#### 1. Name of the Project

Country: The Republic of Iraq

Project: Basrah Refinery Upgrading Project (E/S)

(Loan Agreement: January 25, 2008; Loan Amount: 2,079 million yen; Borrower: The Government of the Republic of Iraq)

#### 2. Necessity and Relevance of JBIC's Assistance

In the aftermath of many years of economic sanctions and conflicts, which have left deep scars in its economy and society, Iraq has begun to move toward reconstruction with assistance from the international community after the war.

The petroleum sector is the main backbone of Iraq's economy, accounting for about 70% of its GDP and about 80% of its annual revenue. Additionally, the petroleum sector is about the only source of foreign exchange. Consequently, in its national development strategy of 2005–2007 (June 2005), the Government of Iraq identifies development of the oil sector as its top priority for strengthening the basis of economic growth. The Ministry of Oil plans to gradually raise Iraq's crude oil production capacity, from the present 2 million barrels per day to 6 million over the next 10 years. To reach that goal, the ministry estimates that it will need to invest an additional 20 billion dollars or more in related facilities, including those required for producing and exporting crude oil. However, given the lack of public safety and other concerns, it is unclear whether or not adequate investment funds can be raised by the private sector alone.

As for the refinery segment of the petroleum sector, the capacity degradation of petroleum processing facilities caused by war and aging and the increase in the demand for petroleum products accompanying the postwar reconstruction have increased the shortfall in domestic gasoline supply to  $7,000 \text{ m}^3/\text{day}$ , resulting in a wide gap between the supply and demand of petroleum products for civilian use. The increased shortfall is forcing Iraq to import petroleum products from other countries to fill the supply and demand gap, thus triggering a large outflow of foreign capital (200 million dollars a month). Under these circumstances, rehabilitation and strengthening of relevant facilities are urgently needed to improve Iraq's petroleum refining capacity.

In the International Conference on Reconstruction in Iraq held in Madrid in October 2003, besides grand aid amounting to \$1.5 billion for urgent reconstruction of Iraq, the Government of Japan pledged a total of \$3.5 billion in yen loans to support medium-term reconstruction after 2005. Additionally, in JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), one of the sectors is the assistance it provides for efforts being made to solve global problems and build peace. Consequently, the support for Iraq, where social instability continues even after major conflicts have ceased, is consistent with JBIC's assistance policy.

JBIC's support for the project is therefore highly necessary and relevant.

#### 3. Project Objectives

This project aims to enhance production of gasoline and other petroleum products for civilian use by building a fluid catalyst cracking (FCC) plant, including FCC equipment, which helps improve gasoline production and the like at the existing refinery in Basrah, a province in the southern part of Iraq, and utilizing residual oil, thereby contributing to Iraq's economic and social recovery. The ODA loan being granted under this project is designed to promote the project's smooth implementation with some of the engineering services (E/S) related to its basic design, subsidy and the like as its target.

#### 4. Project Description

(1) Target Area Basrah, Basrah Province

## (2) Project Outline

(a) Construction of a new FCC plant

(b) Consulting services

This ODA loan will target some of the engineering services (E/S) that will be provided for this project. The general outline of the E/C is as follows:

(a) FEED (Front End Engineering Design), etc.

(b) FEED review, etc.

(3) Total Project Cost / Loan Amount

10,184 million yen (Yen Loan Amount: 2,079 million yen)

(4) Schedule

January 2008-May 2010 (29 months, only the E/S portion)

- (5) Implementation Structure
  - (a) Borrower: The Government of the Republic of Iraq
  - (b) Executing Agency: Ministry of Oil (MOO)

## (6) Environmental and Social Consideration

- (a) Environmental Effects / Land Acquisition and Resident Relocation
  - (i) Category: B
  - (ii) Reason for Categorization

This ODA loan is a loan for engineering services, and the entire project does not belong to Category C under the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established in April 2002). Thus this project is classified as Category B.

(iii) Prior to the implementation of the main body of this project, the Environmental Impact Assessment (EIA) will be conducted on this ODA loan and the approval of the Ministry of the Environment will be obtained, and on the basis of the EIA results and the ministry approval, environmental and social consideration will be given in accordance with the environmental standards, both domestic and overseas.

- (b) Promotion of Poverty Reduction None
- (c) Promotion of Social Development (e.g. Gender Perspective, Measures for Infectious

Diseases, Including AIDS, Participatory Development, Consideration for the Handicapped, etc.)

None

(7) Other Important Issues

None

# 5. Outcome Targets

- (1) Evaluation Indicators (Operation and Effect Indicator)
  - These are scheduled to be established when the main body of the project is implemented.
- (2) Internal Rate of Return (Financial and Economic Internal Rate of Return)

These are scheduled to be established when the main body of the project is implemented.

## 6. External Risk Factors

Deterioration of law and order, etc.

# 7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

The lesson learned in similar past projects is that, if there are related facilities other than those targeted by a particular project, which may impact the effectiveness of the project, it is important to be cognizant of their situation. Therefore, in this project, attention will be given to thoroughly study the situation at the existing refinery in Basrah, etc.

# 8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

These are scheduled to be established when the main body of the project is implemented.

(2) Timing of Next Evaluation

These are scheduled to be established when the main body of the project is implemented.