

# TOPICS

- Ultimate Target**
- Possible sources of CO<sub>2</sub>**
- Experience of ADNOC in CO<sub>2</sub> project**

# ADNOC Perspective on CO2 Recovery & Injection for EOR

## Ultimate Target

- ❑ ADNOC recognized the value of CO2 as a potential alternative to sweet gas injection
- ❑ Protect the environment by reducing the emission & global warming
- ❑ Technology for CO2 recovery from flue gas is proven & applied
- ❑ Injection CO2 into reservoir is an established practice to enhance oil recovery
- ❑ To enhance the UREA production

# ADNOC Perspective on CO<sub>2</sub> Recovery & Injection for EOR

## Possible Sources of CO<sub>2</sub>

- Flue gases from offshore/onshore Plant;**
  - ✓ **Boilers**
  - ✓ **Gas Turbine**
  - ✓ **Reformers**
  - ✓ **Heaters**
  - ✓ **Regenerators**
- Process Gas (Associate and/or Non-Associate)**
- By-Product from Ammonia Plant**

## **ADNOC Perspective on CO2 Recovery & Injection for EOR**

### **1. Pre-Feed Study - Dec. 2003 (100 MMSCFD - Pilot Phase)**

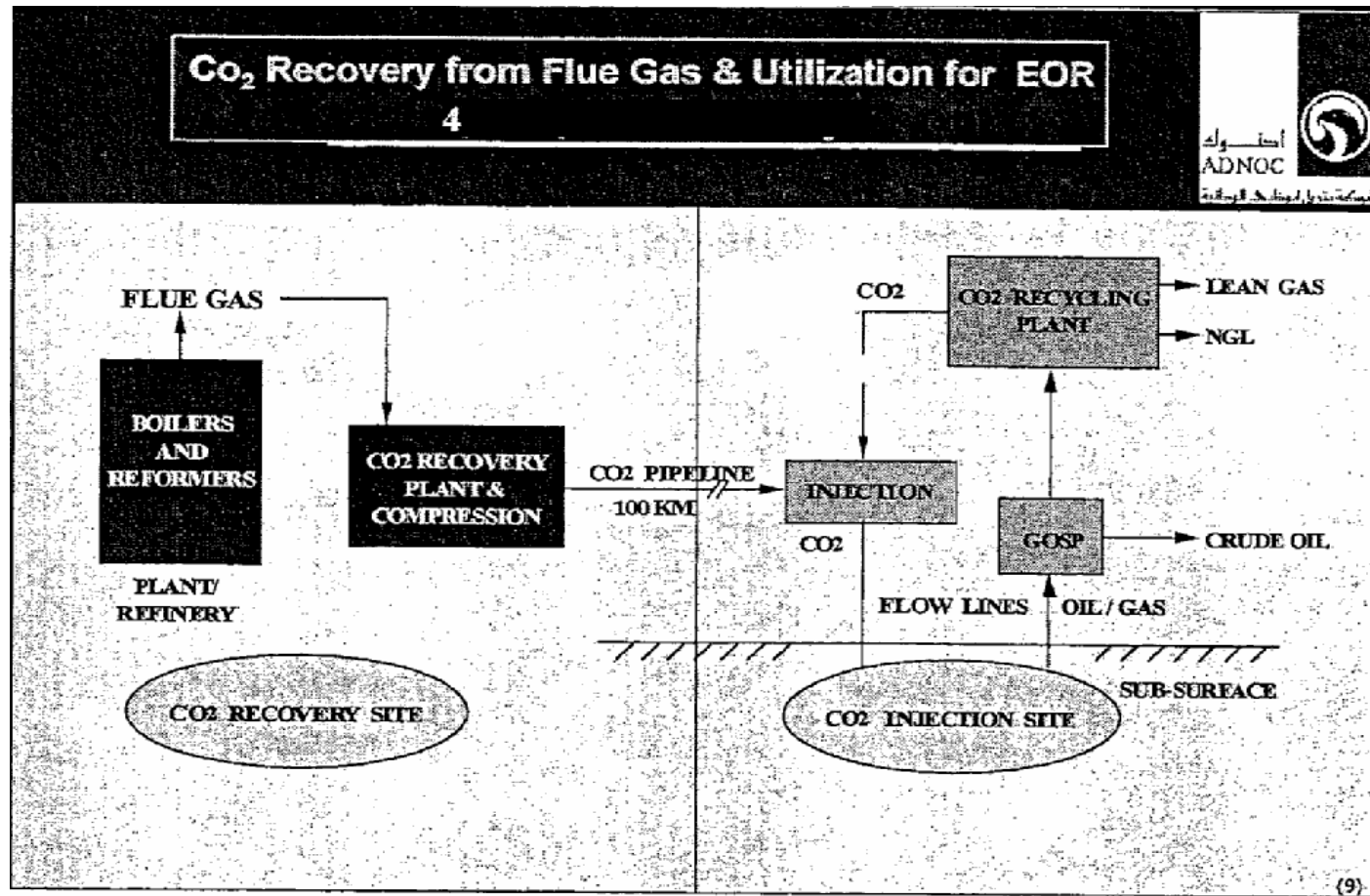
The scope for Engineering study, to develop a pre-feed study to recover CO2 from Refinery and transport/injected in sour oil reservoir for EOR.

### **2. Pre-Feed Study – Sep. 2006 (100 MMSCFSD – Pilot Phase)**

The scope for Engineering study, to develop a pre-feed study to recover CO2 from onshore field (Sour/Acid gas) & injecting it into sour oil reservoir for EOR.

### **3. EPC contract awarded to enhance UREA production**

## Pre-feed study- 100 MMSCFD from Refinery



- ❑ Capital Cost: US \$ 300 Million
- ❑ Operating Cost: US \$ 22 Million / Year
- ❑ CO<sub>2</sub> Cost US \$ 1.55 / MSCF