

# Overseas Power Generation Business



**Kaeng Khoi #2 (Thailand)**

To develop the overseas power generation business into a second core operation behind the wholesale electric power business in Japan, J-POWER is carefully screening and promoting projects in the priority markets of Southeast Asia centered on Thailand, the United States, and China. Total investment in the overseas power generation business was roughly ¥90 billion as of June 30, 2009. As of the same date, J-POWER had 23 projects in operation in six countries and regions worldwide, lifting its overseas owned capacity to approximately 3,100 MW.

Now that we have gained experience through

business projects, we are gradually broadening investment targets as well as the scale of our investment. In fiscal 2007, J-POWER held the winning bids in two large-scale, gas-fired thermal power projects (total of 3,200 MW)<sup>\*1</sup> in Thailand. Going forward, we plan to secure a majority interest and take the lead in these two projects.

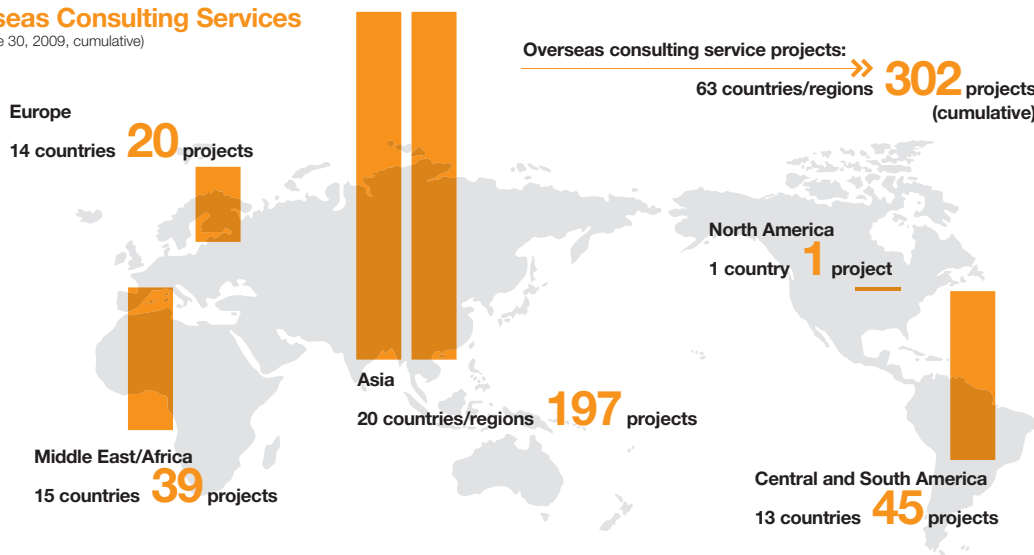
Returns have also risen steadily thanks to proper investment management (refer to column below). As a result, J-POWER posted overseas equity income of approximately ¥7.8 billion for the fiscal year ended March 31, 2009.

J-POWER is planning investment outlays<sup>\*2</sup> of around ¥250 billion while pursuing five-year management targets. This investment should expand the Company's overseas owned capacity (projects in operation) by roughly 1.5 times the current level to around 4,500 MW in the fiscal year ending March 31, 2013. Meanwhile equity income is expected to reach ¥10 billion in the fiscal year ending March 31, 2011, and J-POWER expects to maintain and expand this level of earnings through stable operations at existing projects and the accumulation of new projects.

<sup>\*1</sup> Samet Tai site: 1,600 MW output; operations scheduled to commence in 2013. Nong Saeng site: 1,600 MW output; operations scheduled to commence in 2014.  
<sup>\*2</sup> J-POWER's exposure is limited to an amount equal to the amount of capital invested in the project, multiplied by the investment ratio (amount of planned direct contribution estimated at roughly ¥90 billion).

## Overseas Consulting Services

(As of June 30, 2009, cumulative)



### [Project Organization, Evaluation and Management]

J-POWER carefully studies various factors when weighing participation in new projects. These include the countries' power industries and overall climate, the types of fuel, the reliability of electric power sales contracts and creditworthiness of its off-taker, as well as the condition of its transmission infrastructure. Project financing is used for such projects, in principle. In the process of organizing projects premised on risk sharing, J-POWER always strives to ensure rational business arrangements from both a technological and financing standpoint and is reviewed by financial institutions that will act as lenders for the project.

Evaluation of individual projects is based on internal investment assessment guidelines with final decisions made following a multifaceted review by all relevant internal divisions. Specifically, areas such as the project duration and commercial and country risks are comprehensively evaluated for each project on an individual basis. The required return rate, reflecting capital cost, is then calculated for the specific project, along with a comparison of the projected internal rate of return, to decide whether or not to proceed with the investment.<sup>\*3</sup>

Once joined, projects are subject to periodic monitoring. J-POWER also screens the status of each individual project, particularly aspects such as changes in capacity utilization and profitability.

<sup>\*3</sup> See "Decision-making Process and Management in Overseas Businesses" on page 32 for more information regarding the internal screening process.

## Overseas Power Generation Projects

(As of June 30, 2009)

### Projects in Operation

| Country/Region                                  | Project Name                   | Electricity Generation Source  |
|---|--------------------------------|--------------------------------|
| USA   | Tenaska Frontier               | Gas (Combined Cycle)           |
|   | Elwood Energy                  | Gas (Simple Cycle)             |
|   | Green Country                  | Gas (Combined Cycle)           |
|   | Birchwood                      | Coal                           |
|   | Pinelawn                       | Gas (Combined cycle)           |
|   | Equus                          | Gas (Simple cycle)             |
|   | Fluvanna                       | Gas (Combined cycle)           |
|   | Edgewood                       | Gas (Simple cycle)             |
|   | Shoreham                       | Petroleum (Simple cycle)       |
|   | Philippines                    | CBK                            |
| China   | Tianshi                        | Coal Waste                     |
|   | Hanjiang (Xihe)                | Hydroelectric                  |
| Thailand  | Roi-Et                         | Biomass (Chaff)                |
|   | Rayong                         | Gas (Combined Cycle)           |
|   | Thaioil Power                  | Gas (Combined Cycle)           |
|   | Independent Power              | Gas (Combined Cycle)           |
|   | Gulf Cogeneration (Kaeng Khoi) | Gas (Combined Cycle)           |
|   | Samutprakarn                   | Gas (Combined Cycle)           |
|   | Nong Khae                      | Gas (Combined Cycle)           |
|   | Yala                           | Biomass<br>(Rubber Wood Waste) |
| Kaeng Khoi #2                                   | Gas (Combined Cycle)           |                                |
| Taiwan  | Chiahui                        | Gas (Combined Cycle)           |
| Poland  | Zajaczkowo                     | Wind Power                     |
| <b>Total 23 projects in 6 countries/regions</b> |                                |                                |

### Projects Under Construction

| Country/Region                                 | Project Name     | Electricity Generation Source |
|--|------------------|-------------------------------|
| Thailand                                       | Samet Tai        | Gas (Combined cycle)          |
|  | Nong Saeng       | Gas (Combined cycle)          |
| China  | Hanjiang (Shuhe) | Hydroelectric                 |
|  | Xinchang         | Coal                          |
| Vietnam  | Nhon Trach 2     | Gas (Combined cycle)          |
| <b>Total 5 projects in 3 countries/regions</b> |                  |                               |

## Overseas Power Generation Network Development

■ In operation  
 ☒ Under construction

