

# Experience in GHG emission reduction and opportunities

## PT PERTAMINA EP

(A Subsidiary of Indonesia Oil and Gas State Own Company)

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## **Agenda :**

1. CDM Activities in the year of 2005
2. CDM Activities in the year of 2006 / 2007
3. Opportunities in PT Pertamina EP
4. Sources Emission / Flaring Gas in PT Pertamina EP
5. CDM Project Challenge
6. What should Government Do ?

# 1. CDM Activities in the year of 2005

- a. Carrying out the Workshop Carbon Credit of Global Gas Flaring Reduction, on September 06, 2005 at Head Office, Jl. Medan Merdeka Timur No. 6, Jakarta
- b. Proposing 2 (two) CDM Projects on October 06, 2005 :
  - 1. Construction of Oil Transportation Pipe from Tambun to Balongan.
  - 2. Reforestation for Capturing CO<sub>2</sub> Vented from CO<sub>2</sub> Removal Unit at Subang Field.
    - The projects were guided by CER (Carbon & Environmental Research) Consultant
    - Presenting the PIN (Project Idea Note) to World Bank Country Office on December 14 – 15, 2005 at Bromo Meeting Room, JSEB Tower 2, 13<sup>th</sup> floor, Jl. Sudirman Kav. 52-53, Jakarta.

- The projects keep being carried out, but could not be continued as the CDM scheme, because could not fulfill the applicable methodologies which have been approved by the CDM Executive Board

Methodologies for oil and gas which have been approved by the CDM Executive Board are :

- AM0009 : Recovery and utilization of gas from oil wells that would otherwise be flared
- AM0037 : Flare reductions and gas utilization at oil and gas processing facilities
- ACM009 : Consolidated baseline methodology for industrial fuel switching from coal or petroleum fuel to natural gas

•Note:

AM: Approved Methodology, ACM : Approved Consolidated Methodology

## 2. Activities in the year of 2006 / 2007 .

- a. Carrying out the workshop on November 24, 2006 at Oil Centre Building, Jl. MH Thamrin No. 55, Jakarta by PT Konsultan Energi Indotama and Agrinergy Ltd, UK, with agenda to increase the awareness of CDM project mechanism
- b. By the existence of PT PERTAMINA EP, the CDM Team was revised and established by the Decree of President Director No. Kpts-007/EP0000/2007 – SO on January 23, 2007
- c. Carrying out the workshop on December 29 – 30, 2007 at Bandung by Corporate HSE PT Pertamina (Persero) for identifying the projects.

### 3. Opportunities in PT Pertamina EP

#### Green House Gas Emission Reduction & Opportunities :

- a. The projects which have been carried out without CDM mechanism :
  - The Usage of Flaring Gas at Tugu, Jatibarang Field as the LPG Raw Material (4 MMSCFD )
  - The Usage of Flaring Gas at Cemara, Jatibarang Field as the LPG Raw Material (7.5 MMSCFD )
  - Substitution of HSD to Gas as Generator Fuel at UBEP Jambi (0.160 MMSCFD)
  - The Usage of CO<sub>2</sub> Emission from Oil Well at Pamanukan, Subang Field as Dry Ice ( 0.5 MMSCFD )
  - The Usage of CO<sub>2</sub> Emission from Cilamaya CO<sub>2</sub> Removal as material of Soft Drink Industry (0.776 MMSCFD )
  - Reforestation for Capturing CO<sub>2</sub> Vented from CO<sub>2</sub> Removal Unit at Subang Field (7,300 Ton CO<sub>2</sub> / Year )

b. Opportunities for CDM Projects :

- The Usage of Flaring Gas at Tambun / Pondok Tengah, Subang Field as fuel the electricity plant ( 10 MMSCFD )
- The Usage of Gas Lift for EOR at Jambi Area (0.8 MMSCFD)

## 4. Sources Emission / Flaring Gas in PT Pertamina EP

NO	REGION / FIELD	FLARING SOURCE	FLARING GAS VOLUME (MMSCFD)	NOTE
	<b>Sumatera Region</b>			
1	Rantau Field	18	0.2899	
2	Pangkalan Susu Field	10	0.3441	
3	Lirik Field	0	0	No Flaring Gas
4	Jambi Field	3	N/A	
5	Prabumulih Field	20	3.4624	
6	Pendopo Field	7	5.5	
	<b>Jawa Region</b>			
1	Subang Field	12	9.655	
2	Jatibarang Field	20	8.3775	
3	Cepu Field	1	0.362	
	<b>KTI Region</b>			
1	Bunyu Field	3	0	No Flaring Gas
2	Sangatta Field	2	0.3	
3	Papua Field	1	2	
	<b>UBEP</b>			
1	UBEP Lirik	0	0	No Flaring Gas
2	UBEP Jambi	45	0.00208	
3	UBEP Limau	8	0.95	
4	UBEP Benakat	1	0.09	
5	UBEP Tanjung	0	0	No Flaring Gas
	<b>TOTAL</b>	<b>151</b>	<b>31,33298</b>	

## 5. CDM Project Challenge :

- a. Lack of information on the CDM project, many of the potential projects owner do not apply for CDM project
- b. Lack of information that the CDM project could support the project financial from the Carbon Emission Reduction (CER)
- c. Lack of agent in Indonesia to process the project without advanced payment
- d. Most of the flared gas located in the remote area, and no facilities and infrastructure for transporting it to consumer
- e. No incentive in Production Sharing Contractor for flaring reduction

## 6. What should Government do? :

- a. Need government support to campaign the CDM project
- b. Need government support to provide the regulation which rewards the project that could reduce the carbon emission, i.e. : import tax reduction
- c. Need government support to construct the interconnecting pipe lines and / or electric power transmission from the gas production area to the consumer

Thank You