure Level (P/L Status) [excluding fuel cost timing impact]



(Note 1) Timing-shift impact of the fuel cost adjustment system is excluded.

- (Note 2) Assumptions of our calculation:
- Foreign exchange rate: 110JPY/USD for each year

• Crude oil price (nominal figure): Average 65USD/bbl for 2019~2021, 100USD/bbl for 2025



Total Assets / Net Assets / Interest-bearing Debt





Prospects of Consolidated Cash Flow



(Reference) Image of Profit Composition by Business Proportion of Domestic Power Generation Falls from 60% to 40%



Domestic Power Generation Business

(Reference) Image of Investment Composition by Business

Revenues are assured thanks to long-term contract etc. for more than 90% of the invested amount
 Around 70% of the invested amount is related to LNG and renewable energy



Integration Synergy Effect

- The integration synergy target is JPY100 billion/Year within 5 years from Step 3 integration
- Studies are under way for cost reduction initiatives through O&M efficiency improvement and consolidated procurement of materials and equipment, and prospects are good for already achieving reduction of half the cost originally planned
- We will continue looking for further cost cuts, and accelerate studies for new profit expansion measures (such as O&M business on the global scene etc.) to make them come true as early as possible
- The benefits of integration synergy effect shall be leveraged to provide competitive electricity/gas in the market and for internal reserves/reinvestment so that our enterprise value can be maximized



Integration Synergy Effect

(6) Environmental Policy

Environmental Policy

Environmental Policy

Energy is a foundation of society and economy, and the composition of power generation requires multifaceted considerations, including environment, security of supply, and cost. Given the current circumstances of global energy demand and supply, coal-fired thermal technology plays an indispensable role to underpin the economic growth and lives of billions around the world as a stable and economical source of energy. At the same time, JERA acknowledges that more choices are becoming available for power generation, as innovation in renewables advances.

JERA, as a responsible leader of the Japanese power industry, will take on the challenge of reducing CO₂ emissions in order to realize sustainable environment, society and economy, including through the proactive development of renewable energy. This approach is in accord with energy and environmental policies of the Japanese government, notably the '5th Strategic Energy Plan'.



Environmental Goals

Environmental Goals	
Benchmarks	Achieve the Benchmarks stipulated in the Act on the Rational Use of Energy at the earliest possible time by replacing aging plants with state-of-the-art thermal power.
Inefficient coal- fired power plants	Further deepen our deliberations on phase-out of inefficient coal-fired power plants (SC and below) stipulated in the '5 th Strategic Energy Plan'.
Renewable energy	Develop and hold renewable energy both at home and abroad. Furthermore, support its integration into the energy system by accelerating our efforts to enhance operational agility of the gas-fired plants, and introducing new technologies such as battery storage.
CO ₂ emissions and carbon intensity	Reduce total CO ₂ emissions and carbon intensity from domestic and overseas power business by 2030 (relative to FY2017).

Forward-Looking Statements

The information in this presentation may contain forward-looking statements. Forward-looking statements include statements relating to: (i) plans; (ii) business and management strategies; and (iii) performance forecasts, and are based on then-current data by the time of issuance of this document. Forward-looking statements involve risks and uncertainties including but not limited to economic conditions, competitive landscape, government laws and regulations, exchange rate and so on that could significantly affect the expected results, and are based on certain key assumptions. Many factors could cause actual results to differ materially from those projected or implied herein. Due to such uncertainties and risks, readers are cautioned not to place undue reliance on such forward-looking statements.