



**MINISTRY OF ENERGY AND MINERAL RESOURCES
DIRECTORATE GENERAL OF OIL AND GAS**

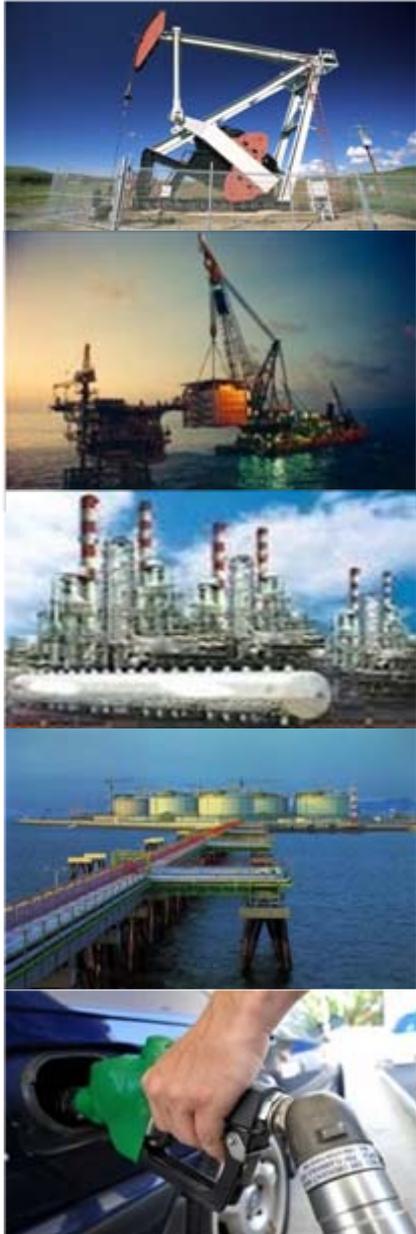
GAS FLARING / FUGITIVE EMISSIONS REDUCTION IN NATURAL GAS PRODUCTION

**By:
Directorate of Engineering and Environment Safety**

Jakarta, 6 Februari 2012

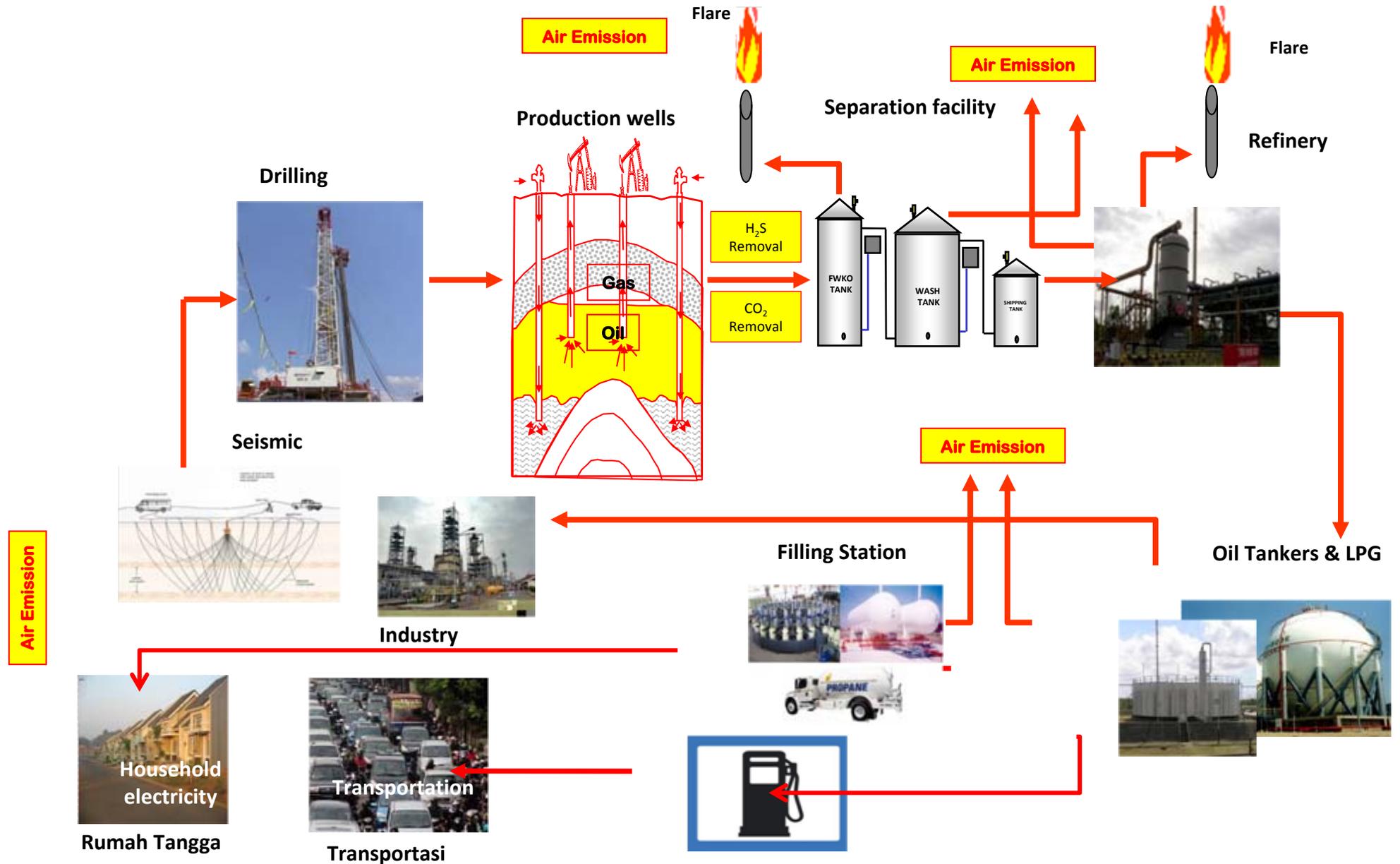
OUTLINE

- OIL AND GAS ACTIVITY
- ROLE OF OIL AND GAS INDUSTRIES
- TARGETS FOR 2025
- FLARING AND VENTING IN INDONESIA
- REGULATORY FRAMEWORK FOR GAS FLARING REDUCTION





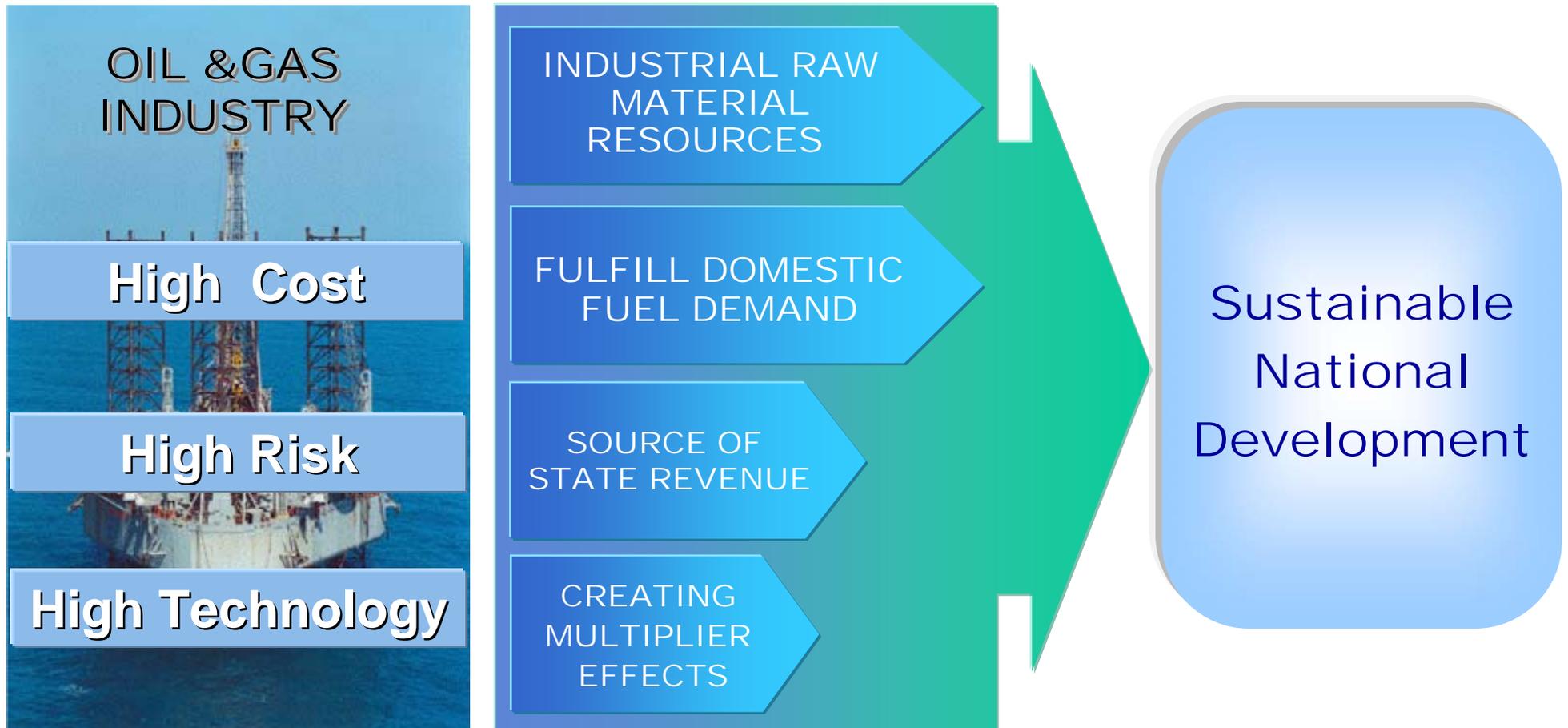
OIL AND GAS ACTIVITY





ROLE OF OIL AND GAS INDUSTRIES

ROLE OF OIL AND GAS FOR NATIONAL DEVELOPMENT





TARGETS FOR 2025



TARGETS FOR 2025

- **Maintain oil production level of 1 Million BOPD**
- **50% national operatorship**
- **Security of domestic Fuel Supply and Industrial Feedstock**
- **91% local content (goods and services)**
- **99% skilled national worker**
- **Achieving oil and gas safety, zero accidents, zero failure, and achievement of **zero flares**, and **zero waste****



FLARING AND VENTING IN INDONESIA



FLARING AND VENTING IN INDONESIA (Based on Global Gas Flaring Reduction Study)

1. Gas Flaring in 2009: 364 MMSCFD (GGFR Study)
2. Equivalent to ~10 MMTCO₂e
3. Equal or greater amount of CO₂ directly vented during gas processing



SPREAD OF FLARE GAS

No	PSC	Field	Area	Flowrate (BBTUD)
1	Petrochina International Jabung Ltd.	South West and West Betara	Jambi	14.5 ramp down 7
2	Petrochina International Jabung Ltd.		Jambi	
3	PT Pertamina EP Region West Java		West Java	2
4	PT Pertamina EP Region West Java		West Java	0,7
5	PT Pertamina EP Region West Java	Kandanghaur	West Java	0,7
6	PT Pertamina EP Region West Java	Pegaden	West Java	0,5
7	Kodeco Energy Co. Ltd	Madura Strait - Gresik	Madura Block	2,481234
8	PT Pertamina Hulu Energi Tuban East Java	Mudi	Bojonegoro,	17
9	PT Pertamina Hulu Energi Tuban East Java	Lengowangi	Tuban, East Java Province	5
10	PT Pertamina Hulu Energi Salawati	Salawati	Sorong, Papua	4-5



REGULATORY FRAMEWORK FOR GAS FLARING REDUCTION



REGULATORY FRAMEWORK FOR GAS FLARING REDUCTION

- **FLARING AND VENTING MANAGEMENT PRINCIPLES**
- **REGULATORY AGENCY**
- **STAKEHOLDER CONSULTATIVE COMMITTEE**

Government

DG MIGAS (Chair)
BP MIGAS
LEMIGAS
Ministries of Finance and Environment
BAPPENAS

Private sector

Representatives of upstream oil and gas operators (selected by IPA)
Representatives of major gas users

- **TECHNOLOGY SELECTION**
- **LIMITATIONS ON GAS FLARING**
- **FLARING PERMITS**
- **MANDATORY REQUIREMENTS FOR FLARED GAS REDUCTION**
- **INCENTIVES FOR PROJECT DEVELOPMENT**
- **MEASUREMENT, MONITORING AND REPORTING**

Offshore/Onshore Flare Gas

1. For all PSC, TAC and JOB

- Economically and Financially Feasible
 - Gas sales and utilization:
 - Direct sales to commercial customers
 - LNG
 - Re-injection in pipeline
 - Re-injection for EOR : Gas Lift
- Economically and Financially Feasible with Intervention
 - Need stimulation such as incentive
 - Provide infrastructure by government

2. DOWNSTREAM SIDE

The numbers of gas flare is not significant from these activity that maximize own use is the best way in troubleshooting gas flare reduction.



ACTION PLAN IN 2012

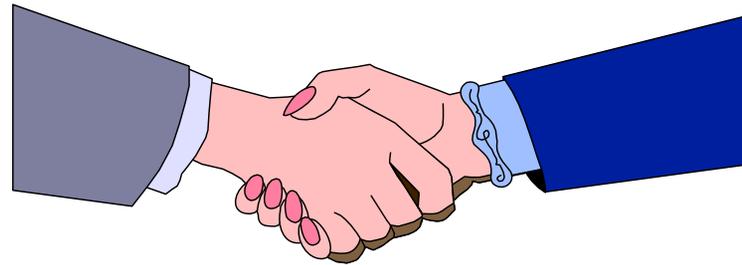
PRESIDENT'S DELIVERY UNIT FOR
DEVELOPMENT MONITORING AND
OVERSIGHT (UKP4) ASSIGN TO MEMR :

- TO EXERCISE GAS FLARING REDUCTION IN PERTAMINA'S FIELD AS PILOT PROJECT.
- TO PROVIDE A MINISTERIAL DECREE REGARDING GAS FLARING REDUCTION.



MEMR

THANK YOU



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