



J-POWER Group  
SUSTAINABILITY REPORT  
2016

Harmonizing energy supply with the environment

**SUSTAINABILITY REPORT**

# J-POWER Group Overview (As of the end of March 2016)

Company name	Electric Power Development Co., Ltd.
Communication name	J-POWER
Date of incorporation	September 16, 1952
Headquarters address	6-15-1 Ginza, Chuo-ku, Tokyo, 104-8165 JAPAN
President	Toshifumi Watanabe (from June 22, 2016)
Capital	¥180.502 billion
Employees	J-POWER: 2,360 J-POWER Group: 7,225
Business category	Electric Utility

## Overview of facilities (As of the end of March 2016)

● Power generation facilities <small>(includes equity method affiliates, but percentage ownership is not taken into account.)</small>			● Transmission lines		
Thermal power stations	12	9.11 GW	AC power transmission lines		2,408 km
Hydroelectric power stations	60	8.57 GW	DC power transmission lines		2,141 km
Geothermal power stations	1	0.015 GW	Substations (output)	4	4.30 million kVA
Wind farms	20	0.4 GW	Frequency converter station (output)	1	0.3 GW
Other power generation facilities	2	0.033 GW	AC/DC converter stations (output)	4	2 GW
		Total 95			
		18.13 GW			



## List of Main Group Companies

\* Percentage figures in parentheses are J-POWER equity shares (including indirect investments)

Scope of environmental data:

J-POWER and 25 domestic consolidated subsidiaries

Scope of domestic and overseas CO<sub>2</sub> emissions volume data:

J-POWER, 11 domestic and 32 overseas electricity business companies



### Electric power-related business

- JPec Co., Ltd. (100%)
- JPHYTECH Co., Ltd. (100%)
- JP Business Service Corporation (100%)
- J-POWER RESOURCES Co., Ltd. (100%)
- J-POWER EnTech Co., Inc. (100%)
- Kaihatsu Denshi Gijutsu Co., Ltd. (100%)
- J-Wind Service Co., Ltd. (100%)
- Kaihatsu Sekkei Consultant Co., Ltd. (100%)
- JP Enterprise Co., Ltd. (100%)
- Miyazaki Wood Pellet Co., Ltd. (98%)
- JM Activated Coke, Inc. (90%)



### Electricity business

- Bay Side Energy Co., Ltd. (100%)
- Mihama Seaside Power Co., Ltd. (100%)
- J-Wind Co., Ltd. (100%)
- Japan Clean Energy Development Co., Ltd. (100%)
- J-Wind OOMA Co., Ltd. (100%)
- Minami Kyushu Wind Power Co., Ltd. (99%)
- ITOIGAWA POWER Inc. (80%)
- Nagasaki-Shikamachi Wind Power Co., Ltd. (70%)
- Nikaho-Kogen Wind Power Co., Ltd. (67%)
- TOSA POWER Inc. (45%)
- GENEX COMPANY, LIMITED (40%)



### Other

- Kaihatsu Hiryo Co., Ltd. (100%)
- Japan Network Engineering Co., Ltd. (100%)
- OMUTA PLANT SERVICE Co., Ltd. (100%)
- Biocoal Osaka-Hirano CO.,LTD. (60%)
- Greencoal Saikai Co., Ltd. (60%)



### International business

- Gulf Cogeneration Co., Ltd.
- Nong Khae Cogeneration Co., Ltd.
- Samutprakarn Cogeneration Co., Ltd.
- EGCO Cogeneration Co., Ltd.
- ShanXi TianShi Power Generation Co., Ltd.
- China Resources Power (HeZhou) Co., Ltd
- Chiahui Power Corporation
- Tenaska Frontier Partners, Ltd.
- Elwood Energy, LLC
- Gulf Power Generation Co., Ltd.
- Green Country Energy, LLC
- Birchwood Power Partners, L.P.
- Pinelawn Power, LLC
- Equus Power I, LP
- Tenaska Virginia Partners, L.P.
- Edgewood Energy, LLC
- Shoreham Energy, LLC
- Orange Grove Energy, L.P.
- Gulf JP KP1 Co., Ltd.
- Gulf JP KP2 Co., Ltd.
- Gulf JP TLC Co., Ltd.
- Gulf JP NNK Co., Ltd.
- Gulf JP NLL Co., Ltd.
- Gulf JP CRN Co., Ltd.
- Gulf JP NK2 Co., Ltd.
- Gulf JP NS Co., Ltd.
- Gulf JP UT Co., Ltd.
- ROI-ET Green Co., Ltd
- CBK Power Co., Ltd
- Gulf Yala Green Co., Ltd.
- Shaanxi Hanjiang Investment & Development Co., Ltd
- Zajaczkowo Windfarm Sp. z o.o.

# Contents

1	J-POWER Group Overview / Contents / Editorial Policies
3	Message from the President
4	J-POWER Group's Corporate Social Responsibility (CSR)
6	J-POWER Group's Medium-Term Management Plan
7	<b>Initiatives for a Stable Supply of Electricity and Reduced CO<sub>2</sub> Emissions</b>
9	Hydroelectric power
11	Thermal Power
13	Clean Coal Technology Contributes to Global Reduction of Carbon Emissions
14	Coal-Fired Power and the Role of J-POWER
15	Promoting Reduction of Carbon Emissions by Coal-Fired Power
17	Research and Development of Next-Generation Low-Carbon Technologies
19	Renewable Energy
21	Power Transmission, Substation, and Communications Facilities
22	Overseas Business



## 23 [Report] The Ohma Nuclear Power Plant



## 27 Business Operations That Fulfill Social Responsibility

27	Foundations of Business Operations
30	Recruiting and Developing Human Resources and Creating a Workplace that Provides Job Satisfaction
33	Coexistence with the Community and Society
37	Environmental Management



## 52 External Evaluation and Outside Opinions

### Editorial Policies

- The J-POWER Group operates under its corporate philosophy of playing our part for the sustainable development of Japan and the rest of the world. Accordingly, this report is titled Sustainability Report to express our intention of achieving sustainable growth and development of both the Group and society. It summarizes and reports on the Group's corporate activities under the headings of Governance, Social Responsibilities, and Environment.
- This report includes all consolidated subsidiaries and is representative of the entire J-POWER Group.
- To ensure objective credibility, this report has been independently assured by Ernst & Young Sustainability Co., Ltd. Guaranteed data (Refer to the Websites indicated at the bottom right) calculated according to calculation standards\* is indicated by a star (★). (For details, see p. 52)
- A questionnaire survey was conducted to obtain opinions from readers of the FY 2015 Report, and we have made use of the results in our editing. (A summary can be found on p. 52)
- The opinions of experts outside the company have been sought regarding issues and expectations in relation to the J-POWER Group, and we have made use of the results in our editing. (See pp. 53-54)

#### Period covered:

April 2015 - March 2016

(January - December 2015 for those companies with a January - December fiscal year. Also, some articles may include content from April 2016 or thereafter.)

#### Scope:

J-POWER and the J-POWER Group companies (consolidated subsidiaries)

Note: If other than above, this is indicated in the appropriate place.

#### Guidelines referred to:

Ministry of the Environment, Environmental Reporting Guidelines: FY 2012 Version

**Published in:** September 2016

#### Note concerning forecasts:

The plans, strategies, and forecasts set out in this report have been formulated based on currently available information. Unforeseeable changes in various factors may cause results to differ from projections.



This report is also available at the J-POWER's website as "J-POWER Group Sustainability Report 2016."  
[http://www.jpowers.co.jp/english/company\\_info/environment/index.html](http://www.jpowers.co.jp/english/company_info/environment/index.html)