

Technical Cooperation for Oil-Producing Country

MASATOSHI SAWADA
DIRECTOR & GENERAL MANAGER
REFINING & TECHNOLOGY DEPT.

Introduction

1

[The Cosmo Oil Group's Management Vision]

Harmony and Symbiosis

- ~ with Global Environment**
- ~ between Energy and Society**
- ~ between Companies and Society**

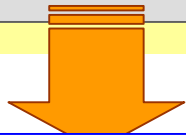
for sustainable growth towards a future

Together with . . .

Global Communities

Employees

Customers

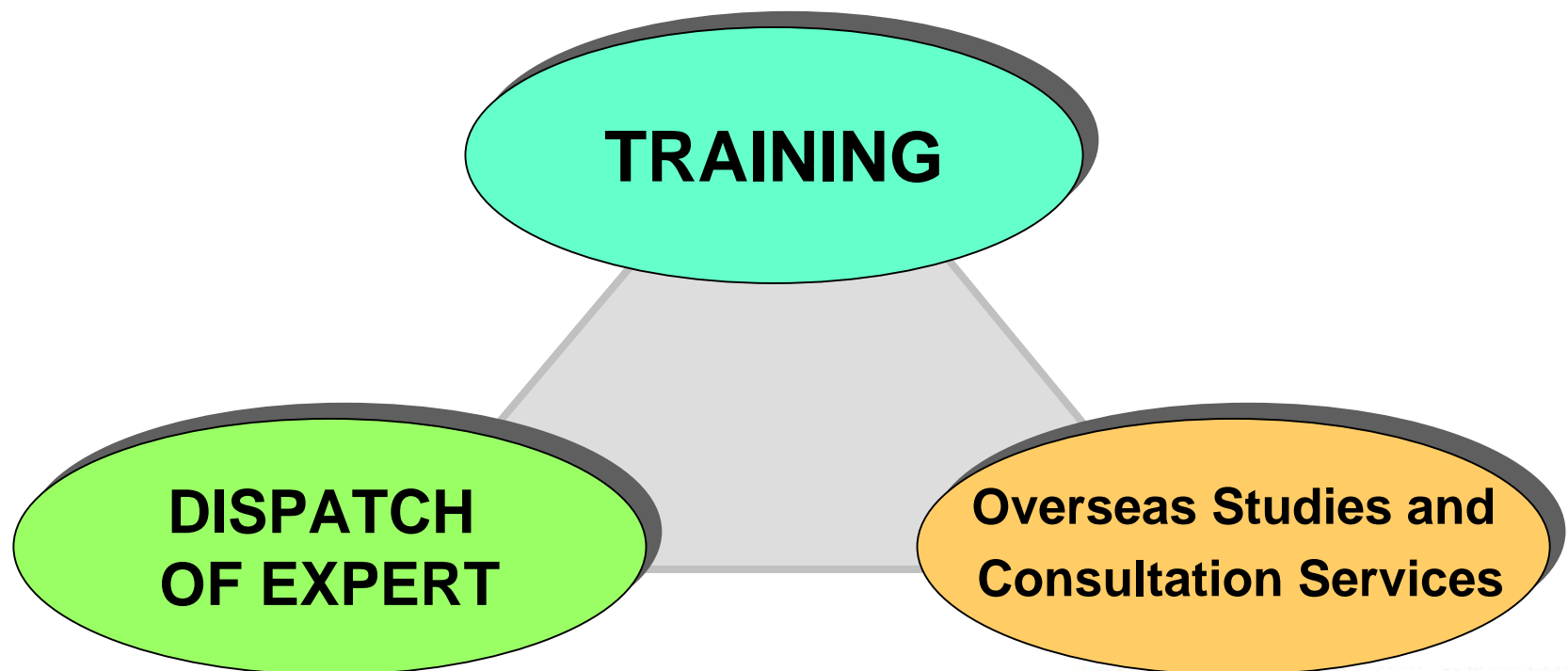


Promoting international cooperation through technical support and environment protection activities

International cooperation activities

2

Our main activities are the implementation of technical assistance for various development and research projects and energy conservation model projects.



Training

3

We have been providing technological and managerial services at home and abroad at the request of oil producing country in such fields as follows.

- * Management business Administration**
- * Demand forecast & Product Planning**
- * Marketing & Distribution**
- * Plant Operation & Maintenance**
- * Quality Control & Laboratory Management**
- * Environment & Safety Management**



(COSMO SHONAN SEMINAR HOUSE)

Dispatch of Expert

We send our experts abroad, where they assist officials, engineers and other counterparts in governmental projects. Our experts are also sent to conduct feasibility studies, company diagnoses and other consulting services.



(Workshop in UAE)

Overseas Studies and Consultation Services

5

We conduct studies on prevention of global warming in the oil-producing countries and developing countries.

**Energy saving
Environmental protection .**



(Workshop in Yemen)

Example of Technical Cooperation for Oil-producing Country

Flare Gas Recovery Project in UAE

**Abu Dhabi Oil Refining Company
(Takreer)
and
Cosmo oil**

COSMO activities in Abu Dhabi, UAE

<COSMO activities>

OIL exploration & production since the 1960s

Established subsidiary Abu Dhabi Oil in 1968

- UAE is the biggest exporter to COSMO.**
- Exchange of personnel, Technical assistance, Cultural exchange**

<HSE in UAE>

UAE is presently working on HSE

(Health, Safety & Environment) Program.

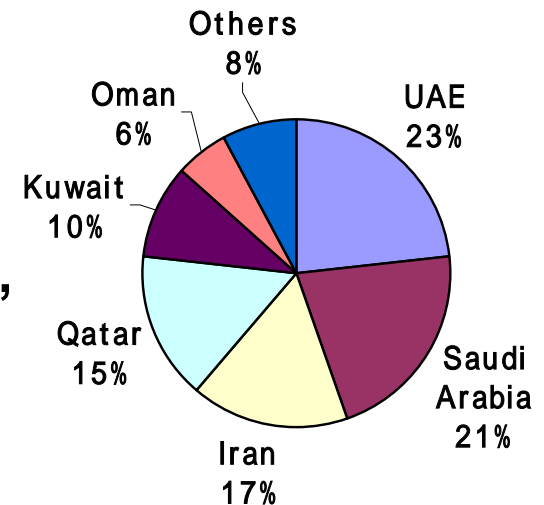
Reduction of flare gas is an important issue.

- Environmental pollution by Gas flaring**
- Conserving gas resources**

<COSMO experiences>

Two Flare gas recovery(FGR) systems are working in our refineries

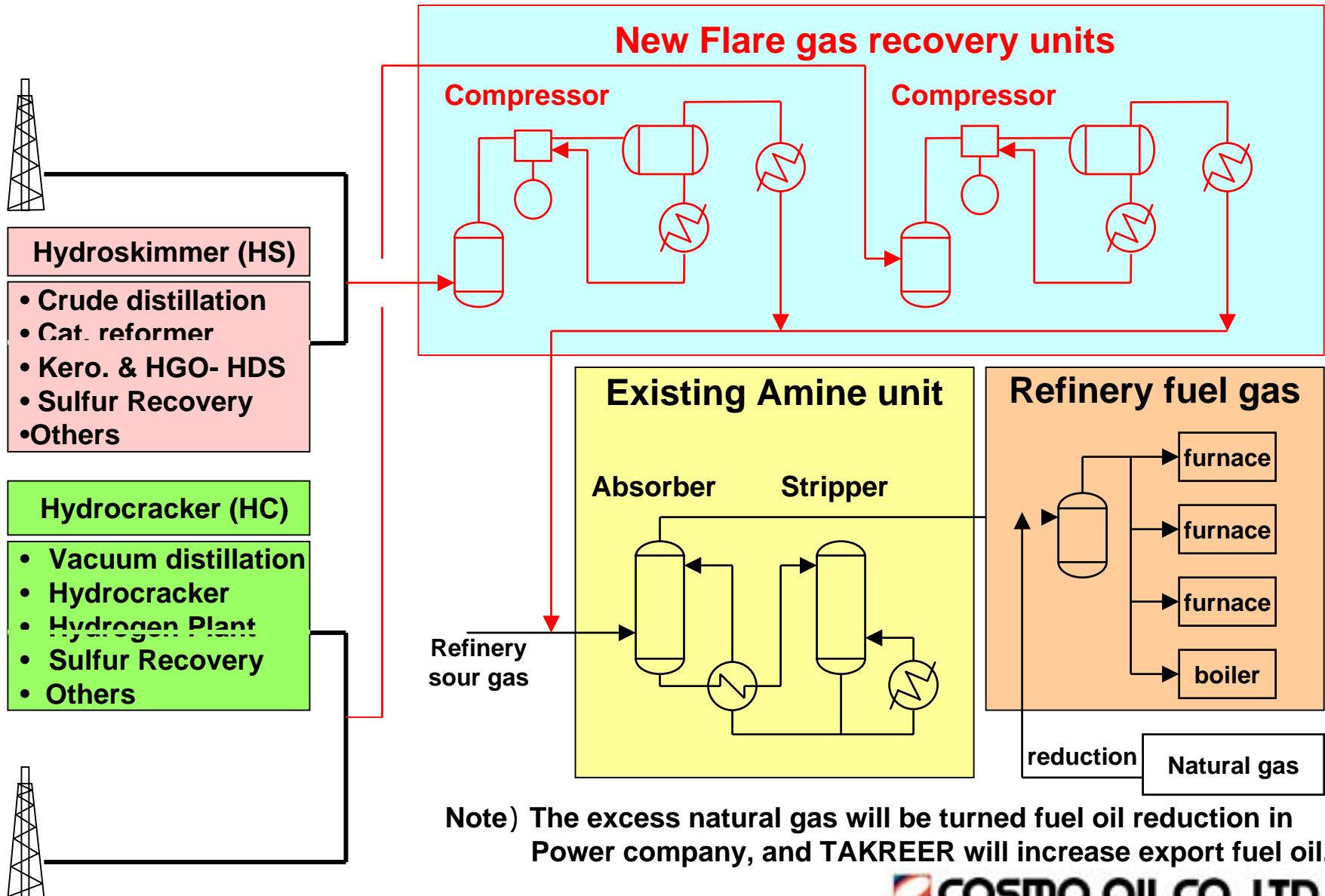
COSMO and Takreer have started the FGR Project to reduce the environmental impact through COSMO's technology.



COSMO OIL CO., LTD.

<http://www.cosmo-oil.co.jp>

Simplified flow of FGR system



Simplified flow of Re-contactor system

Installing Re-contactor system in CDU overhead section.

