

Potential to scale-up: carbon finance for gas flaring reduction



Side Event at the Carbon Expo
Carbon Finance for Gas Flaring Reduction:
Harnessing the Potential for Sustainable Development
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Harnessing opportunities for flaring reduction through carbon finance

- Supplemental incentive for ongoing policy and regulatory efforts in developing countries
- Enabling projects facing specific prohibitive barriers
 - Switching projects with marginal feasibility from “-” to “+”
 - Leverage investment flow due to additional revenues
- Contributing to the implementation of new technological solutions:
 - Gas conversion to products: GTL, methanol, DME
 - Gas to re-injection
- Boosting feasibility of gas utilization programs grouping individual activities under unique umbrella: scaling effect

Scaling up emission reduction opportunities

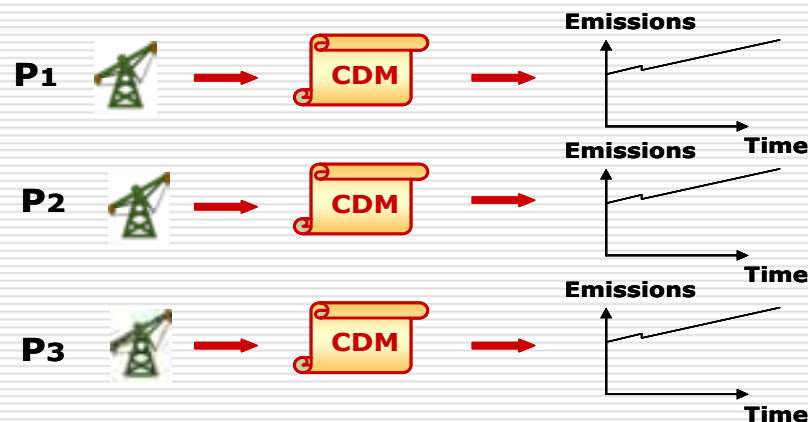
- Current context:
 - Uncertain future of carbon finance operations after 2012
 - Multiple signals for the maintain of the market-based flexibility mechanisms

- Current and future needs:
 - Enlarge the scope of flaring reduction efforts to make substantial impact
 - Provide a longer-term visibility to decision makers and investors:
 - Gas flaring reduction projects are long-term and capital-intensive
 - To unlock larger potential – need to act now

Project by project vs programmatic approach

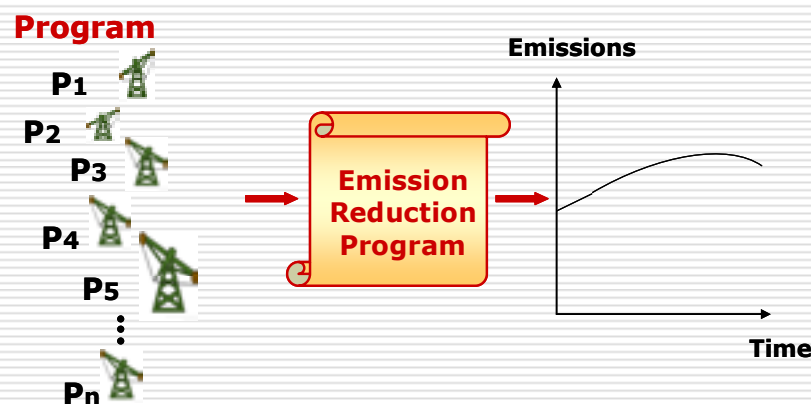
□ Project by project approach:

- Higher transaction costs
- Lower predictability for project owners
- "Individual" impact on emissions



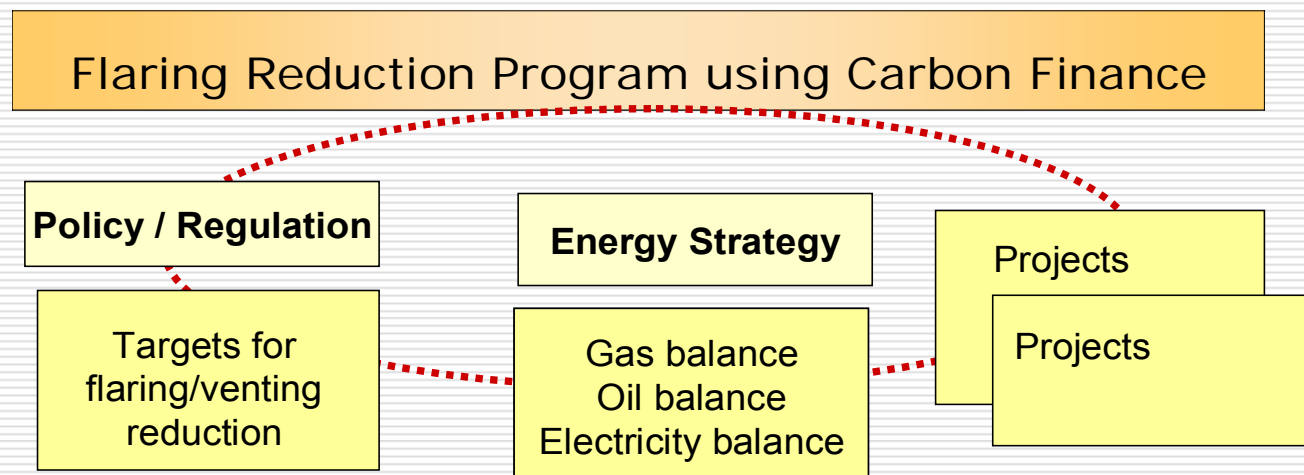
□ Programmatic approach:

- Larger scale of activities
- Better planning environment for project owners
- Transformational impact on emission trend



Strategic approach maximizing the potential for sustainable development

- ❑ Sector-wide and geographic overview of gas flaring
- ❑ Barriers / limitations hampering flaring reduction
- ❑ Identify carbon revenue utilization maximizing its leverage



Starting from the programmatic approach to CDM...

- Program of Activities:
 - Implementation of a policy, measure or goal, e.g.
 - Implementation of the GGFR Voluntary Standard
 - Gas used for rural electrification
 - Institutional, financial and methodological framework to achieve emission reductions

- CDM Project Activity within a Program:
 - Individual Project Activity that actually generates ERs
 - Multiple locations, participants
 - One coordinating entity (private or public)

Advantages of programmatic approach

- Additionality demonstration:
 - Program of Activities would not be implemented, or
 - Policy/measure would not be enforced, and/or
 - Program of Activities leads to greater enforcement of a policy/measure (i.e. Global Standard)

- One baseline & monitoring methodology:
 - Significantly reduce efforts and risks of each activity to generate carbon assets

- To enlarge the scope of programs - would need to include combination of methodologies

Identifying pilot programs commonly with local partners

- Identification of potential programs through discussions with:
 - National/regional governments and their agencies
 - Public and private oil companies

- Focus on strategic context and alignment with
 - The priorities of the host country
 - Select actions that would leverage the positive impact on the sustainable development

What could be possible a program for associated gas utilization ?

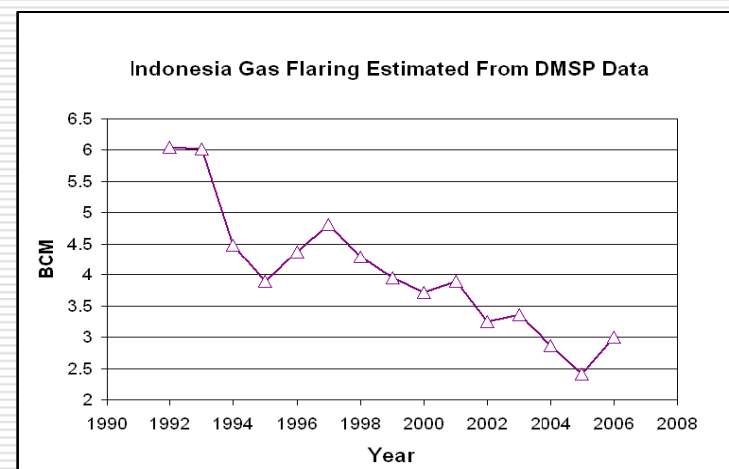
- Delivering associated gas-to-power for local markets:
 - Access to local power generation
 - Utilization through bundling of marginal fields
 - Provide access to electricity to the rural areas

- Program enabling National Oil Company to fulfill investment programs

- Program of regional export projects (gas-to-pipeline):
 - Supply less carbon-intensive energy in the region
 - Expand export capacities to neighboring countries

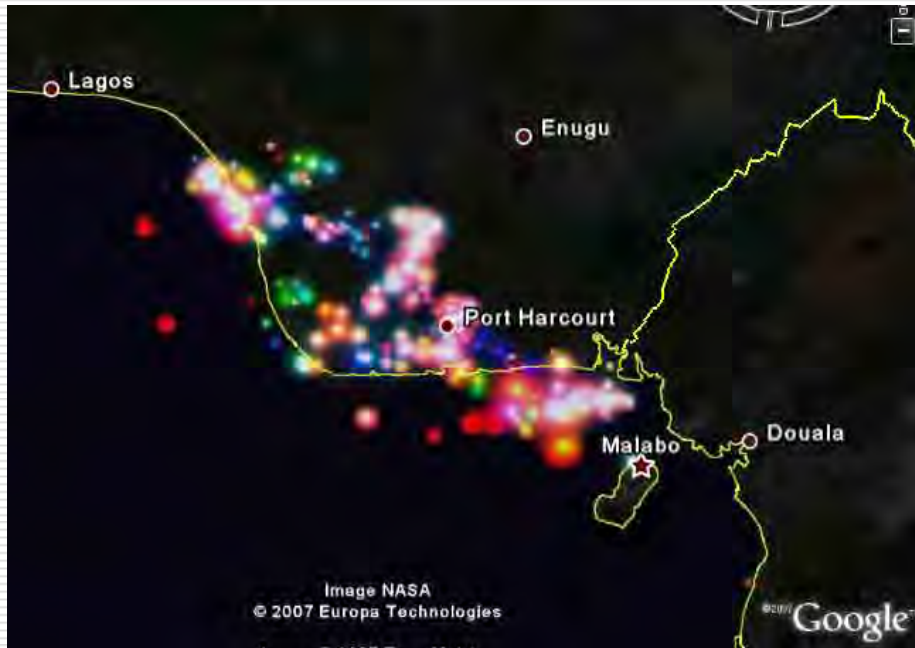
Are there opportunities in e.g. Indonesia?

- ❑ 3 Billion cubic meters flared in 2006
- ❑ 8 mln tonnes CO₂eq
- ❑ Onshore 2 Bcm, offshore 1.1 Bcm
- ❑ More than 500 producing fields



- ❑ Onshore:
 - ❑ Small scale power generation opportunity?
 - ❑ Study selected 26 fields as candidates (100+ flares)
 - ❑ Harnessing valuable energy source & reduce diesel-oil consumption
- ❑ Offshore:
 - ❑ Larger fields than onshore, gathering systems required
 - ❑ Multiple operators

Are the opportunities in e.g. Nigeria?



Earth Observation Group , U.S. NOAA, National Geophysical Data Center

Flares
 Red - 2004
 Green - 1998
 Blue - 1992

25 Bcm flared

Government of Nigeria reiterated flare down target

Insufficient power supply capacity to meet the national demand

Using associated gas for power could have a significant development impact

Existing enabling platform: Nigeria Flare Reduction Committee`

Opportunities and challenges

- Scaling-up the leverage of carbon finance to reduce gas flaring
- Structuring and implementing successful programs will require strong support and engagement of host countries and project developers
 - Assuring sizeable contribution of programs to host country development goals
- Significant methodology and operationalization effort is required
 - Need enabling and evolving methodological approaches
 - Need an effective coordinating entity

Thank you very much for your
attention!