



















# We are committed to developing energy in an environmentally and socially responsible manner and bringing a better quality of life to communities

In an increasingly competitive environment, INPEX Holdings Inc. is setting itself on a path to build a solid business foundation characterized by strong international competitiveness from which we can achieve sustainable growth in our corporate value, and ensure a stable and



#### **Company Overview**

Company name: INPEX Holdings Inc.

Established: April 3, 2006

Capital: 30 billion yen

Company headquarters: 4-1-18 Ebisu, Shibuya-ku, Tokyo, 150-0013, Japan

Telephone: +81-3-5448-0200

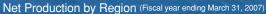
Fiscal year end: March 31

Main business: Management of subsidiaries and group companies engaged in exploration, development and production of oil and natural gas.

#### **Financial Information**









#### Proved Reserves by Region<sup>3)</sup> (as of March 31, 2007)



- 1) Barrels of oil equivalent per day
- 2) Million barrels of oil equivalent
- 3) Proved reserves are evaluated in accordance with SEC regulations and do not include those currently undergoing the related governmental approval processes, nor those that are not eligible for DeGolyer and MacNaughton's deposit evaluation report, but does include proved reserves owned by equity method affiliates.
- 4) Former Soviet republics such as Azerbaijan and Kazakhstan

#### FORWARD-LOOKING STATEMENTS

This report includes forward-looking information that reflects the plans and expectations of INPEX Holdings Inc. and its affiliates (hereinafter called the INPEX Holdings Group). Such forward-looking information is based on the current assumptions and beliefs of the INPEX Holdings Group in light of information currently available to it, and involves known and unknown risks, uncertainties, and other factors. Such risks, uncertainties and other factors may cause the INPEX Holdings Group's actual results, performance, achievements or financial position to be materially different from any future results, performance, achievements or financial position expressed or implied by such forward-looking information. Please be advised that the INPEX Holdings Group shall assume no responsibility for such risks.

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#### **Editorial Policy**

This report updates you on corporate social responsibility (CSR) activities being undertaken by the INPEX Holdings Group. Prior to the management integration, INPEX CORPORATION and Teikoku Oil Co., Ltd. published their own "CSR Report" and "Social and Environmental Report," respectively. This report—the first of its kind that the Group has published—is intended to cover the CSR activities of the entire Group, and replace the separate reports of the past. In preparing this report, we have followed the "Environmental Reporting Guidelines" provided by Ministry of the Environment of Japan. We will continuously seek opportunities to improve our CSR reports.

#### **Company Names**

In this report, INPEX Holdings Inc. and the INPEX Holdings Group are referred to as the Company and the Group, respectively, and INPEX CORPORATION and Teikoku Oil Co., Ltd. as INPEX CORPORATION and Teikoku Oil, respectively. INPEX CORPORATION and Teikoku Oil are wholly owned subsidiaries of INPEX Holdings Inc..

#### Scope of Reporting and Data Compilation

- ●INPEX Holdings Inc. and its 60 consolidated subsidiaries
- Environmental performance data published in this report are a compilation of data from Teikoku Oil Co., Ltd., Teiseki Pipeline Co., Ltd., Teiseki Topping Plant Co., Ltd. and Offshore Iwaki Petroleum Co., Ltd. Concerning environmental performance data, except for PRTR (Pollutant Release and Transfer Register) chemicals, 50% of actual results of Offshore Iwaki Petroleum Co., Ltd are added to the total, corresponding to the Company's ownership of a working interest.
- ●Teikoku Oil Co., Ltd. and Offshore Iwaki Petroleum Co., Ltd. have signed on to the program to reduce greenhouse gas emissions called for by the Keidanren Voluntary Action Plan on the Environment. (Greenhouse gases emitted during a decarbonation process at the Minami Nagaoka Gas Field not included.)
- Teikoku Oil Co., Ltd., Teiseki Pipeline Co., Ltd. and Offshore Iwaki Petroleum Co., Ltd. are participating in the program to reduce emissions of volatile organic compounds called for by the Japan Natural Gas Association.
- Data on freight volume came from Teikoku Oil Co., Ltd.

#### Reporting Period

- ●April 1, 2006 to March 31, 2007
- Environmental performance data, except those for PRTR chemicals and PCB control, production volume, sales volume and volume of natural gas stored underground represent actual results of the calendar year 2006—from January 1, 2006 to December 31, 2006—in this report.

#### **Next Issue**

Scheduled to be published in October 2008

## A Message from the President

# As a global E&P company, we strive to achieve sustainable growth by undertaking CSR initiatives



Naoki Kuroda President INPEX Holdings Inc.

Our mission is to provide a stable and efficient supply of energy to customers by building a solid business foundation characterized by strong international competitiveness

Recent years have seen increasingly intense competition for energy resources on a global scale, accelerated by skyrocketing demand for oil and natural gas—especially in emerging economies such as China and India with their growing energy consumption. Combined with the fact that oil and gas producing countries are exercising tighter state control over their resources, the oil and gas development business overseas is becoming ever more challenging. Under these circumstances, the management structure of INPEX CORPORATION and Teikoku Oil Co., Ltd. (Teikoku Oil) was integrated to come under the control of a joint holding company called INPEX Holdings Inc. in April 2006. INPEX Holdings Inc. is scheduled to complete the merger by acquiring INPEX CORPORATION and Teikoku Oil to become an operating holding company in October 2008.

INPEX CORPORATION was established in 1966 to develop hydrocarbon resources in Indonesia. The company explores and develops oil and natural gas fields around the globe, primarily in Indonesia and Australia, and is currently expanding its operations into the Caspian Sea, the Middle East and South America. INPEX CORPORATION is the largest supplier of crude oil to Japan, accounting for more than half of the total crude oil produced by Japanese companies.

Teikoku Oil established in 1941, is a Japanese pioneer of E&P. The company has developed and produced oil and natural gas in domestic fields such as the Minami Nagaoka gas field, which has the largest natural gas reserves in Japan, and has been engaged in E&P in Latin America and North Africa.

It is no coincidence that both companies have operated under basic principles of management that consider conducting the core business of providing a secure and stable energy supply to customers to be a social responsibility. Now that the two companies that share a common approach to corporate social responsibility (CSR) have merged, there is a renewed commitment to pursuing CSR initiatives.

# As a responsible E&P company, we address the issue of climate change and strive to protect and preserve the global environment

As we operate globally, one of our most important and highest-priority social responsibilities is to preserve the environment of the regions in which we do business, as well as of the Earth in general.

Global climate change is an extremely complex and unpredictable issue. The Intergovernmental Panel on Climate Change recently reported that the continuous warming of the climate system poses an increasing environmental threat to society and our ecosystem. It is, therefore, a moral obligation for an energy developer such as ourselves to resolutely address and combat global warming.

With that in mind, when we conduct exploration and development activities, we spare no effort in taking every precautionary environmental measure possible. In addition, we have begun to focus our attention on the development and use of natural gas, promising clean energy. Furthermore, we have been improving our production efficiency so as to reduce emissions of greenhouse gases, a byproduct of our business. Concurrently, our research and development team has been focusing on GTL (gas-to-liquids) and DME (dimethyl ether) technologies, both of which are intended to provide next-generation, clean-burning alternative fuels with low environment loads. Our ongoing mission is to formulate and implement business strategies that are compatible with the preservation of the environment, and which contribute to the sustainable development of natural energy resources.

# We make every effort to raise employees' awareness of CSR in order to build a solid foundation from which to implement CSR initiatives

Our mission of providing a stable and efficient supply of energy to customers must be accomplished while conducting our business in a socially responsible and ethical manner. With the aim of building a solid foundation from which to implement our CSR initiatives, we formulated in April 2006 "INPEX Holdings Group's Mission" and "INPEX Holdings Group's Corporate Social Responsibility Policy," both of which stipulate that every employee of the INPEX Holdings Group shall comply with relevant laws and regulations, and observe business ethics in pursuit of transparent business operations. In addition, we established the "INPEX Holdings Group Policy on Health, Safety and Environment" and promulgated it to all employees to send a strong message that it is imperative to protect the safety and health of all the people associated with our business, and to minimize adverse impacts on the environment. We strive to grow as a corporate group that earns the trust of society as all officers and employees of the INPEX Holdings Group observe and implement these policy guidelines.

This CSR Report is the first of its kind that the Company has published. We hope that this will give you a good understanding of our CSR initiatives we have been implementing. If you have any comments or suggestions, please let us know. We appreciate your support.

Thank you.

#### Mission

The mission of INPEX Holdings Group is to provide a stable and efficient supply of energy to our customers by exploring and developing oil and natural gas resources throughout the world. Through this business, we aim to become an integrated energy company that contributes to the community and makes it more livable and prosperous.



#### Corporate Social Responsibility Policy

INPEX Holdings Group conducts our business efficiently and proactively with a long-term perspective. Guided by the leadership of top management, we are committed to fulfilling our corporate social responsibilities. Our key principles include:

- 1. Deliver energy in a safe, efficient and reliable manner.
- Comply with laws, rules and regulations and adhere to ethical business conduct.
- Communicate timely and openly with shareholders, employees, customers, business partners and other stakeholders.
- 4. Value the individuality of our employees, secure a safe, healthy and worker-friendly environment, and provide opportunities for career development.
- Recognize our responsibility to help preserve the environment and contribute to sustainable development.
- Contribute to the development of our host countries and communities, based on an understanding of cultural diversity.

# We spare no effort to enhance corporate governance so as to achieve greater management efficiency and soundness in the Group

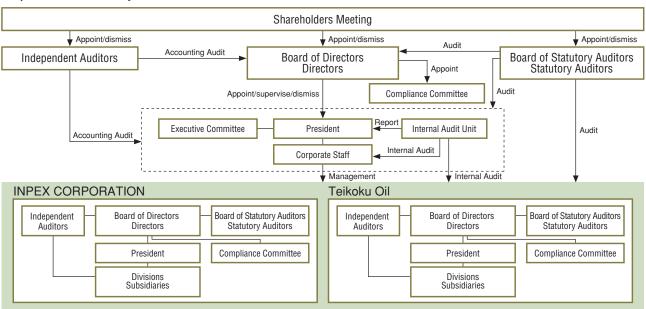
#### **Overview of Our Corporate Governance**

INPEX Holdings Inc. is responsible for carrying out corporate governance practices in an integrated manner for the entire Group. The Company has governance over its two operating subsidiaries—INPEX CORPORATION and Teikoku Oil—by exercising shareholders' rights over them and managing them in accordance with the "Group Regulations" and "Subsidiary Standards for Management and Administration."

In addition, the Company employs a statutory auditor system and has established the "Internal Audit Unit," which is

independent from business divisions and reports directly to the President. Statutory auditors are responsible for auditing directors' execution of duties with regard to overall operations and individual projects. The Internal Audit Unit performs internal audits of the Group to maintain consistency in audit policy and procedures across the Group, and consults with independent auditors and statutory auditors in a timely manner to ensure appropriate execution of management.

#### **Corporate Governance System**



#### **Special Class Share**

The Company's Articles of Incorporation stipulate that certain major corporate decisions—the appointment and removal of directors, disposition of material assets, amendments to the Articles of Incorporation, mergers, exchange or transfer of shares, capital reductions and dissolution—require a resolution by the holder of the special class share in addition to the approval of a shareholders' meeting or the Board of Directors, depending on the requirements specified for each type of decision. The Minister of Economy, Trade and Industry is the holder of the special class share.

The Minister established in its Bulletin No. 74, dated April 3, 2006, guidelines for the exercise of the special class share's veto rights, under which the Minister may veto any of the above-mentioned major corporate decisions only to the extent that the Minister determines that a proposed action or

transaction (1) will likely result in INPEX Holdings Inc. being managed in a manner inconsistent with its role of securing a stable energy supply for Japan as a national flag company; (2) will likely adversely affect its role of efficiently securing a stable supply of energy for Japan as a national flag company; or (3) may affect the exercise of voting rights of the special class share.

With the existence of this class of share, the Company can minimize the risk of losing management control to foreign-owned concerns and of an unsolicited takeover for speculative reasons. Moreover, since the scope of the veto is limited and guidelines have been established for exercising veto rights, the special class share is a minimum necessary measure that is highly transparent and does not unduly interfere with the Company's ability to operate efficiently and flexibly.

## **Compliance**

# We promote a culture in which all employees share the commitment to comply with laws and regulations, and adhere to high standards of ethical conduct and business practices, to continue to earn the confidence of society

#### **Compliance Policy and System**

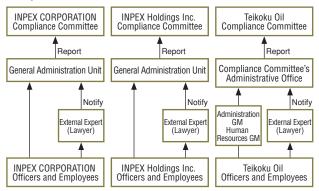
The Company states in its CSR Policy that it shall comply with laws and regulations, and adhere to high standards of ethical conduct and business practices. Based on this policy, we foster an open atmosphere of communication in office and in our business culture in order to establish a compliance system and rules, and prevent problems from happening in the first place.

We have established the "Compliance Committee," which is tasked with leading initiatives by reviewing the Group's basic policy and important issues on compliance, and monitoring and managing the implementation of compliance programs by INPEX CORPORATION and Teikoku Oil, so as to ensure consistency and uniformity in compliance across the Group.

The two operating subsidiaries have established compliance committees of their own, each responsible for working with their statutory auditors, the Board of Statutory Auditors, independent auditors as well as with the Compliance Committee and the Internal Audit Unit of the Company in order to: (1) develop and implement compliance programs; (2) monitor their implementation; (3) raise employee awareness of compliance policy and procedures; (4) receive reports on and investigate noncompliance; (5) put a stop to noncompliant conduct by means of warning notices or other means; and (6) establish measures to prevent recurrence of noncompliant conducts.

Each of the committees has compiled a "Compliance Manual" on important matters that need to be addressed, and has made the manual available to all officers and employees so as to ensure compliance policy and procedures are understood and exercised. The Company plans to publish a new compliance manual that will incorporate good track records and experiences of both companies in October 2008, when the merger is scheduled to be completed.

#### **Compliance Framework**



- The Compliance Committee at INPEX Holdings Inc. works with its counterparts at its two operating subsidiaries to coordinate group-wide compliance issues.
- One of representative directors acts concurrently as a chair of the Compliance Committee at each company.

#### Help-line

The Company has established the "Help-line Procedures" to implement a fraud-reporting protocol that includes mandatory reporting of fraud or unethical conduct, fact-finding procedures, protection of whistle-blowers and confidentiality of the reports. A designated unit or office, or an external expert designated by the Compliance Committee, receives fraud reports. In the latter's case, incoming reports are shared with the designated unit or

office in a timely manner.

Officers and employees can report unethical behavior anonymously, under protection that is strictly and carefully enforced to prevent any punitive action from being taken against them. Our Help-line system is compliant with provisions of the Whistle-blowers Protection Act that became effective in April 2006.

The two operating subsidiaries have Help-line Systems in place.

#### **Establishing Information Security Management System**

Maintaining information security requires addressing both mechanical and human factors. The mechanical factor involves installing physical and technical security measures, while the human factor involves having organizations and people take security measures under established rules.

The Group is in the process of developing the information security policy and related rules and regulations, designed to maintain an effective balance between mechanical and human factors in information security. The "Information Security Working Committee," established in June 2007, is tasked with security policy development.

We plan to have Information Security Management System in place by the time the merger is completed in October 2008, after which we will carry out the Plan-Do-Check-Act (PDCA) management cycle to ensure continuous improvement of information security level.

## **Business Activities and Broader Consideration for Stakeholders**

We are engaged in energy supply business on a global basis ranging from award of license blocks to the sales of products, in which we give due consideration for diversified stakeholders in and around our business



#### **Acquisition of License Blocks**

#### Primary Activities .....

- Collect extensive information on areas in which oil and natural gas are expected to exist.
- Conduct preliminary technical evaluations of the areas using documented materials publicly and commercially available, followed by an assessment of the legislative and political stability and economic situation of the areas and siting conditions.
- Apply and bid for concession rights and/or working interest.
- Conclude contracts for the license blocks.

#### Consideration for Stakeholders .....

- Develop stronger relationship with host governments of oil and gas producing countries.
- •Make our business absolutely free of bribery and corruption.
- Comply with the principle of respect for human rights.
- Launch a project for the protection of nature, with due consideration for ecosystem effect.



#### **Exploration and Appraisal**

#### Primary Activities .....

- Collect basic information on potential subsurface accumulations of oil and natural gas using terrestrial geological surveys, aerial photographs, satellite images and other available data in and around the licensed blocks.
- Conduct geophysical surveys, which include gravity, magnetic and seismic surveys, to extract prospects of oil and natural gas accumulations.
- Determine locations of exploration wells in the prospects and drill wells to confirm the presence of the oil and gas fields.
- Drill appraisal wells to evaluate the extent of the discovered oil and gas fields
- Analyze subsurface information derived from well and geophysical surveys to confirm lateral continuity of oil and gas reservoirs and to estimate reserves—volume of oil and gas.
- Determine the commercial viability of developing the fields in a comprehensive manner.

#### Consideration for Stakeholders .....

- Implement occupational health and safety management systems in project sites.
- Minimize ecological impacts and preserve cultural heritage in and around project sites.
- Exercise risk assessment and safety controls to prevent incidents in project sites and, in cases where incidents do occur, respond to them quickly.
- Comply with the laws and regulations of host countries and communities.
- Respect the cultures and customs of host countries and communities.
- Stimulate local business e.g. procuring materials and equipment from local suppliers and building community facilities.



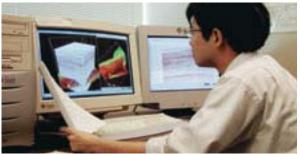
Negotiating contracts



Signing a contract



Well drilling operation



Data analysis



#### **Development and Production**

## Primary Activities .....

- Devise development plans for oil and gas fields.
- Drill production wells to recover oil and natural gas.
- Construct processing facilities for separating oil and gas, and removing impurities. Construct facilities to ship oil and gas.
- Produce oil and gas.

#### Consideration for Stakeholders ......

- Preserve the environment of the project areas e.g. making good use of associated gas and minimizing ecological impacts in surrounding areas.
- Preserve cultural heritage in the project areas.
- Implement an occupational health and safety management system at the project site.
- Exercise risk assessment and safety controls to prevent incidents in the project area and, in cases where incidents do occur, respond to them quickly.
- Implement emergency response plans.
- •Make a contribution to an economic development of oil and gas producing countries and regions e.g. hiring local employees and procuring materials and equipment from local suppliers.
- Comply with the laws and regulations of host countries and communities
- Respect the cultures and customs of host countries and communities.
- Conduct fair purchasing practices with suppliers.



Production facility at ADMA Block, the United Arab Emirates



Gas processing facility at Koshijihara Plant in Niigata Prefecture, Japan

## \_\_\_\_\_

#### **Refining, Shipment and Sales**

#### Primary Activities .....

#### Crude Oil

- •Crude oil produced in Japan is transported in tank trucks to the Group's refineries, where it is converted into gasoline, naphtha, kerosene, gas oil, fuel oil and liquefied petroleum gas (LPG), which is sold and shipped to customers via oil tankers and tank trucks.
- Crude Oil produced outside Japan is sold and shipped on oil tankers or via pipeline to refineries or trade companies for refining, to power companies for use in thermal power plants, and to petrochemical companies for manufacturing of chemical products.
- Swap crude oil to meet customer needs.

#### **Natural Gas**

- Domestic natural gas is sold to gas companies and large factories via pipelines.
- •Natural gas produced overseas is sold either to power and gas companies primarily in Japan as liquefied natural gas (LNG, composed mostly of methane) and liquefied petroleum gas, (LPG, composed mostly of propane and butane), or to the gas-producing countries and their neighbors via pipelines.

#### Consideration for Stakeholders .....

- Exercise risk assessment and safety controls to prevent incidents during oil refining operations and, in cases where incidents do occur, respond to them quickly.
- Minimize environmental impacts during oil refining operations e.g. reducing carbon dioxide emissions and chemical release, and preventing soil contamination as well as air and water pollution.
- Take measures against pollution during oil refining operations, such as reduction of nitrogen oxide and sulfur oxide emissions.
- Ensure safety during transportation, such as the prevention of—and response to—accidents at sea and to pipelines.
- Reduce use of energy during shipments.
- Minimize ecological impacts in and around the area where pipelines are being constructed.
- Carry out routine maintenance of pipelines. Improve the stability and reliability of pipeline networks by reinforcing and expanding them based on simulated predictions of supply and demand.
- Implement emergency response plans.
- •Reduce environmental impacts during shipments.



The Bontang LNG Plant, Indonesia

As a leading E&P company in Japan, we are committed to providing a stable supply of energy and helping bring a better quality of life to communities

Japan is a resource-poor country that relies almost exclusively on imports for its energy resources. Recently we have been seeing diversification in energy consumption, but oil and natural gas still account for more than 60% of the country's primary source of energy<sup>1)</sup>. As global competition for acquiring energy resources intensified, the Japanese government unveiled a national energy policy that stated oil resources produced by Japanese companies should increase to around 40% of total oil imports on the basis of an entitlement volume by 2030<sup>2)</sup>. The announcement led to a call for the establishment of a stronger E&P company in Japan's upstream oil and gas industry with strong international competitiveness and a solid business foundation, which was tasked with playing a vital role in helping achieve this aggressive goal.

Under these circumstances, INPEX Holdings Inc. was established in April 2006 as a holding company under which

Feature Story

# Social Responsibility That INPEX Holdings Inc. Is Committed to Fulfilling



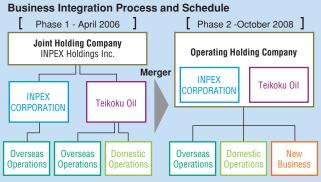
Taking advantage of three tangible benefits derived from management integration, we establish a solid business foundation with stronger international competitiveness to enhance our corporate value

We have gained three tangible benefits from the merger. First, our asset portfolio has become more effectively balanced in terms of regional coverage as well as risk profiles. We are able to reduce business risks by having a diversified combination of projects with different risk profiles such as exploration, development and service operations. In terms of product mix, oil and gas represent approximately 60% and 40% production volume of the Group, respectively, maintaining a good balance between them.

The second benefit is that we have a stronger presence in the global market. The Group has a stable business foundation characterized by the combination of domestic operations—free from country risk and currency exchange risk—and overseas operations with higher profitability and great growth potential. As of March 31, 2007, we had market capitalizations of 2.4 trillion yen (approximately 20 billion U.S. dollars at 118.09 yen against dollar), approximately 1.8 billion barrels of oil equivalent in

management of INPEX CORPORATION—the largest E&P company in Japan in terms of production and reserve volume, and Teikoku Oil—which has the largest natural gas field in Japan and an extensive pipeline network, was integrated and both companies became wholly owned subsidiaries. In October 2008, the Company will become an operating holding company by enhancing these two operating subsidiaries and will complete the merger with the aim of solidifying the integration benefits and acquiring even stronger international competitiveness.

The Group faithfully attempts to fulfill the responsibility as an E&P company by actively developing oil and natural gas both at home and abroad with supports from governmental institutions, provide a stable and efficient supply of energy to customers. Thus we make a meaningful contribution to bringing a better quality of life to communities in which we operate by helping develop their social infrastructure.



- Japan's dependence on crude oil and natural gas for primary source of energy was 49.0% and 13.8%, respectively in fiscal year 2005. (Source: "Report on Energy Supply and Demand Fiscal Year 2005" published by the Agency for Natural Resources and Energy)
- Source: "New National Energy Strategy" published by the Agency for Natural Resources and Energy under the Ministry of Economy, Trade and Industry in May 2006



proved reserves<sup>1)</sup> and production volume<sup>2)</sup> of approximately 420 thousand barrels of oil equivalent per day, comparable to other global E&P independents.

The third benefit is that we have enhanced capability as an operator. While it takes an enormous amount of management resources to be an effective operator<sup>3)</sup> in an international energy development project, if successful, being an operator will earn the trust of oil and gas producing countries and other E&P companies, and have a greater chance of acquiring participating interests in other projects. With combined technical expertise and management resources, the Group will aggressively move forward with our operator projects.

- 1) Proved reserves are evaluated in accordance with SEC regulations.
- 2) The production volume of crude oil and natural gas under the production sharing contracts entered by the Group corresponds to the net economic take of the Group.
- An operator is a company that takes primary responsibility for operations for exploration, development and production in a block.



# Social Responsibility That INPEX Holdings Inc. Is Committed to Fulfilling

Efforts to Ensure a Stable, Long-term Supply of Energy - 1

# Taking full advantage of the synergies created by the integration of two leading Japanese E&P companies, we are committed to developing new energy resources around the globe

The core of the INPEX Holdings Group's business strategy lies in securing adequate oil and gas reserves that we can develop, produce and deliver so as to attain a stable revenue stream, and thus achieve sustainable growth in our corporate value.

As we produce oil and gas, the reserves we own decline in volume. It is, therefore, critical to constantly continue our exploration efforts to discover new resources and/or acquire additional reserves by means of asset purchase. The integration

of INPEX CORPORATION and Teikoku Oil—whose business domains are complementary to each other—has given the Group a greater opportunity to aggressively go after new business around the globe. Having both upstream acreages overseas and low-risk operations at home is another benefit of the integration. Taking full advantage of these synergies, we aim to ensure a stable, long-term supply of energy and maintain a solid business foundation over the coming years.

#### An Overview of Ongoing Projects Worldwide

#### **Indonesia Offshore Mahakam Block**

The Group acquired a working interest in the Offshore Mahakam Block in Indonesia in 1966 and has discovered many oil and gas fields there since 1970. We have been producing



crude oil and natural gas in this block since 1972. The Group is the largest supplier of natural gas to the Bontang LNG Plant, which is one of the largest facilities of its kind in the world, with an annual LNG production of 20 million tons—70% of which is shipped to power and gas companies in Japan. This block plays a central role in the Group's business.

#### **Japan** Minami Nagaoka Gas Field

Discovered by the Group in 1979, the Minami Nagaoka Gas Field, located in Nagaoka City, Niigata Prefecture, boasts the largest natural gas reserve and production capacity in Japan. Although more than 20 years have passed since production began in 1984, the reserve is still large enough



to allow us to maintain the current production level for years to come. A pipeline network runs a total of 1,300 kilometers from the gas field to the Tokyo metropolitan area through the Kanto-Koshinetsu Region, supplying natural gas to customers throughout the region. In 2010 and beyond, we plan to purchase regasified LNG from Shizuoka Gas Company, Ltd. so as to secure yet another source of natural gas off Japan's Pacific Coast. This business strategy is intended to bring greater stability to our supply of gas in the future.

#### The United Arab Emirates (UAE) ADMA Block

Partnered with the Abu Dhabi National Oil Company (ADNOC), the Group has been operating in the United Arab Emirates, which is an important oil supplier to Japan, since 1973. The ADMA Block



currently produces crude oil in five fields, which accounts for more than half of the total crude oil production of the Group. Production in the Upper Zakum Field, one of the largest oil fields in the world, began in 1982 and has been operated by a joint venture between ADNOC and Japan Oil Development Co., Ltd., a wholly owned subsidiary of INPEX CORPORATION.

#### Caspian Sea ACG Oil Fields/BTC Pipeline/Kashagan Oil Field

In 2003, the Group acquired a working interest in the ACG Oil Fields already in production, located in the Azerbaijan-controlled area of the Caspian Sea, in the expectation of producing more than one million



barrels per day (bpd) of oil in 2009. In order to secure transportation routes for crude oil produced in the Caspian Sea area to the Mediterranean Sea, we participated in the BTC Pipeline Project, under which a pipeline was constructed to transport crude oil from Baku, Azerbaijan to Ceyhan, Turkey.

The Group first gained a foothold in the other part of the resource-rich offshore Caspian Sea in 1998 and, working with several international oil companies, discovered the gigantic Kashagan Oil Field in the Kazakhstan-controlled area of the Caspian Sea. The first phase of the development of the field is currently underway and, when fully developed, the peak production is expected to reach more than 1.2 million bpd.



#### **Australia** Ichthys Gas and Condensate Field

In 1998, the Group acquired a working interest in WA-285-P in offshore Western Australia. Two years later, we discovered the highly promising large gas and condensate<sup>1)</sup> field, Ichthys. This is the first major project in which



a Japanese company has taken charge of the entire process, ranging from developing a gas field to producing and sales of LNG. We are currently in the midst of conducting feasibility studies, including engineering work and an environmental impact assessment, as well as marketing activities. Production is targeted to start in 2012.

 Hydrocarbons (light crude) that remain liquid at room temperature and atmospheric pressure, produced during the process of extracting and refining natural gas.

#### **Worldwide Exploration and Production Activities**

#### **Venezuela Guarico Oriental Block/Copa Macoya Block**

After Venezuela, which boasts the largest crude oil reserves outside the Middle East, nationalized its hydrocarbon resources in 1975, it started in 1991 opening bidding to foreign companies to rehabilitate oil



fields and facilitate new petroleum exploration.

The Group participated in the bidding and was awarded working interests in two onshore blocks. After starting development and production in these oil fields, we also began producing gas in 2000. When the Operating Service Agreement was amended under Venezuela's new policy in 2006, we established a joint venture with the Venezuelan national oil company (PDVSA) to undertake crude oil and gas business in both blocks.



# Social Responsibility That INPEX Holdings Inc. Is Committed to Fulfilling

Efforts to Ensure a Stable, Long-term Supply of Energy - 2

# To meet growing demand we are increasing production of natural gas, and expanding and upgrading the supply system

Domestic demand for natural gas has been on the rise as more people consider it an environmentally friendly energy source and as crude oil prices are increasing. To meet the growing demand and provide a stable supply of gas, it is absolutely imperative to expand and upgrade pipelines that run from where gas is produced to where it is consumed, as well as to increase production capacity of gas fields and build up underground storage facilities.

Teikoku Oil, in charge of the domestic gas business of the Group, is redoubling its efforts to meet rising demand, and additionally plans to start importing LNG from overseas to beef up supply in 2010. If we include natural gas reserves that INPEX CORPORATION owns overseas as yet additional sources of supply, we will be able to establish a self-contained "Natural Gas Value Chain" within the Group.

#### **Natural Gas Pipeline Network**



#### **Expanding Natural Gas Pipeline Network**

Since Teikoku Oil started the operation of the Tokyo Line—the first long-distance high-pressure pipeline built in Japan—in 1962, the company has made a series of extensions and upgrades to the pipelines to broaden geographical coverage and to meet growing household and industrial demand for gas in and around the regions that the pipelines run through.

In recent years, we have intensified our efforts to expand the pipeline network to satisfy burgeoning demand expected in the future. These efforts materialized a reliable network with broader regional coverage in 2006 that connects domestic gas fields on the coast of Sea of Japan and an LNG import terminal on the Pacific Coast.

As global warming is becoming a pressing issue, we expect

the demand for natural gas to remain steady and strong, and have begun constructing an extension to the Shin Tokyo Line, the Gunma Interconnection Line in the northern Kanto region, and the Shin Oumi Line in Niigata Prefecture.





Construction of pipelines



#### **Maintaining Pipelines**

Keeping the pipelines that run for a total length of more than 1,300 kilometers in good working condition is a critical duty we have to fulfill in order to supply natural gas to customers in a secure and stable manner.

To accomplish this, Teikoku Oil routinely makes a visual inspection of the pipelines to confirm that they are safe, and also conducts physical diagnostics, such as leakage and corrosion detection. Other precautionary safety measures include formally requesting in advance—and making on-site inspection to ensure—that local municipalities and other companies take extra care and caution when they conduct water-service and sewerage repairs on the roads and in the rivers so that they do not damage our underground pipelines. If necessary, we relocate the pipeline out of the way or reinforce its outer protective layer. In addition, prevention of incidents are key components in the extensive training of staffers and workers at our construction sites and we compile case studies on past troubles to learn from them.

Our monitoring center, which is located in Kashiwazaki City, Niigata Prefecture, monitors pressure and flow volume of the pipelines 24 hours a day to maintain constant surveillance on the flow of natural gas, and adjusts supply to demand. The center receives an uninterrupted flow of information from a weather service company and collects seismic array data from 20 locations along the pipelines that can be used to determine whether to order a call-out when natural disasters such as earthquakes and heavy storms strike. The center is capable of shut down the pipelines by remote control in an emergency.





Inspection of a valve station

Patrolling Kubiki mountain area

#### **Increasing Production in Gas Fields**

Production capacity of the Minami Nagaoka Gas Field, which boasts the largest reserve of natural gas in Japan, has been continuously increased to meet the growing demand for natural gas.

At the Koshijihara Plant, which is capable of processing 70% of the gas produced in the field, a new processing train was added in late 2006, which gives additional daily output of 1.65 million normal cubic meters to the plant, bringing the total daily output to 5.03 million normal cubic meters from the earlier 3.38 million normal cubic meters. To take advantage of this increased processing capacity, we plan to enhance well productivity, increase injection and ejection capability of the underground storage at the nearby Sekihara Gas

Field, and increase capacity of transporting gas from wells to a processing plant, of which the enhancement of well productivity has just started. In addition to upgrading equipment and facilities, we

have a backup system for key equipment in readiness for emergencies to achieve greater stability of plant operations, and also have security measures in place such as an upgraded fire control system.



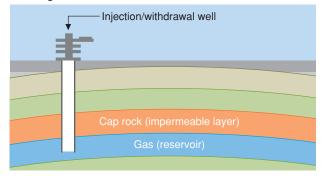
New processing train at a gas plant

#### Reliable and Flexible Supply of Gas with a Built-in Underground Storage System

Natural gas can be injected into a depleted gas or oil reservoirs for storage. This storage method utilizes a natural underground structure, and its advantage over an artificial subsurface facility is that it has higher survivability in earthquakes, and is simple to operate for long-term storage.

Teikoku Oil converted the depleted Sekihara Gas Field in Nagaoka City, Niigata Prefecture, which ceased to operate in 1968, into an underground storage site. Combined with the extensive pipeline network that the company owns, the storage area serves as a reliable and flexile gas supply system capable of responding to seasonal fluctuations in demand. The amount of gas stored underground grew from 135 million normal cubic meters when it started in 1975, to 185 million normal cubic meters at the end of 2006 as a result of a continuous effort to increase storage volume and upgrade the gas injection/withdrawal facility. We make it an

effective backup system when the processing plant at the Minami Nagaoka Gas Field is shut down in an emergency as well as of easing the tightened supply situation of natural gas in recent years. Conceptual diagram of storing natural gas in a depleted oil and gas field shown in section



# Social Responsibility That INPEX Holdings Inc. Is Committed to Fulfilling

Building the Foundation to Support E&P Activities

# No effort has been spared to take full advantage of the synergies created by the integration of the two companies

#### **Unified Research and Development Efforts**

The research and development units of both operating subsidiaries currently own and employ R&D equipment and facilities, engineers and laboratory technicians, accumulated expertise, and the technology exchange network with leading overseas oil companies and research firms. When INPEX Holding Inc. becomes an operating holding company in October 2008, we as a group will be able to manage all of these R&D

assets in a comprehensive and unified manner.

This will allow us to have broader areas where we can apply new technologies and demonstration tests, and a streamlined and more efficient process of commercializing the results of the researches. The synergistic effect is expected to be greater than the sum of the combined physical and human resources.

#### Development of Environmentally Friendly Next-generation Fuel

As the energy industry is under mounting pressure to address environmental issues, the Group is gearing up for the development of next-generation fuel that has an advantage over coal and oil in terms of environmental impact.

One is gas-to-liquid (GTL<sup>1)</sup>) technology. INPEX CORPORATION has joined forces with the Japan Oil, Gas and Metals National Corporation<sup>2)</sup> (JOGMEC) and four other private companies to launch a preliminary research project to develop and test new GTL technologies using a pilot scale plant since 2001. In October 2006, the Nippon GTL Technology Research Association was established by these six companies including INPEX CORPORATION to run a more comprehensive research and test program and to pursue the commercialization of the GTL technology. Research began with cooperation of JOGMEC on a demonstration plant capable of producing 500 barrels per day. The proprietary technology we are working on is groundbreaking in that it allows natural gas to be used as raw material without removing carbon dioxide.

Another one is demethyl ether (DME), an alternative fuel made from natural gas. DME poses little burden on the environment since it has a similar general characteristics to LPG and does not produce soot or sulfur oxides when burned. INPEX CORPORATION and nine other companies teamed up to establish DME Development Co., Ltd. in 2002 and worked on DME direct synthesis technologies at a demonstration plant until 2006.

- 1) Narrowly defined, it is a technology that utilizes the Fischer-Tropsch reaction for liquid fuel synthesis.
- Japan National Oil Corporation and Metal Mining Agency of Japan merged into the Japan Oil, Gas and Metals National Corporation in February 2004.





GTL demonstration plant

DME demonstration plant

#### Geological Storage of Carbon Dioxide, a Promising Technology to Combat Global Warming

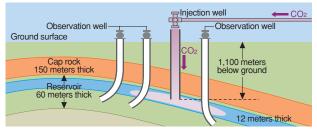
Under ever-increasing pressure to reduce emission of carbon dioxide that may cause global warming, researchers around the world have been working on the geological storage of carbon dioxide—a technology to capture carbon dioxide emitted from a source, and inject it into a deep underground aquifer. In 2006, the Intergovernmental Panel on Climate Change endorsed this technology as an effective carbon capture and storage technology.

Teikoku Oil has been working with the Research Institute of Innovative Technology for the Earth to test the technology at the company's Iwanohara Base located in the Minami Nagaoka Gas Field. The company provides technical expertise gained from experiences in underground storage of natural gas and enhanced oil recovery techniques<sup>1)</sup>. The injection of carbon

dioxide into the aquifer at the test site was completed in January 2005 and its behavior has been closely monitored.

 Enhanced oil recovery technique: a generic term given to the technologies that apply to mature oil fields to increase their recovery of oil

## Conceptual diagram of geological storage of carbon dioxide shown in section





#### Producing Methane Using Microbes Found in Depleted Oil Fields

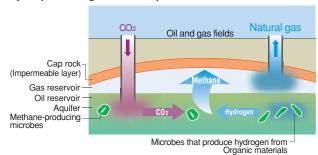
Teikoku Oil has been working with Chugai Technos Corporation since 2006 to study methane-producing technology using microbes inhabiting depleted oil fields.

This is how it works. First hydrogen-producing bacteria are harnessed to produce hydrogen from residual petroleum components in the depleted reservoir. Next, methane-producing bacteria are used to generate methane from the hydrogen and carbon dioxide injected for geological sequestration.

The research team has successfully isolated samples of hydrogen- and methane-producing microbes from depleted oil fields, and has confirmed that methane production does take place. The next step will be to evaluate capability of methane-producing microbes and to identify an effective and efficient process of producing methane.

If successful, it will be a big step toward establishing a carbon recycling system that converts residual oil in depleted oil fields into environmentally friendly methane.

Mechanism for microbial restoration of methane deposit by sequestrating CO<sub>2</sub> into depleted oil fields



#### **Expanding Communications Outreach to Stakeholders**

The Company states in its Corporate Social Responsibility Policy that we shall "communicate timely and openly with shareholders, employees, customers, business partners and other stakeholders." Based on this policy, we proactively disclose corporate

information to our stakeholders. Additionally, we disclose information to—and exchange ideas with—those who live in and near the regions in which we operate so that they have a better understanding of our business.

#### International Conferences and Exhibitions

The Company participates in many international oil and natural gas conferences and exhibitions held in oil and gas producing countries and elsewhere in order to raise awareness among industry insiders and citizens in the region. At these conferences and exhibitions, we showcase our business activities in a visually appealing manner by displaying photographs and illustrations on panels, and by answering questions about our management policy and ongoing projects. Attending exhibitions also gives us excellent opportunities to build a network of contacts and relationship, collect information on the local and

regional oil and natural gas industry, and make our presence better known in host countries.

We attended 12 international conferences and exhibitions

during fiscal 2006. At the 11th Iran Oil Show, which ran from April 20 to 23, 2006 and had more than 1,000 exhibitors on the floor, our booth was awarded the "prize for the superior stand within the design and construction."



The 11th Iran Oil Show

#### Investor Relations (IR) Activities for Shareholders and Investors

It is essential for the Company to have a good working relationship with the shareholders and investors so that we will have long-term stability in management. To achieve this objective, we have formulated rules for corporate information disclosure and have engaged in a series of IR activities. We are fully committed to disclosing what is required by laws and regulations, as well as other information that we consider useful to investors, in a timely, sustained and fair manner. During fiscal 2006—the first fiscal year of the Company—we were very proactive in maintaining dialogues with equity research analysts, institutional investors and individual

investors so as to promote a better understanding of the Company.

In addition to semiannual briefing sessions on financial results given by senior management, the Company held 339 IR meetings in fiscal 2006 with analysts and institutional investors. We also

provided financial information to private investors at briefings and IR exhibitions in which we participated. Comments made by investors are routinely forwarded to management for review.



IR exhibition

# Social Responsibility That INPEX Holdings Inc. Is Committed to Fulfilling

## Building the Foundation to Support E&P Activities

#### **Designing and Implementing an Internal Control System**

A series of corporate scandals, such as accounting frauds, that have happened in recent years has brought to the top of the agenda at many companies the issue of ensuring the reliability of financial reporting. Under the Japan's Financial Products Transaction Law scheduled to be applied to fiscal years ending March 31, 2009 and beyond, it will become mandatory for a company to submit an "Internal Control Report" based on findings from an assessment that management is required to perform of the effectiveness of internal controls over the company's financial reporting. Implementation of internal controls is expected to help minimize frauds and errors in business processes and to help achieve more streamlined and efficient operations, leading to enhanced internal management. The Company established the Internal Control Working Committee in July 2006, which is tasked with designing and implementing an internal control system for the group-wide financial reporting.



Yoichi Takabayashi Coordinator Internal Audit Unit

#### **VOICE**

"We are in the middle of formulating relevant internal rules and regulations, and preparing workflow charts and a risk control matrix, based on a vision of the fully-integrated company scheduled to become operational in October 2008. Japan's Financial Services Agency has published broad guidelines for preparing these documents but has not given detailed instructions. Our unit has been consulting with other departments within the Group and audit firms regarding effective ways to perceive, manage and reduce risks posed to our business."

#### **Upgrading Information Systems**

As part of an upgrade of information systems, we are integrating a mission-critical system and information system infrastructure.

The integration of a mission-critical system that handles accounting and human resources tasks is scheduled to be completed and become operational in October 2008. The new integrated system is designed to give us a shorter preparation time for financial reporting, greater efficiency in performing tasks, enhanced internal controls and tighter information security. At the same time, a new business management process and a system capable of quickly responding to the changes in business environment will be incorporated.

We have been building a new information system infrastructure that consists of hardware, software and internal/external networks in a manner optimized for the volume and nature of the tasks and transactions the Company is expected to generate upon full integration.



Hitoshi Watanabe ERP Group IT System Unit

#### **VOICE**

"I have been assigned to build a new system that handles human resources tasks. The first thing we have to do is to envision an optimized set of tasks relating to human resources for the new integrated company. Since the two operating subsidiaries currently have different policies and procedures, it is not an easy task to find an optimum solution that satisfies both. But when we do manage to build a new system for human resources, it will support each and every employee of the new company and will ensure that the integration will be a success."

#### **Enhancing Human Resource Development**

The two operating subsidiaries worked together to recruit university, graduate school and high-school graduates for employment, starting in April 2007, to have an early start in taking advantage of the benefits of integration. When we hired 45 new graduates for the first time as

a new company, we held a joint training session for them on the oil and natural gas E&P business so that they could smoothly enter our corporate environment and begin their assigned jobs in different departments. It was a tremendous success.



Joint training session

# 1

Takeshi Inoue Human Resources Unit

#### VOICE

"The joint training session gave new recruits a good opportunity to have hands-on experience of our business when they visited our project sites in Japan. The session turned out to be a meaningful and productive one, in that the participants—a group of the first new hires—were motivated to make a contribution to the growth of the Group and renewed their commitment to ensuring a stable and long-term supply of energy to customers."

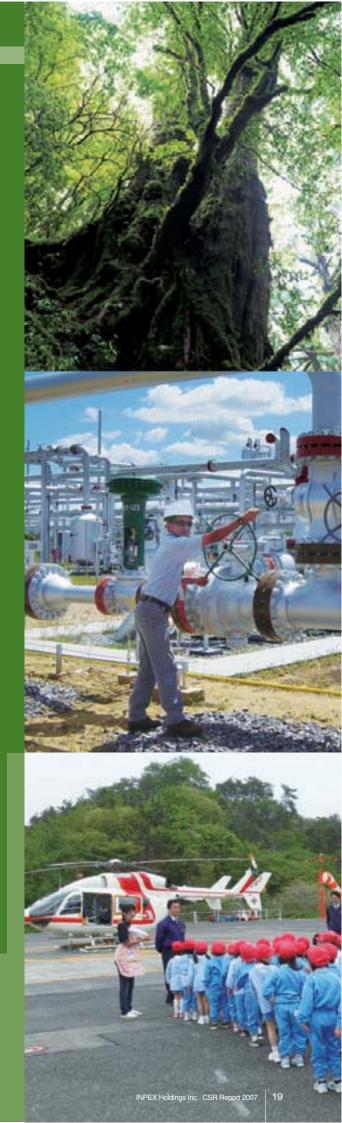
# Integrating Social Responsibility into Our Business Operations

INPEX Holdings Inc. carries out E&P business around the globe with commitment to the protection and preservation of environment and to the safety and well being of our employees. To turn this commitment into action, we have implemented our own HSE (Health, Safety and Environment)

Management System as a guiding framework for undertaking a series of initiatives.

In order to develop energy resources efficiently in different parts of the world, we must have a dialogue with those who live in the regions in which we operate and solicit their understanding and support. In return, we make a positive contribution to making their lives better now and for the future, and to helping develop their community.

In the following pages, you will find how seriously INPEX Holdings Inc. takes social responsibility and proactively acts on it.



## A Message from the Director for HSE

# The INPEX Holdings Group has given top priority to implementing a series of Group-wide HSE (Health, Safety and Environment) initiatives, toward the goal of fulfilling our mission



Takeshi Maki
Director and General Manager of the Technology Division

The mission of the INPEX Holdings Group is to provide a stable supply of energy to our customers. The recent management integration has placed the Group in a better position to strengthen our business foundation and international competitiveness with the aim of fulfilling this mission.

To ensure that we accomplish the mission, we need to work hard to prevent incidents because they could impact very seriously on the maintenance and continuity of our business. It is also vital for the company's sustainable development that we care for the global environment and contribute to communities. In view of all this, the INPEX Holdings Group is working to establish an organization and set of rules to ensure that occupational health and safety and environmental conservation activities are carried out under a unified management system. As the first step along this road, in June 2006 we instituted the Group-wide Health, Safety and Environment Policy.

With the aim of ensuring that all activities across the Group relating to health, safety and environment are carried out according to this policy, we are working to establish an HSE Committee and develop, implement and maintain an HSE management system.

While the integration and systemization of HSE activities across the Group are proceeding in the above-described manner, we also need to keep in mind the ways in which HSE activities have been carried out by the two operating subsidiaries

over the years prior to the business integration. The vital point about the HSE activities is that they make sense at the frontline in the workplace, so that the expertise accumulated by the two companies is systematically being used to promote the evolution of the INPEX Holdings Group in a way that is appropriate for the growth of the combined business.

Let me explain briefly the efforts made at the two operating subsidiaries in this regard. First, Teikoku Oil has a long history of conducting HSE activities at its many facilities, most of which are in Japan. To make these activities more systematic, Teikoku Oil formulated operating rules to define an HSE management system in October 2003. In November of the same year, the company established its Basic Policies on the Environment and Safety, which have provided the basis for defining priority policies for each subsequent year. HSE activities for each year have been managed under the PDCA management cycle<sup>1)</sup>. In December 2005, Teikoku Oil formulated a set of priority policies for 2006, as shown on the following page. The HSE-related activities of Teikoku Oil for 2006 reviewed in this report are based on these policies. In view of the integration, Teikoku Oil has chosen to adopt the HSE Policy that the Company has developed for the Group, and its priority policies for 2007 have been defined in line with this policy.

For its part, INPEX CORPORATION has implemented HSE measures on a project basis. For operator projects in particular, HSE initiatives were pursued with developing and implementing an HSE management system. As a result of the integration, INPEX CORPORATION has also adopted the HSE Policy of the Company. INPEX CORPORATION is upgrading its HSE initiatives in the large-scale operator projects it is currently pursuing at Ichthys (Australia) and Abadi (Indonesia), according to the development stage of the projects.

To fulfill our Group's mission of providing a stable supply of energy, it is essential that we earn the trust of the communities we serve. While a relationship of trust takes many years to build, it can be lost overnight. And once trust is lost, it is very difficult to restore. Aware of this, we are committed to investing great efforts in our HSE activities, so that this precious asset of trust is passed intact from one generation to another.

#### 1) PDCA management cycle

A continuous management process that links together four key activities: to PLAN (creating a plan); to DO (executing the plan); to CHECK (to evaluate the results); and to ACT (to make improvements).

#### Health, Safety and Environment Policy of the INPEX Holdings Group

INPEX Holdings Group is a global, independent energy company and our vision is to provide a stable and efficient supply of energy to our customers.

We recognize our responsibility to sustainable development and, in this regard, we aim to protect the health and safety of all those associated with our business activities and to minimize adverse impacts on the environment.

To accomplish this, we will:

- Comply with all applicable HSE laws and regulations, and apply our standards where laws and regulations do not exist or are considered insufficient.
- Implement and maintain HSE management systems, and perform regular audits of legal compliance and progress of our HSE activities to achieve continuous improvement in our HSE performance.
- Identify and assess health and safety hazards and eliminate or, if not possible, reduce risks to as low as reasonably practicable to prevent incidents.
- Conduct environmental assessments and promote efficient energy consumption to reduce adverse environmental impacts.

- Maintain and regularly test emergency plans to ensure a quick and effective response in the event of emergencies.
- Provide resources that will enable our employees to meet HSE objectives and targets.
- Provide training in HSE activities and safe driving to ensure all employees are aware of their responsibilities and accountabilities in these areas.
- Require contractors to manage HSE in accordance with this Policy, and to achieve agreed HSE targets.
- •Communicate openly on HSE activities with stakeholders.

#### Teikoku Oil's Priority Policies for 2006

- 1. Full establishment of the HSE management system
- 2. Elimination of human errors
- 3. Establishment of systematic on-site training that matches employee skill levels
- 4. Preparation of emergency-response manuals and periodic implementation of emergency drills
- 5. Elimination of accidents involving falls from high places
- 6. Total pipeline management
- 7. Monitoring and reduction of environmental concentrations of hazardous substances subject to PRTR regulations
- 8. Prevention of and exhaustive countermeasures against soil contamination
- 9. Reductions in the emissions of GHGs (greenhouse gases) per unit of production
- 10. Reductions in the emissions of volatile organic compounds
- Prevention of work-related as well as non-work-related traffic accidents



## **HSE Management System**

## In order to fulfill our mission, we have a unified management system in place for environmental conservation and occupational health and safety initiatives

#### **HSE Management System**

#### Overview of HSE Management System

The mission of maintaining a stable supply of energy can be disrupted for any number of reasons. Of most concern to us is the risk of incidents, which not only can directly interrupt energy supplies, but can also result in environmental pollution that threatens the sustainability of our business.

In view of this, the Group regards environmental conservation and prevention of incidents as inseparable. We therefore

implement environmental measures and health and safety measures under a unified management system.

With the aim of improving on health (H), safety (S) and the environment (E), we are operating our own HSE Management System. This comprehensive system enables us to continuously enhance our HSE performance.

#### HSE Management System Implementation Framework

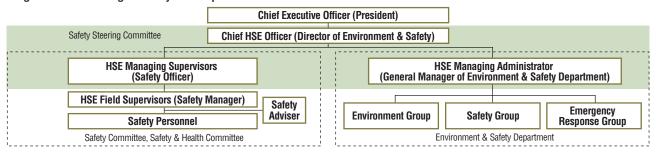
Teikoku Oil has established the HSE Management System illustrated below.

The Director of Environment & Safety serves as Chief HSE Officer under the control of the President. The Safety Steering Committee, which comprises the HSE Managing Administrator (General Manager of Environment & Safety Department) and the HSE Managing Supervisors (Safety Officers at each office), is tasked with seeking company-wide improvements through the establishment of HSE policies and priority policies for each year,

as well as with the responsibility of monitoring and reviewing progresses made toward these goals.

The HSE Managing Supervisors are the highest-ranking HSE managers at their respective offices. Together with HSE Field Supervisors (Safety Administrators) and other Safety Personnel, they establish a Safety Committee at each workplace. These facility committees have the task of improving HSE performance at the workplace level, based on the decisions made by the Safety Steering Committee.

#### Diagram of HSE Management System Implementation Framework



#### HSE Auditing

Teikoku Oil implements field-initiated audits as well as audits conducted by its Environment & Safety Department.

#### Field-initiated Audits

An Auditing Team is organized at each office to perform regular audits. As a rule, the Auditing Team must have a Safety Adviser, but the makeup of other members and the frequency of audits are determined according to implementation guidelines established at each location. Field audits check compliance with laws and regulations, and with company rules, as well as progress made in the implementation of HSE initiatives. If any noncompliance is found, the Auditing Team instructs the responsible personnel to make necessary improvements, and a report is compiled and presented to the Safety Committee. In addition, the matter is also communicated to the Environment & Safety Department in the Safety Adviser's monthly report.

#### Corporate-initiated Audits

The Environment & Safety Department and the deputy general managers and supervisors of the Field Operations Division (Production Department, Construction & Maintenance Department, Drilling Department) form a Corporate Auditing Team. Once a year, this team conducts an audit of all plants and offices. Based on the audit checklist, the team checks that the HSE management system is operated appropriately, and assesses the progress and achievement of the goals and implementation plans. The results of the audit are shared with the Safety Administrator of each location. Based on the report, the Safety Administrator devises and implements improvement measures and reports the results of these efforts to the Corporate Auditing Team, as well as to the Safety Supervisor at the Safety Committee.

#### ISO14001 Certification of Nagaoka Field Office

The Minami Nagaoka Gas Field, which is the major domestic production base of the INPEX Holdings Group, is managed by Teikoku Oil's Nagaoka Field Office. Since acquiring ISO14001 certification in November 2003, this office has been applying the ISO management system to continuous improvements in its HSE activities.

Based on the priority policies that Teikoku Oil establishes for each year, the Nagaoka Field Office formulates a set of environment and safety goals for the year, incorporating ISO environmental targets. The status of efforts made toward achieving these goals is recorded. At the end of each month and after the end of each year, the achievements are evaluated by an Environmental Management Committee established at the Field Office. Any improvement measures considered necessary in light of this report are then put into effect.

The goals for 2007 are set based on the specific goals, activities, and results for 2006. They are summarized in the table below.

Note that in the renewal review for 2006, the measure

"Conversion at the Koshijihara Gas Plant from a direct combustion to a catalytic method for removing volatile organic compounds (VOC)" was found to be highly effective, and therefore denoted as a "strong point." 1)

In addition, in the periodic review for 2005, "kill well" 2) training, in which training is repeated until it reaches an effective level, was highly rated. As a result, this training is now being extended to all relevant employees.

- strong point
   A point rated as excellent.
- 2) kill well

An emergency response measure to suppress well blowouts.



#### ISO14001 Certified Offices

- Koshijihara and Oyazawa Plants (processing of natural gas)
- Sekihara Plant (underground storage and withdrawal of natural gas)
- Nagaoka Field Office (management of field operation)
- •Well sites (Koshijihara, Oyazawa, and Sekihara districts)

2006 Goals	Main Initiatives	Results	2007 Changes	2007 Goals	
(1) Reduce the number of unscheduled plant shutdowns (to below 2005 level)	investigated causes of all plant troubles, and formulated measures to prevent their recurrence.  Also, documented problem-solving expertise and		(1) Reduce the number of unscheduled plant shutdowns (to below 2006 level)		
(2) Reduce GHG emissions per unit of production (to below 2005 level)	Worked to reduce energy consumption by reducing electricity and fuel use, and to reduce gas emissions by installing gas-recovery lines.	Achieved reduction	Continue	(2) Reduce GHG emissions per unit of production (to below 2006 level)	
(3) Achieve 100% compliance with waste storage and management rules (Koshijihara Plant)	All work teams worked hard on waste storage and management.	Achieved compliance	Add "recover valuable resources such as steel and stainless steel scrap" to the waste storage rules	(3) Achieve 100% compliance with waste storage and management rules and categorize valuable waste	
(4) Reduce emissions of VOCs and PRTR substances per unit of production <sup>3)</sup> (to below 2005 level)	Replaced combustion-type VOC-removal equipment at the Koshijihara Plant with catalytic equipment. Strove to reduce emissions of VOCs and PRTR substances by compiling and then complying with an operation manual for the removal equipment, incorporating tips on operating procedures, in order to increase the effectiveness of equipment operation.  Achieved reduction for PRTR substances Did not achieve reduction for VOCs		(4) Effective operation of VOC-removal equipment		
(5) Maintain 100% availability factor for well waste water-treatment facility (Koshijihara Plant)	Tried to achieve a 100% availability factor (AF) by compiling an operation manual, controlling quantities of chemicals injected, and monitoring process water and sludge quantity.	Achieved 100% AF	Specify quantitative targets	(5) Reduce sludge per unit of waste water to below 3.2 L/m³	
(6) Promote project site tours	Worked to increase the number of visitors to facilities by approaching local groups, boards of education, primary and high schools, as well as universities with the aim of promoting greater understanding of the projects operations in the community.	Number of visitors increased <sup>4)</sup>	Continue	(6) Promote project site tours	

<sup>3)</sup> The main PRTR substances of relevance to our operations are the VOCs—which include benzene, toluene, and xylene—contained in crude oil. Other PRTR substances of concern include boron, and trivalent chromium compounds. The use of VOC-removal equipment lead to a reduction in PRTR substances.

<sup>4)</sup> The number of general visitors has increased from just a dozen or so to more than 300. More than 1,200 visitors, including customers and other business-related parties, visited the sites for 2006.

## **Environmental Impacts of Business Activities**

# Monitoring and analyzing environmental impact data on our business activities

#### **Business Processes and Environmental Impacts of Teikoku Oil**

Teikoku Oil, which conducts the Group's business activities in Japan, monitors the environmental impacts of all of these activities, and uses them as indicators in its efforts to reduce adverse environmental impacts.

For further details of these efforts, please refer to "Global warming prevention measures," "Caring about biodiversity," "Limiting chemical emissions," and "Waste treatment and soil pollution countermeasures," on the following pages.

#### **Exploration and Development**

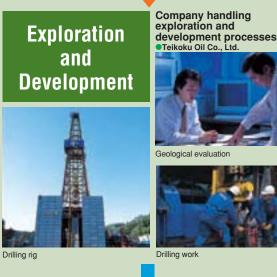
In this activity, we search for underground structures that may contain deposits of oil or natural gas, and drill exploratory wells in promising locations. If sufficient reserves are discovered, we develop oil and gas fields by drilling production wells, constructing production facilities, and laying pipelines.

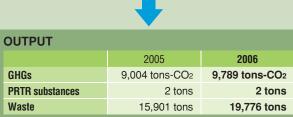
#### **Production**

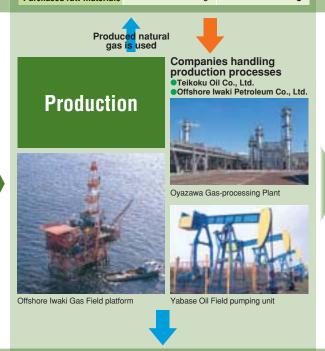
After crude oil and natural gas are extracted from the ground through production wells at oil and gas fields, impurities such as moisture and carbon dioxide are removed, and then the oil or gas is transported by tanker trucks or pipelines.

INPUT		
	2005	2006
Fuel	127 TJ	138 TJ
Water	43,000 KL	57,000 KL
Purchased gas	0	0
Purchased raw materials	0	0

INPUT		
	2005	2006
Fuel (including produced natural gas)	1,122 TJ	1,277 TJ
Water	352,000 KL	342,000 KL
Purchased gas	92 million Nm <sup>3</sup>	76 million Nm <sup>3</sup>
Purchased raw materials	0	0







2005

187,909 tons-CO<sub>2</sub>

18 tons

1,137 tons

2006

239,835 tons-CO<sub>2</sub>

16 tons

1,183 tons

- Teiseki Pipeline Co., Ltd. (TPC): Conducts maintenance and management of the pipelines owned by Teikoku Oil
- Teiseki Topping Plant Co., Ltd. (TTP): Refines crude oil produced in Japan on contract for Teikoku Oil
- Offshore lwaki Petroleum Co., Ltd. (OIP): Operates the lwaki Offshore Gas Field, jointly-owned with the ExxonMobil Group. Note that these figures represent only OIP's 50% ownership of this oil field.

**OUTPUT** 

**PRTR** substances

**GHGs** 

Waste

#### **Capital Investment for Reducing Environmental Impacts**

In 2006, Teikoku Oil introduced new energy-saving technology at its gas-processing facilities at the Minami Nagaoka Gas Field to help reduce GHG emissions. This investment amounted to approximately 200 million yen. In addition, some 430 million yen was spent on new equipment to reduce VOC emissions, and around 220

million yen was spent on equipment to reduce other adverse environmental impacts.

All in all, total spending in 2006 on plants and equipment designed to reduce adverse environmental impacts was about 840 million yen.

#### **Refining and Transportation**

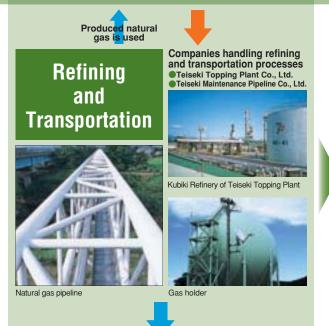
After crude oil is transported to a refinery for refining, the resulting petrochemical products such as gasoline and fuel oil are sold. Natural gas is transported directly to customers via pipeline. Teikoku Oil's Naruto Gas Field also processes and sells iodine as a by-product.

#### Consumption

The sold petroleum products and natural gas are consumed and utilized for a variety of purposes at factories and gas stations; for electric power generation and city gas distribution; and in hospitals, offices and homes.

INPUT		
	2005	2006
Fuel (including produced natural gas)	127 TJ	144 TJ
Water	346,000 KL	338,000 KL
Purchased gas	0	0
Purchased raw materials	96,000 KL	70,000 KL

TOTAL INPUT					
	2005	2006			
Fuel (including produced natural gas)	1,376 TJ	1,559 TJ			
Water	740,000 KL	736,000 KL			
Purchased gas	92 million Nm <sup>3</sup>	76 million Nm <sup>3</sup>			
Purchased raw materials	96,000 KL	70,000 KL			



# Consumption



Natural gas cogeneration system

Sales		
	2005	2006
Natural gas	945 million Nm <sup>3</sup>	1,164 million Nm <sup>3</sup>
Crude oil (amount sold)	9,000 KL	12,000 KL
Petroleum products	625,000 KL	654,000 KL
LPG	13,000 tons	12,000 tons
lodine	542 tons	506 tons

OUTPUT				
2005	2006			
18,913 tons-CO <sub>2</sub>	22,076 tons-CO <sub>2</sub>			
14 tons	15 tons			
395 tons	553 tons			
	18,913 tons-CO <sub>2</sub> 14 tons			

TOTAL OUTPUT				
	2005	2006		
GHGs	215,826 tons-CO <sub>2</sub>	271,700 tons-CO <sub>2</sub>		
PRTR substances	35 tons	33 tons		
Waste	17,433 tons	21,512 tons		

## **Consideration for Regional and Global Environments Global warming prevention measures (1)**

# Cutting greenhouse gas emissions while increasing production to meet rising demand for natural gas

	Limiting GHG emissions				
2006 goal	With the aim of reducing GHG emissions per unit of production to below 2005 level, we set numerical targets for each office, and implement measures to control GHG emissions both on an absolute and per-unit basis.				
2006 performance	Total per-unit GHG emissions for 2006 were 0.196 kg-CO <sub>2</sub> /Nm <sup>3</sup> , approximately 3.7% higher than the value for 2005. Also, per-unit emissions as defined by the Nippon Keidanren Voluntary Action Plan on the Environment (Summary) — Section on Global Warming Measures amounted to 2.15 kg-CO <sub>2</sub> /GJ, which is 6.7% higher than the reduction target set in this document.				
Assessment 🔀	Though per-unit GHG emissions from energy use were reduced, we failed to reduce GHG emissions stemming from CO <sub>2</sub> removed at natural gas processing and natural gas emissions for operational reasons. This is because the production volume of natural gas was substantially increased due to a rise in gas demand. As a result, Teikoku Oil's total per-unit GHG emissions increased in 2006, resulting in a failure to meet the established goal. Therefore, the goal of reducing specific GHG emissions remains an important one for 2007.				
2007 goal	With the aim of reducing per-unit GHG emissions to below the level of 2006, we set numerical targets for each office and implement measures to control GHG emissions both on an absolute and per-unit basis.				

Goal achieved Goal not achieved

## Participation in Nippon Keidanren Voluntary Action Plan on the Environment—Section on Global Warming Measures

Through the Japan Petroleum Development Association (JPDA), Teikoku Oil and INPEX CORPORATION participate in the Nippon Keidanren Voluntary Action Plan on the Environment—Section on Global Warming Measures. The JPDA has set the target of

"reducing the average GHG emissions per unit of production at oil and natural gas development facilities in Japan for 2008 to 2012, by 20% below the level of 1990."

#### **GHG Emissions**

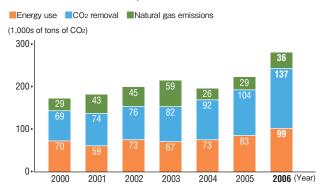
When natural gas is burned, it produces less CO<sub>2</sub> emissions per unit of heat output than other fuels—75% less than oil and 60% less than coal, which makes it environmentally friendly and explains the rapidly rising demand for natural gas. While the continuation of this trend will lower GHG emissions at the consumption stage, it will inevitably result in higher emissions at the production stage.

There are three main sources of GHG emissions in domestic natural gas operations: energy use, CO<sub>2</sub> removal from natural

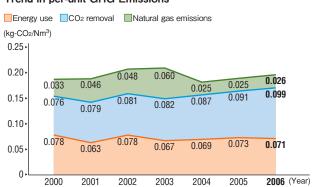
gas, and natural gas emissions for operational reasons. As the demand for natural gas has grown in recent years, GHG emissions from each of these three sources have been rising.

As a natural gas producer, Teikoku Oil has tightly controlled the quantity of GHG emissions per unit of production, which is one of its priority policies since 2004 in order to reduce GHG emissions.

#### Trend in GHG Emissions by Sources



#### Trend in per-unit GHG Emissions



#### **GHG Emission Reduction Initiatives**

#### **Reducing Emissions from Oil and Gas Operations**

#### CO<sub>2</sub> emissions from energy use

At all our oil- and gas-processing plants and field offices, we strive to reduce CO<sub>2</sub> emissions by utilizing environmentally-friendly natural gas as far as reasonably possible as fuel and for generating electric power. Greater use of energy-saving systems powered by natural gas, and improvement in energy efficiency help us reduce CO<sub>2</sub> emissions.

#### ■CO₂ removal at natural gas processing

At the Minami Nagaoka Gas Field, our major production base in Japan for natural gas, approximately 6% of CO<sub>2</sub> contained in the natural gas is separated and removed by a process using an amine solution and then dispersed into the atmosphere.

Currently, there are no effective ways to reduce or eliminate these emissions of separated/removed CO<sub>2</sub>, but the feasibility of a range of different methods is being studied within the oil and natural gas industry. These methods include "geological storage," in which

Trend in Energy Use for Business Activities

removed CO<sub>2</sub> is injected into a deep underground aquifer or into a depleted oil or gas field; and "EOR" (enhanced oil recovery), in which CO<sub>2</sub> is injected into an oil field to improve crude oil recovery.

#### Natural gas emissions for operational reasons

In the oil and natural gas business, when transferring gas in pipelines, when maintaining and restoring the artesian capacity of oil and gas wells of reduced pressure, or when conducting periodic inspections of facilities, there is no choice but to discharge natural gas into the atmosphere.

Since the greenhouse effect of methane, which is the principal component of natural gas, is 21 times more than that of CO<sub>2</sub>, we are focusing efforts on recovering as much of this dispersed natural gas as possible. In addition, we are working on reducing GHG emissions by such means as lowering the pipeline pressure prior to the start of such operations, and by burning the natural gas to convert it into CO<sub>2</sub> then releasing it into the atmosphere.

,							
		2001	2002	2003	2004	2005	2006
Own natural gas/ refinery gas	Vol. 1,000s of Nm <sup>3</sup> Heat value TJ	18,399 759	18,457 762	19,415 802	24,357 1,003	26,179 1,078	30,360 1,248
Gas oil and other liquid fuels	Vol. KL Heat value TJ	3,126 120	6,020 230	3,917 150	2,818 107	3,708 141	4,075 155
Purchased electricity	Vol. 1,000s of kWh Heat value TJ	34,175 123	50,200 181	41,263 149	38,456 138	40,808 147	40,106 144
Purchased city gas	Vol. 1,000s of Nm <sup>3</sup> Heat value TJ	_	_	268 11	241 10	251 10	279 11
LPG	Vol. tons Heat value TJ	_	0	1 0	1 0	2	1 0

#### Cargo Transportation Reporting

Under the provisions of the revised Japan's Energy Conservation Law, enforced in April 2006, the owners of cargoes transported in volumes exceeding 30 million ton-kilometers per year are obligated to report the quantities of their transported cargo, to formulate energy conservation plans, and to report quantities of

energy consumed. The total quantity of cargo transported by Teikoku Oil inside Japan in 2006 was approximately 220 million ton-kilometers. Around 99% of this was petroleum products, of which about 90% was transported by sea.

#### Introduction of Cogeneration System and Construction of Electric Power Plant

Cogeneration systems (CGS), powered by our own natural gas, were introduced at the Koshijihara Plant in 1994, and at the Oyazawa Plant in 2003. Both of these plants process natural gas from the Minami Nagaoka Gas Field. In 2006 an ESCO (an energy service company) project<sup>1)</sup> based on CGS was introduced. Teikoku Oil installs and operates CGSs at its own expense on the premises of the plants and buildings to which it supplies natural gas. The company then sells the electricity and heat generated by the CGSs as energy to the owners of those facilities. Looking ahead, we plan to promote the introduction of CGSs further, focusing on facilities close to our pipelines in Japan.

In addition, we constructed an electric power generator at the Koshijihara Plant. The plant generates power using natural gas and condensates from the Minami Nagaoka Gas Field. Since May 2007, the power generated has been sold on a wholesale basis, as allowed by a recent power industry deregulation in Japan.

#### 1) ESCO project

A type of project in which an energy-saving service is supplied to premises such as a factory or building, and part of the savings (a reduction in heating and electricity costs) gained from the investment is paid to the service provider.



Electric power plant

## Consideration for Regional and Global Environments Global warming prevention measures (2)

#### Energy-saving Technology for the Gas-processing Plant at Minami Nagaoka Gas Field

The new gas-processing train at the Minami Nagaoka Gas Field completed in October 2006 incorporate energy-conservation concepts applied at the design stage, and a variety of energy-saving features. Energy-saving measures have been focused on three items of equipment, as described below, which consume a large amount of energy.

- (1) Hydraulic turbine for amine circulation pump Energy derived from the differential pressure generated when the amine solution that circulates within the plant is regenerated is recovered as electric power and used to power the motor for the circulation pump.
- (2) Contactor overhead cooler for propane freezer Pre-cooling the high-temperature gas that results from the removal of CO2 by means of an air-cooled heat exchanger reduces the load on the propane freezer later in the process.

(3) Reducing load on gas compressor by modifying low gas-pressure processing

When surplus gas is recovered using a gas compressor, the load on the compressor is reduced by modifying the process.

By applying these measures to the three items of equipment, Hydraulic turbine total energy consumption of the plant was reduced by 20%. Inspired by this achievement, we are now studying the further introduction of energy-saving equipment at other plants.





Propane refrigerator

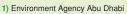
#### Mangrove Forestation Project in Abu Dhabi

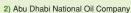
Since 1999, Japan Oil Development Co., Ltd. (JODCO), a subsidiary of INPEX CORPORATION, has been engaged in a joint mangrove forestation project with EAD1) in Abu Dhabi City and on Zirku Island, Offshore Abu Dhabi. This project is aimed at the greening of arid coastal areas through the planting of mangroves. In recognition of its outstanding environmental merits, in 2001 the project was rated sixth out of 62 corporate environmental initiatives in an HSE award held by ADNOC.2)

The project has since evolved into a pilot marine ecosystem restoration program, which is attempting to create an ecosystem by combining forestation with fish cultivation along the desert coastline in Abu Dhabi. The mangrove leaves that fall into the water decompose into organic matter, thereby enriching the environment for the fish. At the same time,

biological waste from the fish fertilizes the growth of the mangroves. In this way, the initiative is creating a coastal

ecosystem by greening the desert. As a result it has become possible in Abu Dhabi to cultivate fish and prawns that are safe and delicious to eat. It is expected that the development of an aquaculture industry utilizing the vast coastal desert in the country will be promoted.







Mangrove planting



Planted mangroves

#### Environmental Impact Assessment Procedures in an E&P Project in Western Australia

On May 1, 2006 we launched an environmental approval process for a proposed LNG, condensate and LPG production project at the Ichthys Gas Condensate Field in Western Australia. Environmental referral documents were submitted to the environment agencies of both the Australian Commonwealth and Western Australian governments.

Currently, we are implementing an environmental impact

assessment according to applicable government guidelines. The results of the assessment will be submitted in the form of a report to the Commonwealth government. Subject to obtaining approvals, we will initiate full-scale development work. This assessment process will ensure that the project is implemented with all due consideration for its potential impacts on the environment.

## Consideration for Regional and Global Environments Caring about biodiversity

# Protecting ecosystems to ensure coexistence with the natural environments around project sites

#### **Ecological Conservation Initiatives**

The INPEX Holdings Group places great importance on coexistence with the natural environments in and around the regions in which we operate both in and outside Japan.

Therefore, before we start developing project sites or constructing pipelines, we investigate the potential impacts on

the surrounding natural environment, and we pay careful attention to the preservation of the ecosystems in all of the areas in which we operate. In addition, we are implementing a wide range of measures to contribute to protecting the local environments and improving environmental awareness in local communities.

#### Ecological Care in Pipeline Construction

In 2003, Teikoku Oil commenced the construction of the Shizuoka Line designed to transport regasified LNG to the LNG terminal of Shizuoka Gas Co., Ltd. Construction of the pipeline was completed in December 2006.

Before commencing construction we engaged a consulting company, Environmental Green Engineering Co., Ltd., to carry out a preliminary survey to ensure that construction work does not damage the natural environment. The presence and living conditions of wildlife along the planned pipeline route, including

flora, raptors (birds of prey), insects and amphibians, were assessed. Conservation measures were then taken for the protection of any species confirmed to be rare or of special significance.

During construction, a monitoring survey was conducted. After construction we conducted a follow-up survey, and then planted trees along the pipeline based on the advice of experts. As a result of this effort, the project earned the praise of the Yamanashi Plant Study Group, which cooperated in the survey.



Plant survey



Mountain hawk eagle survey



Wildlife study



Japanese clawed salamander

#### **Biodiversity Protection at the Kashagan Oil Field**

In September 1998, INPEX CORPORATION obtained a working interest in the Kashagan Oil Field, located in the North Caspian Sea Block in Kazakhstan, and development work is underway. The Caspian Sea is a distinctive ecosystem that is home to a large number of unique species such as sturgeons and seals, as well as other academically important species. In view of this sensitivity, the project not only complies with local laws and regulations, but also undertakes various initiatives in consultation with the Kazakh government in order to ensure ecosystem protection.

The project formulates an action plan each year, based on a



Survey on breeding patterns of seals



Conservation of sturgeon

biodiversity strategy. The three primary activities undertaken in 2006 as part of this action plan were:

- (1) Protection of seals: We provided assistance to field surveys in which the breeding habits of seals on the ice using aerial monitoring during the breeding season in February were studied.
- (2) Protection of marshlands and migratory birds: We created posters to illustrate the importance of conserving marshlands and protecting the animals and plants living there, and to raise environmental awareness amongst the Kazakh people.
- (3) Conservation of sturgeons: To study their habits, we attached ID tags to some sturgeons and monitored their activities.



Protection of migratory birds



Conservation of marshlands

## Consideration for Regional and Global Environments Limiting chemical emissions

# Reducing the emissions of VOCs and other environmentally-harmful substances

	Limiting the emissions of PRTR substances	Limiting VOC emissions
2006 goal	To monitor and control the emissions of PRTR substances in the environment.	To implement VOC-control measures by defining specific targets for each site, with the aim of reducing the total amount of VOCs emitted to below 2005 level.
2006 achievement	We implemented periodic environmental monitoring of the site boundaries, according to a predefined plan, and reduced the amount of PRTR substances emitted by 1.4 tons below 2005 level.	Total amount of VOCs emitted in 2006 was 711 tons, which was 23% higher than the level for 2005.
Evaluation PRTR  VOC	Although we achieved the goal of reducing the total amount of PRTR substances emitted to below 2005 level, the quantity of benzene (one of the specific substances targeted for reduction) emitted rose by 3.7% (678 kg), due principally to natural gas emissions. For this reason, the priority policy for 2007 remains unchanged.	The major factor behind the increase in VOC emissions was gas emissions, which accounted for 135 tons of the total increase in emissions relative to the previous year. The goal for 2007, as given below, will remain in place, and we will also work on ways to reduce VOC emissions during the loading of trucks.
2007 goal	To monitor and control the emissions of PRTR substances in the environment.	To implement VOC control measures by defining specific targets for each site, with the aim of reducing the total amount of VOC emitted to below 2006 level.

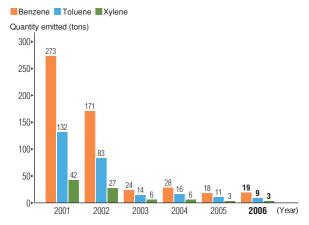
Goal achieved Goal not achieved

#### **Limiting the Emissions of PRTR Substances**

The main substances prescribed by the Japan's PRTR Law that the INPEX Holdings Group handles in its operations in Japan are VOCs such as benzene, toluene, and xylene (known collectively as BTX), which are contained in crude oil and natural gas.

Teikoku Oil is working to systematically reduce the emissions of these kinds of prescribed substances, by introducing,

#### Trend in Emissions of Benzene, Toluene and Xylene



upgrading, and improving the operating efficiency of VOC-removal equipment, and by continuing to install inner roofs of the tanks

Furthermore, in order to monitor impacts on the surrounding environment at sites where BTX is emitted, we are independently conducting monthly monitoring of site environments.

#### **PRTR Quantities Reported for 2006**

Substance	Emitted into atmosphere	Emitted into water body	Emitted into soil	Transferred	
Benzene	18,904	_	_	_	
Toluene	9,305	_	_	_	
Xylene	3,100	_	_	_	
Ethylbenzene	203	_	_	_	
Boron	_	118	_	_	
$\textbf{Chromium}(\mathbb{II}) \ \textbf{compounds}$	_	_	57	1,700	
Zinc compounds	_	0	_	_	
Water soluble copper salts	_	1	_	_	
Lead compounds	_	0	_	_	
Fluorine compounds	_	4	_	_	
Manganese	_	2	_	_	
Total	31,512	125	57	1,700	

#### **Measures for Minute Quantities of Impurities**

Crude oil and natural gas piped up from under the ground may contain minute quantities of PRTR substances other than BTX, such as mercury and arsenic. When oil and gas containing substances such as these are used, there is a risk of contaminating the surrounding environment. For this reason, Teikoku Oil removes these impurities at natural gas processing plants and oil refineries using adsorbent materials.

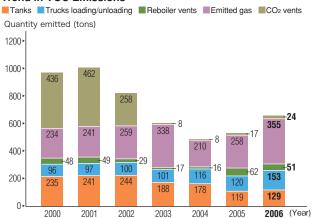
#### **Limiting the Emissions of VOCs**

When Japan's Air Pollution Control Law was amended in May 2004, the Ministry of Economy, Trade and Industry and the Ministry of the Environment formulated a basic policy regarding the emissions of VOCs into the environment. The aim of the policy is to reduce VOC emissions to 30% below the level of 2000 by 2010. In response to this initiative, in November 2005 the Japan Natural Gas Association (JNGA), of which Teikoku Oil is a member, formulated an independent action plan and set itself an even more ambitious target—to reduce emissions by 45% below the 2000 level. For Teikoku Oil this means it must reduce the amount of VOCs emitted to 580 tons.

Despite the fact that Teikoku Oil achieved the above-mentioned JNGA target in 2005 thanks to the introduction of VOC combustion-type removal equipment and the installation of inner roofs to its main tanks, in 2006 it failed to meet its target. VOC emissions rose to 711 tons (up 135 tons in 2005) due to increases in natural gas emissions at the

company's gas fields. To address this concern, we are currently reviewing the option of burning the vented natural gas. We expect to meet the JNGA target by 2010.





#### Measures to Limit Emissions into the Atmosphere

Teikoku Oil regularly analyzes the exhaust gas at facilities that generate smoke, as designated by the Air Pollution Control Law, to verify that emission standards are being met. In addition,

Exhaust Gas Measurement Results in 2006 (average values)

Teikoku Oil tries to use natural gas and gasified fuels as far as reasonably possible to meet its energy needs, in order to limit adverse impacts on the surrounding environment.

	Item	Effluent standard	Oyazawa Plant	Koshijihara Plant	Kubiki Refinery	Platform	
Gas turbines for generators	soot and dust	≤ 0.05g/Nm <sup>3</sup>	$< 0.01 g/Nm^3$	$< 0.01 g/Nm^3$	(not applicable)	< 0.01g/Nm <sup>3</sup>	
	NOx	≤ 70-90ppm	36ppm	47ppm	(Hot applicable)	58ppm	
Gas turbines for gas compression	soot and dust	≤ 0.05g/Nm <sup>3</sup>	(not applicable)	(not applicable)	(not applicable)	$< 0.01 g/Nm^3$	
	NOx	≤ 90ppm	(not applicable)	(not applicable)	(not applicable)	50ppm	
Discol for monorators	soot and dust	≤ 0.1g/Nm <sup>3</sup>	(not applicable)	(not applicable)	(not applicable)	$< 0.01 g/Nm^3$	
Diesel for generators	NOx	≤ 950ppm	(not applicable)	(not applicable)	(not applicable)	520ppm	
Boilers	soot and dust	≤ 0.1g/Nm <sup>3</sup>	$< 0.01 g/Nm^3$	$< 0.01 g/Nm^3$	$< 0.01 g/Nm^3$	(not applicable)	
	NOx	≤ 150ppm	37ppm	35ppm	68ppm		
Heating furnaces	soot and dust	≤ 0.15g/Nm <sup>3</sup>	(not applicable)	(not applicable)	$< 0.01 g/Nm^3$	(not applicable)	
	NOx	≤ 180ppm	(not applicable)	(not applicable)	64ppm	(not applicable)	

#### Monitoring of Water Released into Public Water Bodies

At the six Teikoku Oil project sites where it is mandatory to measure the quality of discharged water in accordance with the Japan's Mine Safety Law and Water Pollution Control Law, released water is periodically analyzed by a measurement certification institution to verify that the standards defined by relevant laws are being met.

Note that since the iodine contained in the water generated in Water-release Measurement Results in 2006 (average values)

natural gas production is extracted and reused as a by-product, water from the Naruto Water Collection Plant of the Chiba Field Office is normally passed on to a chemical-processing plant for this purpose. Thus, this facility directly releases water into a public water body only when this chemical-processing plant is shut down for routine inspections or other reasons.

Water release measurement results in 2000 (average values)										
Item	Effluent standard	Oyazawa Plant	Koshijihara Plant	Kubiki Refinery	Platform	Kashiwazaki Maintenance Center	Naruto Water Collection Plant			
Water released in 2006		22,515KL	50,571KL	431,535KL	1,989KL	330KL	(no release)			
pH	5.8-8.6	6.8	6.7	7.7	7.2	6.4	_			
BOD/COD	≤ 160mg/L	9mg/L	3mg/L	6mg/L	(not applicable)	4mg/L	_			
Suspended solids	≤ 200mg/L	3mg/L	6mg/L	5mg/L	(not applicable)	2mg/L	_			
n-Hexane Extracts	≤ 5mg/L	tr	tr	< 0.5mg/L	(not applicable)	2mg/L	_			
Benzene	≤ 0.1mg/L	< 0.01mg/L	< 0.01mg/L	< 0.01mg/L	< 0.01mg/L	< 0.01mg/L	_			
Fluorine	≤ 15mg/L	(not applicable)	(not applicable)	< 0.5mg/L	< 0.01mg/L	0.3mg/L	_			
Boron (land)	≤ 10mg/L	2mg/L	2mg/L	0.1mg/L	(not applicable)	(not applicable)	_			
Boron (sea)	≤ 230mg/L	(not applicable)	(not applicable)	(not applicable)	13mg/L	(not applicable)	_			
Nitrogen compounds	≤ 100mg/L	3mg/L	8mg/L	1mg/L	28mg/L	(not applicable)	_			
Copper content	≤ 3mg/L	(not applicable)	(not applicable)	(not applicable)	(not applicable)	< 0.1mg/L	-			

## Consideration for Regional and Global Environments Waste treatment and soil pollution countermeasures

## Striving to reduce drilling waste, sludge and other waste

	Soil pollution countermeasures
2006 goal	<ul><li>Exhaustive soil pollution prevention and countermeasures</li><li>(1) To prevent soil pollution during operations and in the event of any contamination, rapidly to implement remedial action.</li><li>(2) To conduct soil pollution surveys at the time of land rehabilitation and if soil pollution is confirmed, to implement remedial action.</li></ul>
2006 achievement	We independently conducted seven soil surveys in 2006, two of these were related to returning leased land, four to leasing out land, and one to selling land. In each case, no pollution that violates the standards of the Japan's Soil Contamination Countermeasures Law was found. As a result, we simply removed the upper layer of soil and placed a mound, as stipulated by company policy.
Evaluation	When returning land, leasing out land and selling land, we carry out surveys in compliance with the Soil Contamination Countermeasures Law and guidelines on remediation of oil-contaminated soil; we assess the presence, range and extent of pollution; and we implement the necessary measures with reference to applicable standards. We expect to face situations requiring similar surveys and measures continually in the years ahead. In view of this we will maintain this priority policy for 2007.
2007 goal	<ul><li>(1) To prevent soil pollution during operations, and in the event of any contamination, rapidly to implement remedial action.</li><li>(2) To conduct soil pollution surveys at the time of land rehabilitation, and if soil pollution is confirmed, to implement remedial action.</li></ul>

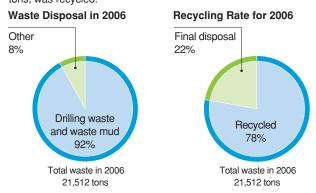
Goal achieved Goal not achieved

#### **Waste Treatment Measures**

The majority of the industrial waste generated by Teikoku Oil consists of well drilling waste and waste mud. In 2006, the total amount of industrial waste generated was 21,512 tons, of which 19,735 tons (92%) was drilling waste and waste mud. Although these wastes are treated as sludge, if the quantity of naturally derived heavy metals contained in the sludge exceeds the limits set by the standards, the sludge is disposed of as landfill; if heavy metals are below the permissible limit, the sludge is dewatered and recycled as a material for roadbed. The total amount of drilling waste and waste mud recycled in 2006 was 15,688 tons, or 80%.

Other kinds of industrial waste, such as waste oil and metal scrap amounted to 1,778 tons. Of this 61%, or 1,090 tons, was

recycled. Overall, 78% of all industrial waste, amounting to 16,779 tons, was recycled.



#### **Soil Contamination Countermeasures**

To date, Teikoku Oil has not used any of the hazardous substances designated by the Soil Contamination Countermeasures Law. However, there is a risk of soil contamination occurring due to the leakage of crude oil during production operations, or due to benzene or heavy metals contained in crude oil or drilling mud.

For this reason, we independently conduct soil surveys at discontinued project sites, and implement any necessary measures such as soil replacement before returning the land. No soil contamination was detected by soil surveys conducted in 2006.

If soil contamination is found at a site that is currently in operation, we check whether there is any risk of adverse impacts on the surrounding environment. Then, even when the site continues to operate, we implement continuous monitoring of wastewater and groundwater within the site and at the site boundaries. At the same time, we take remedial measures to clean the soil and ground water, to the extent permitted by project operation. Furthermore, in case pollution spreads beyond the boundaries of the site, we respond immediately with suitable measures to counter the threat of environmental harm.

#### **Management of PCBs**

The Japan's Law Concerning Special Measures Against PCB Waste, enacted in July 2001, introduced tougher regulations on the waste processing of products containing PCB (polychlorinated biphenyl). In response, Teikoku Oil has gradually replaced the fluorescent lights and capacitors at all its plants and offices, and now uses no products containing PCB.

By law, all existing PCB waste must be disposed of by July 2016.

All of our facilities store PCB Stored Equipment waste with the greatest care. They have already submitted notification to register the waste and are now waiting to have this waste processed.

## Containing PCB (number of items)

High-voltage capacitors	95
Low-voltage capacitors	1
Fluorescent light ballasts	435
Mercury lamp ballasts	3
Switches	1

#### Asbestos Risk Countermeasures

In 2005, after conducting a documentation survey of all its buildings—including company dormitories and housing— Teikoku Oil employed experts to conduct a study to assess the possibility that buildings may contain asbestos and that people may have been exposed to it, focusing on places where people enter and exit frequently. Based on the results, in 2006 we removed sprayed-on materials from three places where the probability of asbestos particle dispersion was considered to be high. In addition, once every six months we check the condition of insulation materials, which may present a risk of asbestos dispersal, to ascertain

whether there is any danger of asbestos exposure.

Since asbestos was used in the past at almost all of our project

sites, including drilling sites, we provide medical examinations to any current or former employees who wish to be checked for asbestos-related health conditions.



Asbestos removal

#### **Environmental Accidents**

In January 2007, at the Sotoasahikawa Plant operated by Teikoku Oil's Akita Field Office, an oil leak occurred from a corroded part of a flowline, resulting in the formation of an oil film over the nearby Kusoudzu River. The project site immediately set up an oil fence to prevent the oil spills from spreading and mopped up the oil film using adsorption mats. The plant then scrutinized the entire flowline for any signs of corrosion and took appropriate measures, such as replacing parts of the line and injecting anticorrosion agents into the line.

In 2006, in response to an oil leak that occurred from a tank at

the Kubiki Refinery operated by Teiseki Topping Plant Co., Ltd. in late December 2005, we implemented soil and groundwater surveys in the surrounding areas, and assessed the state of pollution of nearby riverbeds. The tests showed that the oil leak did not pose any direct threat to local residents. Nonetheless, we constructed a water cut-off wall around the boundaries of the plant site to prevent the spread of pollution, and we decontaminated the groundwater by pumping it out. As of March 2007, we have been examining the best remedial action to take for the soil of the local riverbeds.

#### **Environmental Protection of the Caspian Sea at the Kashagan Oil Field**

Kazakhstan, located on the northern shore of the Caspian Sea, is currently improving an environmental regulatory system to keep up with its rapid economic growth and the development of its energy industry. INPEX CORPORATION owns a working interest in the Kashagan Oil Field in the North Caspian Sea Block. The project not only complies with all applicable laws and regulations in carrying out its operations, but also it has voluntarily formulated its own set of internal environmental standards, which are on a par with the strictest international practices.

For example, discharges into the Caspian Sea are limited to cooling water, water-maker effluent, fire water, and water used for creating water-curtains during well tests. That is, the facilities do not discharge into the sea any other kind of solid wastes or wastes containing oil and its products, such as drilling mud, cuttings and bilge water. Oil on cuttings is recovered and transported to onshore facilities for proper processing and recycling.

In addition, the sewerage generated during the offshore operation of the project is treated on site using the latest technologies, with a final quality that is almost as pure as drinking water.



Water-treatment facility



Kashagan Oil Field

## **Operational Safety**

# As a company that supplies the energy that fuels our society, we ensure uninterrupted safe operation and having emergency response plans

#### Safety Systems

Teikoku Oil regards its safety system as an important element of its HSE Management System. The decisions of the Safety Steering Committee—the highest decision-making body within the HSE system—are communicated by the Safety Officer at the meetings of the Safety Committee or Safety and Health Committee of each plant and office. Based on these decisions, each facility then formulates and executes concrete goals and implementation plans in accordance with its particular circumstances.

Most of the initiatives based on the implementation plans, such as hazard prediction activities, near miss activities<sup>1)</sup>, and the formulation and revision of SOPs<sup>2)</sup> are executed by small groups of shift employees and day workers, and the records and results of these are reported at the monthly meetings of the Safety Committee or Safety and Health Committee. Based on the report, the Safety Committee then checks the progress of the plan. When

a problem occurs, the committee examines possible measures, and reports back to the Safety Steering Committee. All of these steps are then reflected in the priority policies for the following fiscal year.

When incidents occur at production sites, the necessary measures are taken immediately, and reports are made within and outside the company according to a predefined emergency contact system. The project sites that receive the reports examine each of the causes and proposed countermeasures, and use this information to maintain safety at their own sites.

#### 1) Near miss activity

When an incident occurs during work or operation in which there is no human injury or physical damage, but which gives rise to feelings of fear and surprise at the danger of the situation, the details of the incident are recorded so that its causes can be analyzed by all relevant personnel, and preventive safety measures can be taken to ensure that this near miss does not occur again. This near miss activity is one type of safety and health initiative.

2) SOPs Standard operating procedures

#### Safety Initiatives

Under the priority policy of eliminating human errors, all operation sites and individuals at Teikoku Oil set their own objectives in relation to safety initiatives such as near misses, hazard prediction, "pointing and naming," and "calling out activities," and work toward meeting the objectives. The results are reported and evaluated at Safety Committee meetings, which help improve the safety management of the facilities.

Specific initiatives include training of operation site employees using actual equipment, e.g. simulation training<sup>1)</sup>, to constantly raise the safety awareness of all employees and to help avoid operation errors.

In addition, each of Teikoku Oil's facilities creates and utilizes

its own "near miss map," to indicate the dangerous aspects of its particular work and the possible consequences, in order to eliminate any chance of near miss incidents. Near miss maps are based on materials such as company rules, near miss case studies and incident case studies, and are designed to enable an at-a-glance understanding of danger elements, through the inclusion of illustrations and photographs. Employees make use of the maps in pre-work meetings and operation site meetings to increase awareness and to promote mental preparation. These maps are useful tools for sharing risk recognition.

#### 1) Simulation training

Training that checks a trainee's understanding of equipment operating procedures and the procedures for responding to a variety of situations under a simulated environment

#### Safety Award at Ichthys Gas Condensate Field

INPEX Browse, Ltd., a subsidiary of INPEX CORPORATION, was awarded a safety prize by the Australian Petroleum Production and Exploration Association, in the field of offshore exploration for two successive years, in 2003 and 2004, in recognition of the safety of its operations at the Ichthys Gas Condensate Field off the coast of Western

This prize is awarded to companies that demonstrate the highest operational safety standards in the three areas of production, exploration and drilling. INPEX Browse was the first Japanese company to win the prize. When the company drilled exploratory wells in this field, it not only

surpassed the very high HSE standards demanded in Australia, but also strove to instill a stronger HSE awareness among employees and contractors. Through these efforts, INPEX Browse's operations proceeded very smoothly, leading ultimately to the winning of the prize.

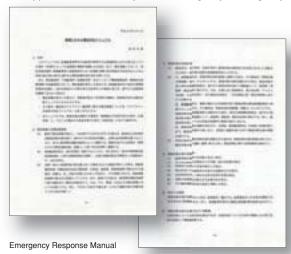


#### **Emergency Contingency Rules and Emergency Response Manual**

Teikoku Oil has formulated the "Emergency Contingency Rules" that specify basic response measures that head office and each project site must take to contain the extent of the damages caused by a disaster and to restore conditions to normal as quickly as possible in the event of an emergency at an operation site in Japan or when there is any risk that a situation might develop into an emergency. Emergency situations include all conceivable events, such as earthquakes, terrorist attacks, explosions, fires and floods. Specific measures to take are detailed in the "Emergency Response Manual" prepared by each project site according to circumstances and needs. Depending on the seriousness of an incident, an emergency headquarters will be set up at the site of the event, or at head office, and under the direction of senior management the whole company will focus its efforts on restoring the situation to its normal condition.

Since any disaster affecting trunk pipelines is likely to have a very serious impact outside the company (in addition to affecting a number of our own project sites), a separate set of rules

("Emergency Contingency Rules for Incidents Affecting Main Trunk Pipelines") has been formulated for this contingency. These rules are applied in the same way as the Emergency Contingency Rules.



#### Periodic Reviews of our Emergency Response Manual through Training

Teikoku Oil implements regular training aimed at maintaining and improving responsiveness to emergencies, based on the Emergence Response Manual. The training exercises are based on scenarios centered around a specific imaginary emergency.

In 2006, the company conducted two company-wide emergency drills. In one scenario, we assumed there was a fire

Pipeline emergency drill (on-site operations center)



Pipeline emergency drill (emergency headquarters at head office)

at a tank at a plant, which would have a devastating effect on the surrounding environment if it were to burn out of control. Another scenario posited a landslide that disrupted the operation of a natural gas supply trunk line (social infrastructure). After each drill we hold evaluation meetings, review and update the manual, and then reflect what was learned into the next training plan.



Pipeline emergency drill Emergency drill at Nagaoka Field Office (setting up satellite communications equipment) (simulation of reporting to local community)



#### **Incident Occurrences**

Only one operations-related incident occurred at Teikoku Oil in 2006, when a pipeline ruptured due to construction work being carried out by another company, resulting in a gas leak.

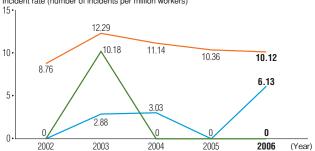
Only one minor injury occurred in 2006. Thus, for the third year running there were zero incidents.

Looking ahead, we will continue to make an effective use of the PDCA cycle in our HSE Management System, strive to maintain a zero incident rate, and endeavor to reduce the environmental impacts from our operations.

#### Trend in Incident Rate at Teikoku Oil

- -Average for oil, gas and mining industry in Japan
- -Average for oil and gas E&P industry in Japan
- —Teikoku Oil

Incident rate (number of incidents per million workers)



## **HSE Training to Raise Employee Consciousness**

# We provide training to make all employees more conscious of continuously improving their HSE performance and skills

#### **HSE Programs**

The INPEX Holdings Group's HSE Policy states that it will "Provide training in HSE activities and safe driving to ensure that all employees are aware of their responsibilities and their accountabilities in these areas." Based on this policy, we proactively provide all our employees with HSE training.

We conduct HSE training for all new employees—engineering, administrative and managerial. They learn about work-related risks from case studies of past incidents and occupational health and safety statistics, and acquire basics of HSE management systems and risk assessment<sup>1)</sup> devised for continuous HSE improvement. Engineers are provided with opportunities to take additional training according to the nature of their work and the stage of their career. We will continue to improve our training programs so that our employees can further upgrade their knowledge and skills regarding HSE.

Employees working at overseas offices are briefed on local conditions, covering elements such as culture, religion, and public security. They are also given information, obtained from medical institutions and risk management specialists, as to diseases endemic to the region, e.g. malaria and dengue fever, and other diseases such as the avian influenza (bird flu). We

ensure that employees are well informed of measures they can take to counter these risks.

Driving safety is important, especially in countries where transport and driving conditions are different from those in Japan. For this reason, we provide safe-driving education programs to employees who travel in motor vehicles on business.

#### 1) Risk assessment

Overall process of identifying hazards, estimating the magnitude of risk and examining how to mitigate them



Introductory HSE training

#### Safety Training in Japan

At Teikoku Oil, each office devises annual HSE objectives and training plans in line with the company-wide annual priority policies, and implements safety training programs accordingly. Through a range of training programs, including lectures, desktop exercises, technical presentations and simulations, employees develop their HSE-related knowledge and expertise. At internal conferences, all offices share best practices to improve their HSE performance, while enhancing the competency of their employees.

Under one of the HSE priority policies 2006 of establishing systematic on-site training that matches employee skill levels, HSE training programs are implemented to help employees meet their individual safety-performance objectives. Through personal interviews and examinations, we check the level of



Safety training

each employee's understanding, and provide guidance in line with the employee's proficiency.

In addition, we keep track of training history of each employee. We also encourage employees to acquire formal qualifications for such as hazardous materials officers, gas engineers and pollution control managers.

All employees in the 10<sup>th</sup> year of their career at Teikoku Oil's Production Division receive training specialized in production process. After attending sessions covering various topics, participants are required to study whether operation and maintenance in their workplaces are appropriate based on a topic of their choice, and produce a report on their study. Study groups are also held once a month for the purpose of sharing knowledge and skills among employees.



nstrument training

#### **HSE Training**

In an effort to improve emergency preparedness, the INPEX Holdings Group implements a number of special training and exercises on disaster response, blackout response, firefighting, water discharging, evacuation, and rescue work. Through these training, we place great emphasis on raising awareness of crisis management and mitigating impacts of emergency events.

For employees engaged in dangerous work, such as offshore drilling operation, we provide mandatory training such as helicopter underwater escape (HUET), sea survival, and firefighting. Training also includes oil spill prevention and response. In case hydrogen sulfide occurrence during a drilling operation is predicted,  $H_2S$  safety training is provided.





Process abnormality prediction training



Water-discharge training



Emergency-evacuation training



Evacuation training using lifeboats



Oil cut-off fence setup training

#### Handing down Knowledge and Skills

One of the Teikoku Oil's HSE priority policies for 2006 is to establish systematic on-site training that matches employee skill levels. On the basis of this policy, each office implements its own site-specific training activities through PDCA cycles, and

manages efforts to pass on the knowledge, skills, and experience accumulated over many years to younger engineers.

One example of the initiatives used for achieving this goal is the Five Senses & Skills Tournament (F-1 Grand Prix).

#### Five Senses & Skills Tournament (F-1 Grand Prix)

The Five Senses & Skills Tournament (F-1 Grand Prix) was first held at Teikoku Oil's Kashiwazaki Maintenance Center in 2006. This innovative competition, which pits

young engineers against experienced and senior employees, serves as an effective and enjoyable way to transmit technical expertise across the generations.

The first tournament was held in April-May 2006, with 40 competitors participating in a wide variety of competitive tasks, as listed on the right.



## Five Senses & Skills Tournament (F-1 Grand Prix)

- Item 1 Proper torque for tightening bolts
  Item 2 Visual evaluation of surface finish
- Item 3 Estimating gap dimensions
- Item 3 Estimating gap dimensions
  Item 4 Visual appraisal of leakage
- Item 5 Distinguishing between screw types
- Item 6 Sledgehammer contest
- Item 7 Body clock
- Item 8 Distinguishing length by sound
- Item 9 Selecting appropriate lubricants
- Item 10 Judging temperature by touch Item 11 Micrometer measurement







Visual evaluation

## **Employee Health Management**

# Caring about the physical and mental well-being of employees who work in a variety of environment

#### **Health and Welfare**

Each office of the INPEX Holdings Group has a Health Committee that meets each month. The aim of the committee is to establish and upgrade the health management system and to improve the working environment. With the guidance of occupational physicians and health supervisors, we promote swift and appropriate care for employees.

Employees are not allowed to smoke in the workplace. We have separate smoking rooms and prevent employees from being exposed to passive smoking.

In May 2006, INPEX CORPORATION introduced an intranet-based work time recording system that enables managers to keep track of and manage the work hours of their staff and to ensure employee health management and prevention of their excessive overwork.

Teikoku Oil invites medical, nursing, and nutrition specialists to

give health seminars once a year in the workplace. The sessions discuss a variety of topics, including lifestyle-induced diseases such as high blood pressure and diabetes.



Health seminar

#### **Efforts to Maintain and Improve Employee Health**

In order to help employees avoid sickness and enhance their awareness of health management, the Group implements a variety of measures such as providing regular health checks, support for complete medical checkups, and vaccinations against influenza. Although 95% of our employees underwent regular health checks in fiscal 2006, we are working to achieve a 100% rate.

Based on the results of health checks, we arrange for employees to have consultations with occupational physicians

and public health nurses, and help them prevent lifestyle-induced diseases and improve their lifestyles. Employees who work for longer than a specified number of hours should attend consultations with an occupational physician, and

take further health checks if necessary.

Employees posted to overseas positions are given physical examinations, as well as vaccinations and new kinds of influenza

## Health Management for Employees Working in Operation Sites

Some employees are posted to remote overseas locations, some of which may lack a sophisticated healthcare and other infrastructure. We ensure that such sites are staffed with our own doctors or medical staff to monitor the health of employees and prevent the outbreak or spread of infectious diseases. As part of the preparedness for the contingency of illness or injuries of employees at the site, we contract 24-hour medical

emergency services, so that we are able to transport them in an emergency to the nearest available medical facility that is equipped to provide appropriate treatment.

countermeasures before leaving Japan.



Helicopter landing at an offshore operation site

#### Mental Health Initiatives

In recent years, an increasing number of company employees are found to be suffering from poor mental health brought on by the stress of difficult interpersonal workplace relationships and long work hours. In view of this, the Group has recognized that mental health is an important issue requiring serious attention.

INPEX CORPORATION is currently considering the introductions, in collaboration with outside medical institutions, of an Employee Assistance Program service for employees.

Teikoku Oil has made mental health consultations, both within and outside the company, readily available to employees. Employees can receive counseling by telephone, e-mail, and personal consultation, with confidentiality of personal information strictly preserved in all cases. Also, as part of their training, managers are educated on the responsibility they have with respect to the mental health of employees, and are trained to deal with such issues effectively.

## **Creating Caring Workplaces for a Diversity of Employees**

# Improving the workplace environment so that each and every employee can express their full potential

#### Constructing a Human Resources System for the Merged Company to be Established Next Year

The Group is constructing a new human resources system in preparation for the completion of the merger. Before setting up the system, we surveyed all employees seeking their input. The survey results were shared with all officers and employees, and the director for human resources held town hall meetings on the survey results in all offices. The survey highlighted the common elements and differences of the cultures and histories between

the two merging companies. The new human resources policy has been formulated based on the survey results. Currently, the human resources departments of the two companies, in consultation with their officers and the labor union of each company, are working to establish an appropriate system for the merged company.

#### **Employment for the Disabled**

The Group is making efforts to employ disabled people when they meet our hiring standards. In August 2004, Teikoku Oil was awarded by the Tokyo Metropolitan Disabled Employment Promotion Association in recognition of its outstanding efforts in employing disabled employees.

In line with the principles of our CSR Policy, and in collaboration with each workplace, we remain committed to

supporting the employment of disabled people as part of our efforts to contribute positively to local communities and society as a whole.



Award from the Tokyo Metropolitan
Disabled Employment Promotion Association

#### **Childcare Support**

The Group has instituted a legally compliant childcare-leave framework to support employees who need to take time off to care for their children. In addition to a "childcare leave period" for employees with children up to 18 months old, we have also established an "overtime and late evening work exemption" that exempts employees with young children from overtime and night-shifts. As part of our childcare-support measures, we pay a 20% of their salaries on top of the statutory childcare leave benefit.

Other than measures described above, INPEX CORPORATION has set up a "shortened childcare work shift" that allows its employees to work two hours less per day until their children finish first grade.

Teikoku Oil employs a system to subsidize the part of nursery, day-care center and babysitting costs, and a flextime system for employees until their children start elementary school. The company also sets childcare support objectives in connection with the government's General Action Plan for Employers, based on the goal of the Law for Measures to Support the Development of the Next Generation. To achieve these objectives, the company promotes a culture in which employees feel comfortable utilizing the childcare support through disseminating relevant information on the intranet and initiating awareness creation events. As a result, in fiscal 2006, employees taking childcare leave included one male employee.

#### **Employee Training**

The Group provides training programs with the aim of cultivating core human resources that contribute to enhancing corporate value in the context of the Group's global business development. We are also committed to improving the overall level of employee competency.

The Group runs training programs tailored to the different needs of groups within the company—senior management, middle management and new employees—and implements a mentor system to follow up the training of new employees.

Furthermore, the Group actively promotes education on compliance, to ensure not only conformance with all applicable laws and regulations, but also adherence to ethical business conducts.

To enable employees to improve their international communication skills and develop the ability necessary for international business, INPEX CORPORATION offers language training given by with native speakers at the headquarters, overseas language training programs, and supports for employees in the self-study of language. At the same time, the company provides opportunities for employees to participate in overseas seminars and on-the-job training at overseas offices.

Teikoku Oil also offers its employees the opportunities to continue to study at universities and institutions in Japan or abroad, to pursue self-study (such as distance learning, part-time study, TOEIC IP), and to take language training programs.

## Social Development

# We promote a variety of activities to contribute to the development of local communities in which we operate

#### **Regional and Community Development**

#### Contributing to Regional Development along the BTC Pipeline Route

The 1,770-kilometer-long BTC (Baku-Tbilisi-Ceyhan) pipeline transports crude oil from the Caspian Sea city of Baku (B) in Azerbaijan, via Tbilisi (T) in Georgia, to the Mediterranean Sea port of Ceyhan (C) in Turkey.

As part of this project, we are conducting "community investment programs" to bring benefits to the communities through which the pipeline passes. In the three years between 2004 and 2006, we set aside a budget of U.S. \$25 million to invest in Azerbaijan, Georgia and Turkey. The details of the programs have formulated through discussions with regional and local governments and NGOs, based on four basic goals—(1) To improve livelihood and business opportunities; (2) To support access to improved social infrastructure; (3) To help raise awareness of health and sanitation issues; and (4) To support development in the agricultural sector.

For example, in Azerbaijan, we support microfinance programs. The programs seek to provide greater stability in the

lives of the local people by offering financial services and employment opportunities to the poor. The programs also help sustainable economic development of the region through building locally-managed financial institutions capable of providing continued financial services. Demand for loans is very strong, and the repayment rate has been as high as 99%.

In addition, as part of a program to prevent the spread of HIV/AIDS, we organize seminars for employees and local communities as well as training for local medical and healthcare professionals.





Development of a water well

HIV/AIDS seminar

#### Social Development in Venezuela

Since 1993, Teikoku Oil has been engaged in E&P business in the area around the city of Valle de La Pascua, Venezuela. Recognizing the importance of socio-economic development of local communities, we have been undertaking various initiatives since the beginning of our project, such as providing health checks to local people, repairing and renovating schools, and donating equipment and materials for local projects.

In 2006, we implemented the community development programs listed below, taking into account the plans of local governments and community concerns. The projects were funded out of the profits from the crude oil production joint venture with a partner company.

(1) We participated in an educational program to improve the computer literacy of local people, based on a Venezuelan governmental policy.

- (2) We donated to a festival held to hand traditional folk dances to next generation.
- (3) We, in cooperation with local medical institutions, conducted prostate cancer tests. Prostate cancer is relatively prevalent among local people due to their diet.
- (4) We implemented maintenance work on the electricity-distribution facilities needed to supply electric power to local households.
- (5) We constructed accommodation facilities and donated them to the city of La Pascua to alleviate the burden on pregnant women who need to visit the city from surrounding areas for medical or healthcare reasons.
- (6) We contributed to a mural painting program to beautify the school facilities in Valle de La Pascua City.



Donation of PCs and installation support



Maintenance of electric facilities



Healthcare facility for pregnant women



Contribution to a mural painting program

# Actively supporting disaster-recovery efforts and participating in activities which contribute to greater transparency in resource-producing countries

#### **Donations and Funds**

#### Donations Activities to Help People Affected by the Central Java Earthquake in Indonesia

With the desire to help restore areas affected by the massive earthquake that struck the region of Central Java in Indonesia in May 2006, INPEX CORPORATION provided relief funds for a number of purposes, as listed below.

- (1) U.S. \$75,000 donated to a program to provide emergency supplies, administered by Indonesia's Ministry of Energy and Mineral Resources.
- (2) U.S. \$500,000 donated through the Indonesian Red Cross.
- (3) 500,000 Japanese yen donated through the Japan Indonesia Association.

In addition, we donated a total of 1.55 million Japanese yen, collected individually from officers and employees of the INPEX Holdings Group.

#### Participation in EITI

The Extractive Industries Transparency Initiative (EITI) is a global initiative to prevent corruption and bribery, and to seek greater transparency in payment and revenue flows and greater accountability for activities associated with extractive industries such as oil, gas and mining. The initiative was proposed by then-British Prime Minister Tony Blair at the World Summit on Sustainable Development in September 2002 held in Johannesburg, South Africa.

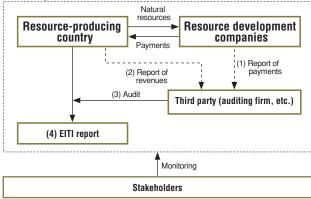
Under this initiative, the companies developing natural resources and the host countries that own these resources respectively disclose details of the money and the products transferred between them. This information is then audited by a third-party auditing firm and the results are published periodically as the EITI Report.

The goal of EITI is to improve the standard of governance in resource-producing countries, through objective verifications to ensure that there is no impropriety in the transactions. EITI also helps ensure that the income from resource development contributes to sustainable economic development and poverty reduction in those countries.

Currently, EITI has been implemented in 20 countries, including Ghana, Nigeria, Kyrgyzstan, East Timor, and Angola. The Group participates in the EITI framework in relation to the projects of the INPEX CORPORATION undertaken in Kazakhstan and

Azerbaijan, at the request of the governments of these countries.

**EITI Diagram** 



#### EITI in Azerbaijan in fiscal 2006

Azerbaijan is a pioneer both in the adoption of the EITI framework and also in actually applying the system.

Azerbaijan's efforts to ensure transparency in business relations with E&P companies have earned special praise at the global EITI conference.

In fiscal 2006, INPEX Southwest Caspian Sea, a subsidiary of INPEX CORPORATION engaged in business activities in Azerbaijan, reported details of the payments it made to Azerbaijan government and the volume of oil it produced for the whole of fiscal 2005 and the first half of fiscal 2006 to an auditing firm. A final report on this

information, based on the audit results, was compiled by the Azerbaijan government and publicly disclosed to NGOs. The discrepancies between the figures reported by the resource development companies and those of the government were far smaller than in previous reports, thereby demonstrating the effectiveness of the EITI. Our next challenge is to respond to an inquiry received from an NGO asking how we verify and confirm the accuracy of the figures we report. We are now examining this question with all relevant parties in an effort to enhance the transparency of the system.

## **Social Development**

# Contributing to local communities in order to fulfill our mission as a member of society

#### **Educational Support**

The INPEX Holdings Group considers educational support particularly important in our social responsibility.

The Group provides various support to educational

institutions, mainly in the areas in which we operate. We also support foreign students studying in Japan.

#### Supporting Indonesian Students

In March 1981, INPEX CORPORATION established the INPEX Scholarship Foundation to help promote the development of education and science in Indonesia and in Japan, and also foster mutual understanding and friendship between the two countries.

The principal activity of the foundation is to offer scholarships for Indonesian university graduates with a degree in natural science to take master's course programs at Japanese universities. Since most of the scholarship students are public servants (lecturers at national universities, researchers at national research institutes, or employees of state-owned companies or government agencies),

they are expected to apply what they learn in Japan to the development of the Indonesia society when they return. The foundation also supports the efforts of young Japanese researchers who wish to pursue the study of sociology and



Exchange with students from Indonesia

cultural anthropology in Indonesia. The foundation had provided scholarships to a total of 127 students up to fiscal 2006.

#### Training Program in Japan for University Students from the UAE

Since 1993, the Japan Oil Development Co., Ltd. (JODCO) has been organizing a seminar in Japan for university students from the United Arab Emirates (UAE) majoring in geoscience, with the support of the Abu Dhabi Oil Co., Ltd. The seminar is held every summer for about three weeks. Over the past 14 years, a total of 73 students have participated in the seminars.

The content of the seminars is substantial and covers not only geology but also topics that help students deepen their understanding of Japanese culture and tradition. The seminar has been valued highly by various institutions in the UAE, playing a significant role in promoting friendship with the UAE—the major exporter of crude oil

to Japan. Many of these seminar participants work in oil industries after graduation and play active roles in oil companies including Abu Dhabi National Oil Company (ADNOC). The good relationship has been maintained between



Exchange with UAE University students

the former participants and the INPEX Holdings Group.

In fiscal 2006, we hosted six students from the UAE University. In fiscal 2007, we plan to host 10 students, including several from the Petroleum Institute in Abu Dhabi.

#### Support for the Petroleum Institute

The Petroleum Institute is a college established principally by the Abu Dhabi National Oil Company (ADNOC) in line with a decree issued by the government of Abu Dhabi in December 2000. JODCO participated in the establishment of the Institute and has also contributed to a part of the college's operating expenses together with three other international oil companies that have working interests in Abu Dhabi.

The Institute runs five specialized courses: Chemical Engineering, Electrical Engineering, Mechanical Engineering, Petroleum Geosciences Engineering, and Petroleum Engineering. Currently, 940 students (840 males and 100 females) are studying at the Institute. In June 2006, the first batch of 44 graduates completed their studies, and all of them began working for the ADNOC Group. Furthermore, a graduate school is scheduled to open soon, and the Institute is planning to increase its total students to around 2,500 over the coming years.

JODCO participates in the management of the Institute. In addition to contributing to its funding, it also provides ongoing consultation and various support measures aimed at improving education and R&D activities of the Institute. Through these activities, JODCO is contributing positively to the Institute's mission of cultivating human resources with advanced expertise and management capabilities for oil and gas upstream and downstream activities—Abu Dhabi's key industry.



Support for the Petroleum Institute

#### **Hosting Overseas Trainees through IAESTE**

Every June and July since 2003, Teikoku Oil has been hosting one trainee a year from overseas as part of a program by the International Association for the Exchange of Students for Technical Experience (IAESTE) Japan. The trainee receives hands-on training in oil and natural gas development projects at the Niigata District Office and its associated production sites.

IAESTE, which works in cooperation with and as an adviser to UNESCO, is one of the few non-profit international organizations that deal in higher education. The goals of IASTE are to provide opportunities for trainees to develop advanced knowledge and expertise in specialized fields through hands-on training in foreign countries, and also to promote international

exchange. Since Teikoku Oil supports these ideas, during the training period the company provides trainees with opportunities not only to learn practical skills, but also to experience Japanese culture through exchanges with our employees.

In 2006, the company hosted a trainee from Oman for seven weeks of training. Teikoku Oil has been hosting trainees from Oman continuously since 2003. This shows that the training program has been receiving positive response from both the trainees and the country.



Hosting a trainee from Omar

#### **Community Outreach Programs**

Under its policy of timely and open communication with stakeholders, and contributing to the development of local communities based on the appreciation of cultural diversity, Teikoku Oil focuses on maintaining good relationships with local communities in which we do business. We are making efforts to gain support of local communities for our ongoing initiatives, operational policies, and care for environment through a variety of programs.

For example, the company organizes project site tours for local primary, junior high and high school students and their parents. We believe that these kinds of continuous efforts promote acceptance of E&P projects within the communities and also help us run our business smoothly-e.g. in achieving agreements or permissions for acquiring new land for new drilling projects.

We are committed to these efforts to build stronger relationship with local communities and to be an integral part of the communities.



Twice a year, the Minami Aga Field Office organizes a voluntary clean-up campaign along a one-kilometer stretch of prefectural road near the



Each year, the Nagaoka Field Office participates in a variety of events organized by local communities, including a marathon relay race.



Kashiwazaki Maintenance Center accepted local industrial high school students as interns.



The volunteer firefighting group at Kashiwazaki Maintenance Center participated in a firefighting study group, organized by Kashiwazaki City on National Disaster Prevention Day, and won the third prize in the category of "fire hydrants."



The Nagaoka Field Office participated in industrial exhibitions and environmental exhibitions organized by Nagaoka City, and made a PR campaign encouraging use of natural gas as a clean form of energy.



Teikoku Oil was interviewed by the Japan-America Student Conference on the subject of CSR.

## **Environmental Performance Data by Site**

Site		Head	Akita		Niigata		Chiba	Drilling	TPC	TTP	OIP	Total
		Office		Minami Aga	Nagaoka	Kashiwazaki		Diffilling				lotai
Production and processing volume	Crude oil production (kL)	_	16,439	35,538	156,571	5,448	_	_	_	_	830	214,826
	Natural gas production (1,000s of Nm³)	_	9,292	9,920	1,041,015	22,688	21,377	_	_	_	81,485	1,185,777
	lodine production (tons)	_	_	_	_	_	533	_	_	_	_	533
	Petrol products (kL)	_	_	_	_	_	_	_	_	222,841	_	222,841
	LPG (tons)	_	_	_	_	_	_	_	_	5,236	_	5,236
	Natural gas (1,000s of Nm³)	_	95	219	21,535	59	90	_	177	1,055	5,476	28,707
	Refinery gas (1,000s of Nm³)	_	_	_	_	_	_	_	_	1,653	_	1,653
	Light oil (kL)	2	11	32	11	2	2	3,026	3	39	3	3,132
	Heavy oil A (kL)	_	_	_	0	_	_	197	_	_	369	566
Consumed energy	Kerosene (kL)	9	6	5	0	8	0	14	1	106	0	149
	Petrol (kL)	54	6	5	19	4	15	8	111	5	2	229
	Purchased electricity (1,000s of kWh)	2,026	1,836	1,292	4,281	4,253	23,395	0	1,050	1,747	226	40,106
	City gas (1,000s of Nm³)	108	15	_	65	79	9	_	3	_	_	279
	LPG (tons)	_	_	0	_	_	0	_	_	0	1	1
Consumed	City water (kL)	27,740	4,896	7,824	101,251	21,325	5,728	2,491	2,951	2,975	2,711	179,891
water	Ground water (kL)	180	_	_	193,064	_	5,236	26,141	_	331,860	_	556,481
GHG	CO <sub>2</sub> emissions (tons)	1,202	1,226	3,457	185,926	2,495	8,857	8,586	1,190	13,490	12,556	238,986
emissions	CH <sub>4</sub> emissions (tons-CO <sub>2</sub> )	_	3,553	2,579	1,715	9,301	3,359	0	7,396	0	4,812	32,715
	Benzene (kg)	_	1,038	1,856	7,400	770	_	_	_	7,840	0	18,904
Pollutant Emission	Toluene (kg)	_	_	1,938	1,920	147	_	_	_	5,300	_	9,305
Register	Xylene (kg)	_	_	579	630	61	_	_	_	1,830	_	3,100
	Others (kg)	_	_	_	72	_	_	57	_	203	53	385
Pollutant Transfer Register	Chromium(II) compounds (kg)	_	_	_	_	_	_	1,700	_	_	_	1,700
Emission to public water bodies	Waste water (kL)	330	_	_	73,086	_	0	_	_	431,535	1,989	506,940
Waste	Recycled volume (tons)	27	15	58	640	1	0	15,689	13	330	6	16,779
disposal volume	Final disposal volume (tons)	14	117	55	166	17	104	4,046	0	209	6	4,734

<sup>1)</sup> All data represents results of the period from January 1, 2006 through December 31, 2006, except pollutant emission and transfer data representing the period from April 1, 2006 through March 31, 2007.

## **Third-Party Comment**

# Third-Party Comment on CSR Report 2007





I share my comments on the CSR Report 2007 of INPEX Holdings Inc. (referred to as the "Report" below) based on a perusal of the Report itself as well as interviews with responsible company staff. Note, however, that my comments as presented here are not intended to serve as a third-party opinion, nor to provide a guarantee or certification of the accuracy of the information in the Report.

#### 1. Promoting CSR Activities under Integrated Management

This is the first CSR report published by INPEX Holdings Inc., established as the first step toward full integration between INPEX CORPORATION and Teikoku Oil.

The message from the President clearly states the Company's strong commitment that "Our mission of providing a stable and efficient supply of energy to customers must be accomplished while conducting our business in a socially responsible and ethical manner." The Report also explains that the Company in fiscal 2006 formulated the Group's Mission, CSR Policy and HSE Policy to establish this commitment. I hope that based on these mission and policies the Company will take full advantage of the synergistic effects discussed in the feature story of the Report.

Of the various social contribution programs, the microfinance initiative and other Community Investment Programs at an overseas project are worthy of special mention. I hope that the Group will continue to integrate innovative CSR initiatives into its business operations.

#### 2. Improving the Report

In comparison with the past reports published by INPEX CORPORATION and Teikoku Oil, this Report provides more substantial articles in an easy to understand format. The quality of the articles is higher, particularly those that explain the creation of natural gas value chain for purposes of a stable supply of energy, one of advantages of the merger; the initiatives being taken to change the strategic direction of the business; and the biodiversity protection activities within and outside of Japan. Also, the articles "Business Activities and Broader Consideration for Stakeholders" and "Environmental Impacts of Business Activities" discuss succinctly the Group's business activities in conjunction with related CSR activities and environmental performance. These articles help readers understand the progress of the business integration.

On the other hand, information about social performance such as employment data including that of disabled people is not sufficient as compared to information about environmental performance. More disclosure of social performance will help improve the Report.

#### 3. Conclusion

The Report offers a very good picture of the Group's CSR activities.

In the coming years, I expect to see the synergistic effects resulting from the merger attained and the Report will be further improved through promoting CSR activities of the Group.









## INPEX Holdings Inc.

Corporate Strategy & Planning Division Corporate Strategy & Planning Unit 4-1-18 Ebisu, Shibuya-ku, Tokyo, 150-0013, Japan Tel: +81-3-5448-0204 http://www.inpexhd.co.jp/english/





