

# External Evaluation and Outside Opinions

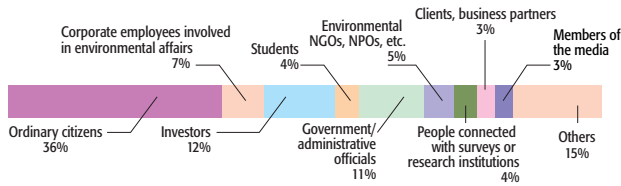
The J-POWER Group strives to incorporate various forms of independent evaluations and recommendations into its activities, including reviews, questionnaires on our Environmental Management Report, and expert opinions. By means of these evaluations and opinions, we determine the kind of business development and environmental activities that others expect of the J-POWER Group and work to improve our sustainable management. By making such comments public, we also enhance our transparency and reliability.

## Readers' Opinions

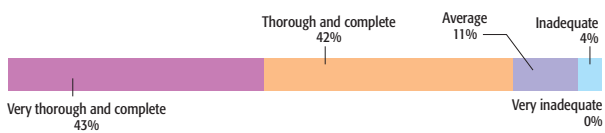
We received many comments from readers in response to our 2006 Environmental Management Report (published August 2006). We consider these valuable comments to be important guidelines for compiling subsequent reports and conducting sustainable management in the future, and intend to put their lessons to use in our corporate activities.

### Aggregate Questionnaire Results (as of the end of March 2007; 64 respondents)

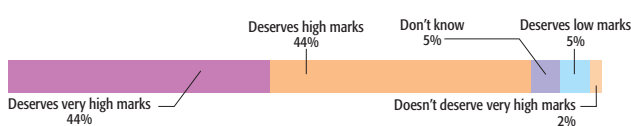
#### Readership



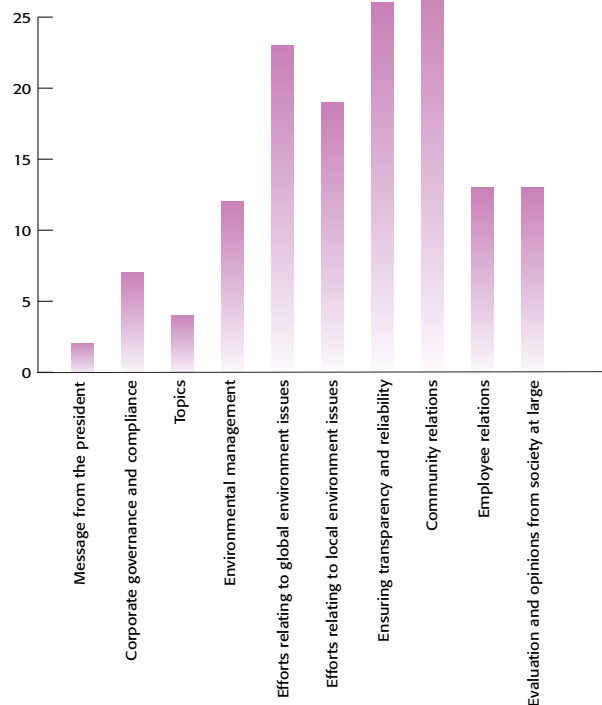
#### Quantity and Quality of Information in the Report



#### Environmental Management



#### Areas That the J-POWER Group Should Tackle More Aggressively (up to four responses per person)



#### Environmental/Social Efforts Sought from the J-POWER Group

Typical comments	Response of J-POWER Group
I would like to see the J-POWER Group harness the pioneering spirit that constitutes its corporate culture and remain on the cutting edge of the power industry in terms of environmental management. I also would like to see your progress in environmental management effectively publicized (this is extremely important for environment-related issues).	In the 2007 report, we present coal usage and carbon dioxide measures as top-priority environmental issues and include them in featured sections. The report incorporates the belief that in order to conduct effective initiatives to address global environmental problems, it is necessary for everyone to recognize those problems as his or her own. We appreciate your further comments.
"Expectations for environmental management" (on the independent recommendations page) will not do. I think this line of questioning is inadequate for promoting CSR initiatives. It makes clear that the J-POWER Group has not adopted a CSR perspective.	The 2007 report features a new structure and has been published as a sustainability report that takes the viewpoint of sustainable development for society and the company. A CSR viewpoint has been incorporated into this approach. We would appreciate your further comments.
I think you should share more environmental technologies with other countries. Please continue with your initiatives to counteract global environmental problems.	As your comment indicates, we recognize initiatives to address global-scale environmental problems as one of our key agendas. We will work to develop various overseas initiatives that utilize technologies fostered in Japan and transfer environmental technologies overseas. In addition to our established consulting business, we have also started providing technical advance through our IPP program.
I think it is important for power stations to earn the understanding, cooperation, and trust of the local community. I think in the case of nuclear power stations in particular you are required to work to earn the trust not only of local communities but also of the nation as a whole. Activities that play an active role are needed in order to facilitate greater understanding. I think it is necessary to inform even more people of your activities and conduct environmental management that can be supported by everyone.	We very much respect your opinion and intend to work to earn greater understanding, cooperation, and trust.

**WEB** Other comments and our responses can be viewed on our website at <http://www.jpowers.co.jp> (available only in Japanese).

## Independent Review

In order to reinforce the credibility of environmental data contained in the *2007 J-POWER Group Sustainability Report*, the data has been independently reviewed and certified by the Shin Nihon Environmental Quality Management Research Institute Co.,Ltd.

In 2007 a review was conducted on the accuracy and comprehensiveness of important environmental information among environmental performance indicators, which were stipulated by the environmental report review and registration system of the Japanese Association of Assurance Organizations for Environmental Information ([WEB http://www.j-aoei.org/](http://www.j-aoei.org/): available only in Japanese). The J-AOEI mark on the back cover indicates that the environmental information contained in this report fulfills the reliability criteria established by the association.



Ishikawa Coal-Fired  
Thermal Power Station  
(Okinawa Prefecture)



Kouchi Power  
Administration Office  
(Kochi Prefecture)



Ishikawa Coal-Fired  
Thermal Power Station  
(Okinawa Prefecture)

Independent certification of  
*J-POWER Group Sustainability Report 2007*

### TRANSLATION

#### Independent Assurance Report

June 29, 2007

Mr. Yoshihiko Nakagaki  
President  
Electric Power Development Co., Ltd.

#### 1. Purpose and Scope of our Assurance Engagement

We have performed certain assurance procedures, based on the engagement with Electric Power Development Co., Ltd. (the "Company"), to express an independent opinion on the Company's Key Environmental Performance Indicators (the "Key Environmental Data" as provided in the Assurance and Registration Scheme of the Environmental Report<sup>1</sup>) of the Company and the major subsidiaries for the year ended March 31 2007, reported in the Company's "J-POWER Group Sustainability Report 2007" (the "Report"), with respect to whether the Key Environmental Performance Indicators are measured and calculated accurately in accordance with the reporting standards of sustainability reports<sup>2</sup> and whether material information is disclosed completely.

The collection of information and the presentation of the Report is the responsibility of Company's management. Our responsibility is to express an independent opinion on the Report.

<sup>1</sup> The Key Environmental Data as provided in the Assurance and Registration Scheme of the Environmental Report refer to the conditions set by the Japanese Association of Assurance Organizations for Environmental Information ("J-AOEI") in order to allow companies to display the trademark shown above (The trademark is shown in the original Japanese version).

<sup>2</sup> The reporting standards refer to the Ministry of Environment's "Environmental Reporting Guidelines 2003", and the Global Reporting Initiatives' "Sustainability Reporting Guidelines 2002", and the complementary guidelines made by the Company.

#### 2. Outline of Assurance Procedures Performed

We have performed limited assurance procedures in accordance with the "Practical Guidelines for the Assurance of Non-financial Statements (exposure draft)" of the Japanese Institute of Certified Public Accountants in July, 2005 and the "Practical Guidelines for the Assurance of Environmental Information" of the J-AOEI in January, 2006 which is mainly composed of inquiries, reviews and analytical procedures. Therefore, our assurance engagement provides relatively limited assurance compared to a reasonable assurance engagement.

The following is an outline of the procedures performed:

We have reviewed and assessed the Company's procedures for the collection and aggregation of the Environmental Performance Indicators, as well as recalculated and reconciled them with the corroborating evidences on a test basis. In addition, we have performed on-site inspections<sup>3</sup> and reviewed the Environmental Performance Indicators generated at each site.

<sup>3</sup> The on-site inspections were performed at the headquarters, the Ishikawa Coal Thermal Power Station, the Kouchi Power Administration Office, the IPec Co., Ltd. Ishikawa Company, and the JPHYTEC Co., Ltd. Kouchi Office.

#### 3. Conclusion

Based on the assurance procedures performed, we were not aware of any data that is not measured and calculated in accordance with the reporting standards of sustainability reports.

#### 4. Independency

We, as a member of the Ernst & Young ShinNihon Group, comply with the "Certified Public Accountant Law", "Ethics Regulation" of the Japanese Institute of Certified Public Accountants; and the "Ethics Procedure" of Ernst & Young ShinNihon. Therefore, there has been no interest to be noted between the Company and us.

Akihiro Nakagome  
Representative Director  
Shin Nihon Environmental and Quality Management Research Institute Co., Ltd.

Note: This Independent Assurance Report was prepared as a translation of the original Japanese version.

## Acquisition of Eco-Leaf Certification

J-POWER's wholesale electricity business is certified and registered under the Eco-Leaf environmental labeling program managed by the Japan Environmental Management Association for Industry (JEMAI). This information is available on the association's website. There are three types of environmental labels: "q," "w," and "e." Eco-Leaf is an "e" type label, which means that product's environmental load has been quantitatively calculated for every

stage of its lifecycle—manufacture, use, and disposal—using the lifecycle assessment approach and this fact has been independently verified.

Information on the Eco-Leaf label can be found on the Japan Environmental Management Association for Industry's website at

[WEB http://www.jemai.or.jp/ecoleaf/index.cfm](http://www.jemai.or.jp/ecoleaf/index.cfm)  
(in Japanese)



## Roundtable Discussion with Distinguished Experts

On October 18, 2006 we held a discussion session on our social responsibilities with experts in various fields. The central topic of discussion was what the J-POWER Group can do to fulfill its social responsibilities.



**Masahiko Kawamura**  
Senior Researcher  
Insurance Research Group  
NLI Research Institute

- As the J-POWER Group's overseas business operations have progressed, to what extent will it be possible to spread initiatives related to societal sustainability being engaged in at the head office level? I would like to see impact on the ecosystem adequately monitored and relevant countermeasures taken.



**Yuko Sakita**  
Journalist and environmental counselor

- With crude oil and gasoline prices rising sharply and the public becoming increasingly interested in energy issues, the J-POWER Group has clearly expressed its view on the importance of coal. However, some people may be surprised that coal is still being used. I would like to see more information provided to such people on measures to address CO<sub>2</sub> emissions when using coal.



**Mizue Tsukushi**  
President and Chief Executive Officer  
The Good Bankers Co., Ltd.

- On the social side, I applaud the news that one of the male employees has taken childcare leave. The overall rate of employees taking childcare leave in Japan is extremely low, and the fact that the J-POWER Group's employees are actually taking it reflects the efforts the Group has made in this area.
- I would like to see the J-POWER Group become the green power of Japan. I think this is steadily happening. The belief that energy is not "green" because coal is being used or the portion of renewable energy is small does not reflect simplistic thinking, but rather the level of awareness.

- In terms of the social dimension of sustainability, unless domestic and worldwide social issues are first recognized and then focus is placed on how to address those issues through the company's core operations, a company will become confused about what to do. It is important to think about the characteristics of the industry in which the company operates and then make decisions on what kind of initiatives to implement.

- As a communication tool, this report is of course aimed outside of the J-POWER Group, but I wonder if it is fully understood internally as well, which is most important. The J-POWER Group should survey penetration and understanding levels within the group and respond accordingly.

- I would like to see the J-POWER Group strategically take on the challenge of various renewable energies.

- It is important to contribute to the environment in local communities. It may be possible to utilize unused local resources for local energy production. A "zero emissions" type initiative needs to take place at the local level with the involvement of citizens, corporations, and local governments.

- The J-POWER Group's communication with its power stations and their surrounding communities around the country has been expanded. It would be good to see environmental reports used in corporate communications, environmental education, and energy education.

- Green energy should be made an option for consumers (this is happening in Europe). This would be difficult for existing power companies, but I believe the J-POWER Group can make it happen, so I would like to see the group on the frontline of this effort. I would want to invest in that kind of company.

- The J-POWER Group's competitors are not limited to domestic power companies. It is necessary for the J-POWER Group to consider how to appeal to worldwide SRI investors as a green power company that represents Japan.

- The J-POWER Group is recommended to sell technologies for developing power sources and techniques (skills) for managing power stations. In other words, it can sell its power development services and expertise as a power station operator on world markets. Japanese companies tend to resist turning their business into a service business, but companies that take this step as a strategy at the earliest stage receive investment.



#### Participants:

**Masahiko Kawamura**, Senior Researcher, Insurance Research Group, NLI Research Institute

**Yuko Sakita**, Journalist and environmental counselor

**Mizue Tsukushi**, President and Chief Executive Officer, The Good Bankers Co., Ltd.

**Gento Mogi**, Associate Professor, Department of Technology, Management for Innovation, School of Engineering, The University of Tokyo

**Izumi Washitani**, Professor, Department of Ecosystem Studies, Graduate School of Agricultural and Life Sciences, The University of Tokyo

**Masayoshi Kitamura**, Executive Vice-President, J-POWER



#### Gento Mogi

Associate Professor  
Department of Technology, Management for Innovation  
School of Engineering, The University of Tokyo

- It is difficult to predict the exact date, but it is clear that a problem will occur in the near future in connection with the oil supply. This problem is referred to as “peak oil.” The production of oil, which currently plays a leading role in energy and accounts for about 40% of overall energy consumption, is expected to begin decreasing by 2–4% per year at some point in the future. The amount of energy that will be lost every year due to this decrease will be enormous, equivalent to one million of the largest class of wind generators. Because of this, realistically, almost all the lost energy will have to be replaced with natural gas and coal. But natural gas will likely suffer the same fate as oil some 10 to 20 years later, so the time will again come when coal plays the leading role in energy.



#### Izumi Washitani

Professor, Department of Ecosystem Studies  
Graduate School of Agricultural and Life Sciences,  
The University of Tokyo

- Though there are major differences depending on how energy is made, creating energy does not always entail environmental load. Up until now economic efficiency and how much profit could be made were the metrics for assessing energy production methods, but I think it is important that we assess energy production with other metrics as well, like the environment and human happiness.
- Woodlands are not being adequately managed, so in some regions there is a troubling excess of biomass resources. Garbage that is thrown out is also a biomass resource. It is not enough to simply produce energy: energy production must be tied to solving environmental problems and reducing environ-

However, despite relatively large coal deposits, coal is also an exhaustible resource, so coal will only provide a temporary delay while preparing to harness solar energy flows to cover all energy needs, which is of ultimate significance to humankind. During this period it will be necessary to continue to raise the efficiency of energy consumption and accumulate stock in order to acquire necessary new energy flows. How much investment is made in this will determine the future of humankind.

- The J-POWER Group’s main business is coal-fired power generation and it supplies coal to the public in its most efficient, easy-to-use form: electricity. Considering the aforementioned future energy situation, there is no doubt that this business will increase in importance into the future. The problem with coal however is its high environmental load. For this reason the most important priority for the time being should be to further improve usage efficiency and develop innovative clean coal technologies.

mental load. There are some systems that have enough merit to be worth doing, for local communities as well.

- In the 20th century, larger and larger scale was pursued in order to raise economic efficiency. But when considering objectives other than economic efficiency, a micro approach, which has not been considered, is also possible. For example, due to the level of efficiency and competition involved, thermal power would not be an option, but if micro thermal power were to contribute to preserving local environments, it would be important from the viewpoint of social contribution. We have no choice but to emphasize the metric of economic competitiveness, but ways to take into account other metrics should be organized conceptually. I hope the J-POWER Group will consider ideal forms for the next generation of energy production by examining international energy trends, taking into account the characteristics of Japan’s natural environment, and giving much thought to the relationship between people and nature.

## J-POWER Response

The J-POWER Group is committed to working toward achieving sustainable development together with society, and we very much appreciate your critical but kind opinions on how we should fulfill our social responsibilities. We have taken your comments to heart. As we steadily advance initiatives in this area, we will

consider what we should do for society, what we are capable of doing, and which of the ideas you have presented we can act on. Our thoughts and initiatives have been published in this report, so we hope to hear your opinions, advice, and recommendations in the future as well.

**Masayoshi Kitamura**  
Executive Vice-President  
Chairperson, Environmental  
Management Promotion Board

