

# Global Gas Flaring Reduction Partnership

9th Steering Committee Meeting

Houston, May 30th, 2008



# Global Relevance of GGFR

---



# The Climate Change Imperative

---

- World-wide Recognition
  - UNFCCC Meetings
  - IPCC Nobel Peace Prize 2007,...
- At the country level
  - Strict environmental policy adopted across all GDPs per capita
- At the corporate level
  - Focus on major oil companies to move to low carbon energy solutions
- At the World Bank Group level
  - New Climate Change Funds are being developed
  - Visibility of GGFR at the presidential level

# GGFR is recognized FR focal point

---

- GGFR has increased awareness about gas flaring globally through
  - International and regional conferences in Norway, Algeria, France, Russia
  - Best practice dissemination
  - Active media campaign
- GGFR Work programs in key gas flaring countries (Russia, Nigeria Flare Reduction Committee)
- Plans Global Forum for Flare Reduction in Amsterdam (Dec 08) and regionally focused conferences,
- GGFR is negotiating work programs in new countries
  - Gabon, Kuwait, Oman, and Qatar

Gas Flaring has achieved global visibility through GGFR efforts

# What has changed since Phase I?

---

- Flaring countries publicly acknowledge flaring problem, recognize resource waste and environmental damage
- A number of oil producing countries now have a deadline for zero routine gas flaring: Nigeria, Equatorial Guinea, Qatar, Kazakhstan
- GGFR is an active player in flaring reduction implementation in key countries :
  - e.g. Nigeria through the Nigeria Flare Reduction Committee
- Several Middle East countries have started or consolidated their dialogue with GGFR: Kuwait, Qatar, Oman, Iraq

# What has yet to change?

---

- Despite best intentions, flare reduction policies and targets not universally enforced
- Total global flaring remains stable but not yet in decline
- GGFR Global Standard endorsed, but its collaborative spirit not institutionalized in all Partner countries
  - Many countries lean towards punitive measures
  - Companies not produced AGRPs
- Carbon financing for flare reduction projects is moving slowly despite great potential

# Current Effectiveness Rating

---

- Partners have expressed satisfaction for Phase 1 & 2 accomplishments
- The World Bank supports continuation of global gas flaring reduction activities
- Flare reduction remains among the most cost effective ways to reduce GHG emissions
- Appropriate regulation and economic incentives are essential to stimulate rational flare reduction activity

# Benefits for Countries working with GGFR

---

- Global recognition for active participation through active GGFR communication campaign
- Technical Assistance and Capacity Building on Regulatory
- Facilitated public-private cooperative approach to Flare Reduction Actions
- Creates value and utility from current wasteful practice
- Possibility to leverage associated gas utilization into large scale non-associated gas development and market creation

# Benefits for Sponsors contributing to GGFR

---



- Global recognition for active participation through active GGFR communication campaign
- Knowledge sharing opportunities for operational and regulatory best practices
- Significant and cost efficient contribution to global GHG emission reduction

# Benefits for Companies joining GGFR

---

- Global recognition for active participation through active GGFR communication campaign
- Shared best operational practices
- Facilitated public-private cooperative approach to Flare Reduction Actions
- Support in seeking carbon finance for flare reduction and natural gas infrastructure projects
- Possibility to leverage associated gas utilization into large scale non-associated gas E&P opportunities

# Update on GGFR Activities



- |                                       |                               |
|---------------------------------------|-------------------------------|
| 1 Stakeholder Facilitation            | 5 Best Practice Sharing       |
| 2 Project Facilitation                | 6 Gas Flare Data Collection   |
| 3 Carbon Finance                      | 7 New Programs                |
| 4 Gas Utilization & Feasibility Study | 8 Communications and Outreach |

# Facilitation - Nigeria

---



- GGFR “Flare reduction in Nigeria” workshop, Sept. 2007
  - Brought together key stakeholders (Govt, operators, NNPC and NAPIMS) to develop a cooperative approach to flare reduction
  - Agreed to form the “Nigeria Flare Reduction Committee”, chaired by the Minister of Energy (gas)
  
- Nigeria Flare Reduction Committee established Nov. 2007
  - Government, operators and NNPC/NAPIMS represented
  - Communities affected by flaring were invited, but none participated
  - Facilitated by GGFR
  - Provides advice and information to the Minister on flare reduction
  - Thirteen meetings to date
  - Briefing of the Minister May 27th

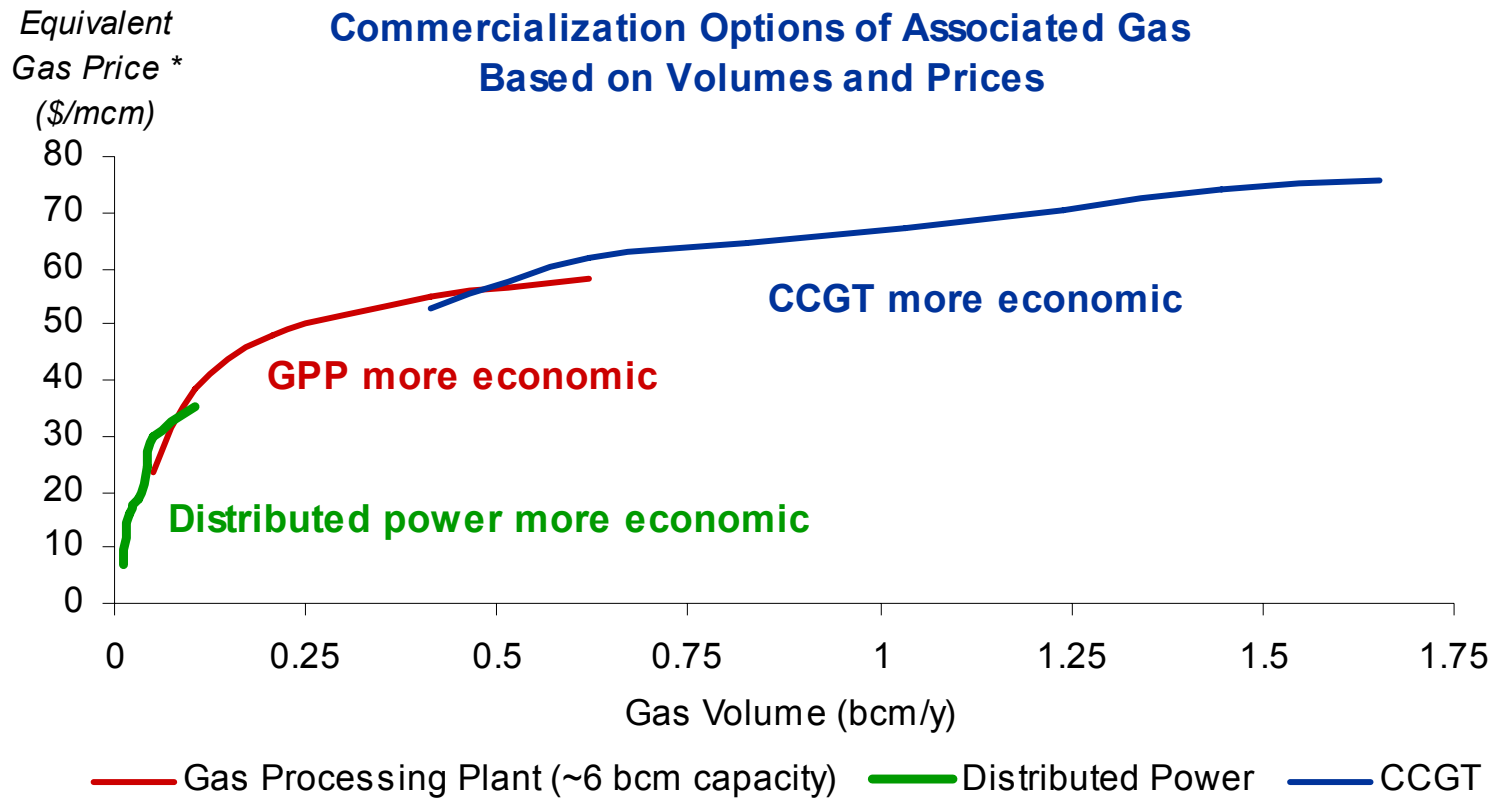
# Facilitation - Russia

---



- International Conference “Associated Gas Utilization in Russia” initiated and co-hosted by GGFR in October 2007
- Bilateral meetings with the government & other stakeholders
- GGFR sponsored study on economics & key barriers to AG utilization in Russia
- WB President to meet with Russia’s President & PM in June to discuss GGFR/WB assistance
- IFC financing of AG utilization projects

# Russia: GGFR Sponsored study on AG utilization (1)



\* The maximum price that an owner of GPP, CCGT, and distributed power could pay the field owner after connections costs and still make a 10% real rate of return

# Russia: GGFR Sponsored study on AG utilization (2)

---



## *Recommendations*

- Measurement & reporting
  - Improve flare measurement, reporting and monitoring
  - Strengthen enforcement with strong penalties
- Gas Price
  - Continue to raise domestic prices
- Regulation
  - Include AG utilization provisions in production licenses
  - Develop a clear and enforceable flaring regulatory regime
  - Establish a single flare regulator
- Infrastructure access
  - Prioritize access for AG into the trunklines
  - Establish an independent regulator to enforce transparent and non-discriminatory gas trunkline access
- Incentives
  - Use Carbon Finance and consider tax incentives

*Develop flare reduction policy in consultation with all stakeholders*

# Facilitation - Equitorial Guinea

---

---



- Regional cooperation achieved through GGFR in 2004-5
  - Objective: supply associated gas to EG LNG terminal (planned Train II)
  - GGFR meeting gathered key stakeholders: Equatorial Guinea, Sonagas, Nigeria, Cameroon, Marathon, and ExxonMobil
- As a result, two HoA for gas supply were signed with EG

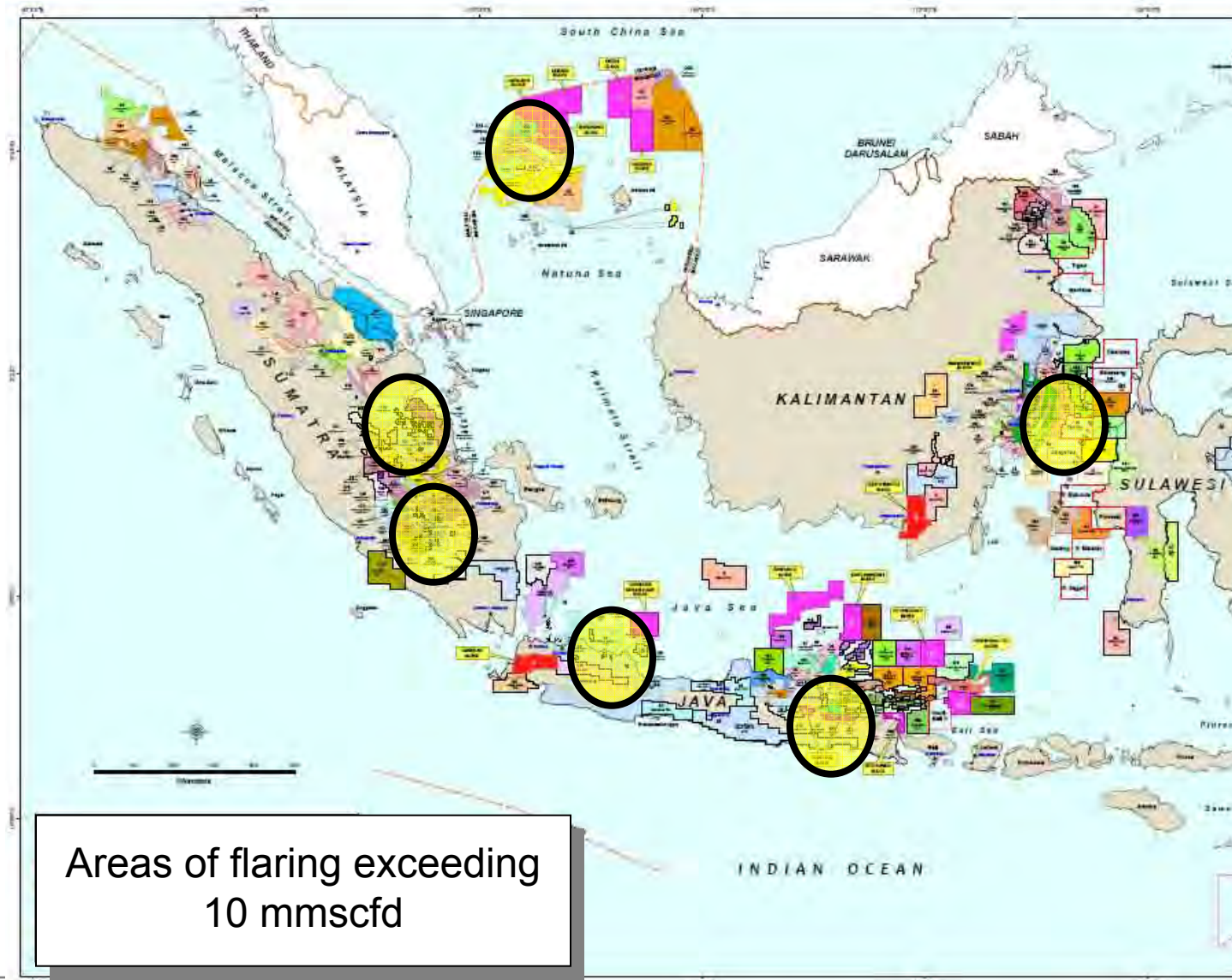
# Gas Utilization and Feasibility Studies - Indonesia

---



- Results
  - Provided indicative annual data by major fields
  - Not consistently accurate and not current
  - Recommendations are debatable
    - > Small scale local power vs gas gathering infrastructure
  
- Next Steps
  - Verify flaring/venting data (coordinate with MIGAS request for data)
  - Identify projects
    - > Candidates for aggregation
    - > Local end-use
  - Provide TA on project design and CDM (Programmatic Approach)

# Indonesia - Potential Flare Aggregation Projects



# New Programs - Re-engagement with Latin America

---



- Brazil
  - Initiated dialogue with Petrobras, potential support offered:
    - > Programmed Best practice exchange visit
    - > PB's "radical gas flaring reduction" effort
    - > Roll out of Gas Utilization Program
  
- Mexico
  - Dialogue with Pemex under World Bank Low Carbon Growth Study
    - > Offering support to develop AG Reduction Plan
    - > Technical Assistance through Best Practice sharing with GGFR partners

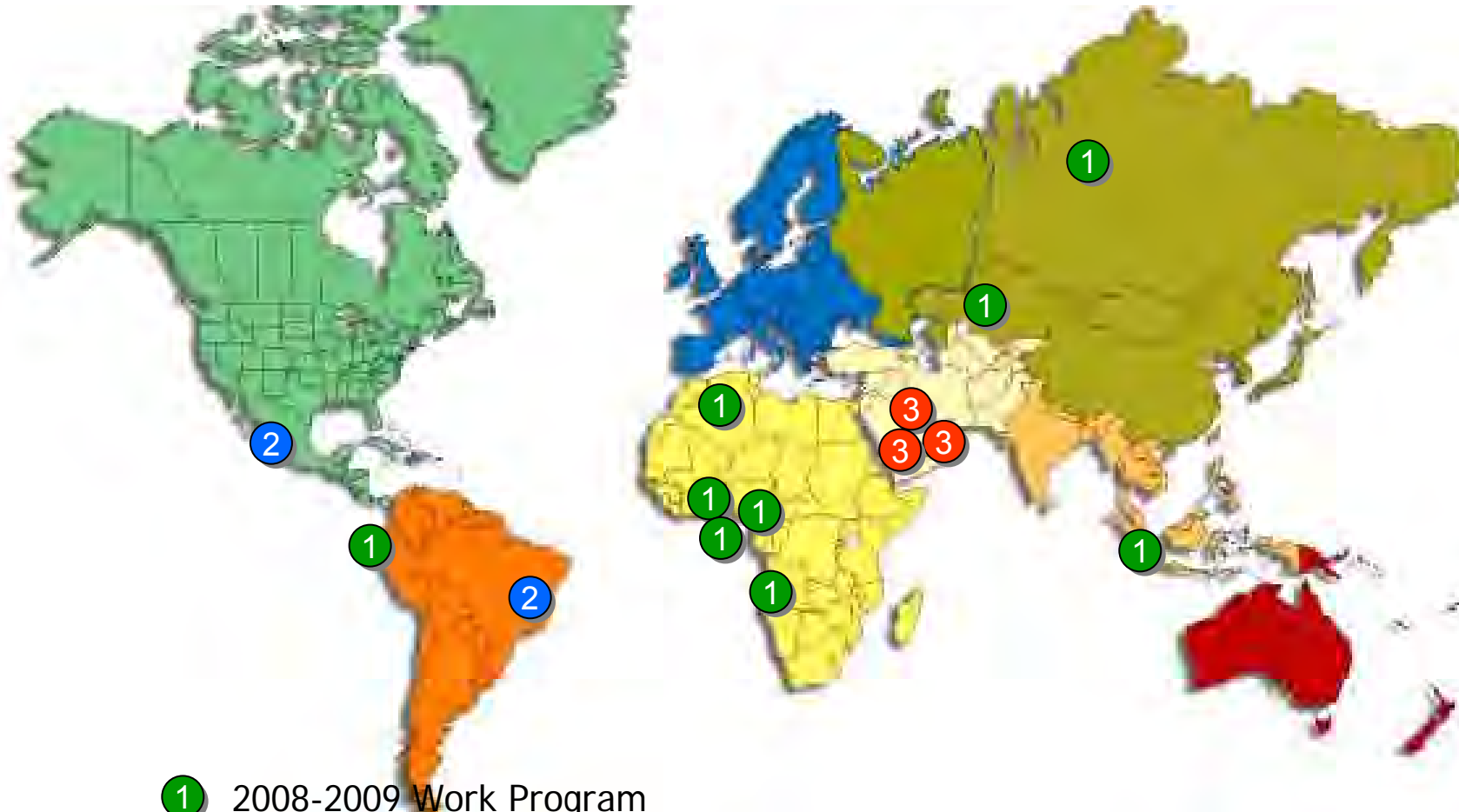
# New Programs - Middle East

---



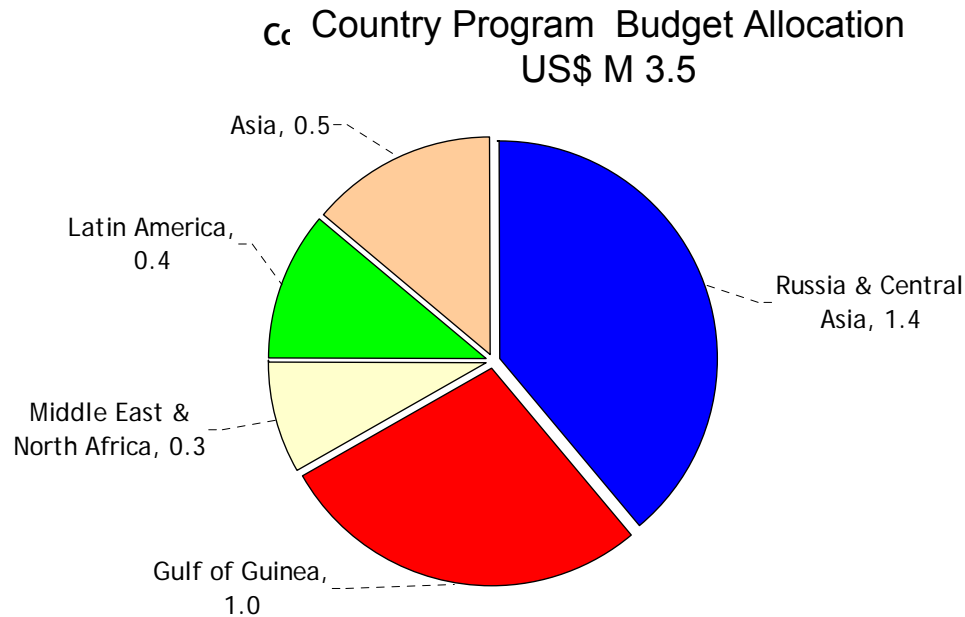
- Second largest flaring region in the world
- Iran and Iraq, as third and fourth largest flaring countries in the world, together flare more than 20 bcm/y
- Large reserves yet to be developed
- Medium term gas flaring reduction policy action should focus on a zero routine flaring policy in Middle East
- Iraq officially requested to join GGFR
- Focus countries: Kuwait, Qatar, and Oman
  - Awaiting final agreement to join

# GGFR Work Program 2008-2009



- ① 2008-2009 Work Program
- ② Re-engagement in Latin America
- ③ New Program in Middle East (subject to financial contribution)

# GGFR Work Program 2008-2009



## Staffing (9 full time)

- 1 Program Manager
- 3 Economists/operations officers
- 2 Secondees
- 1 Consultant
- 1 Communication Officer
- 1 Program Assistant
- 3 Locally-based consultants (part time)

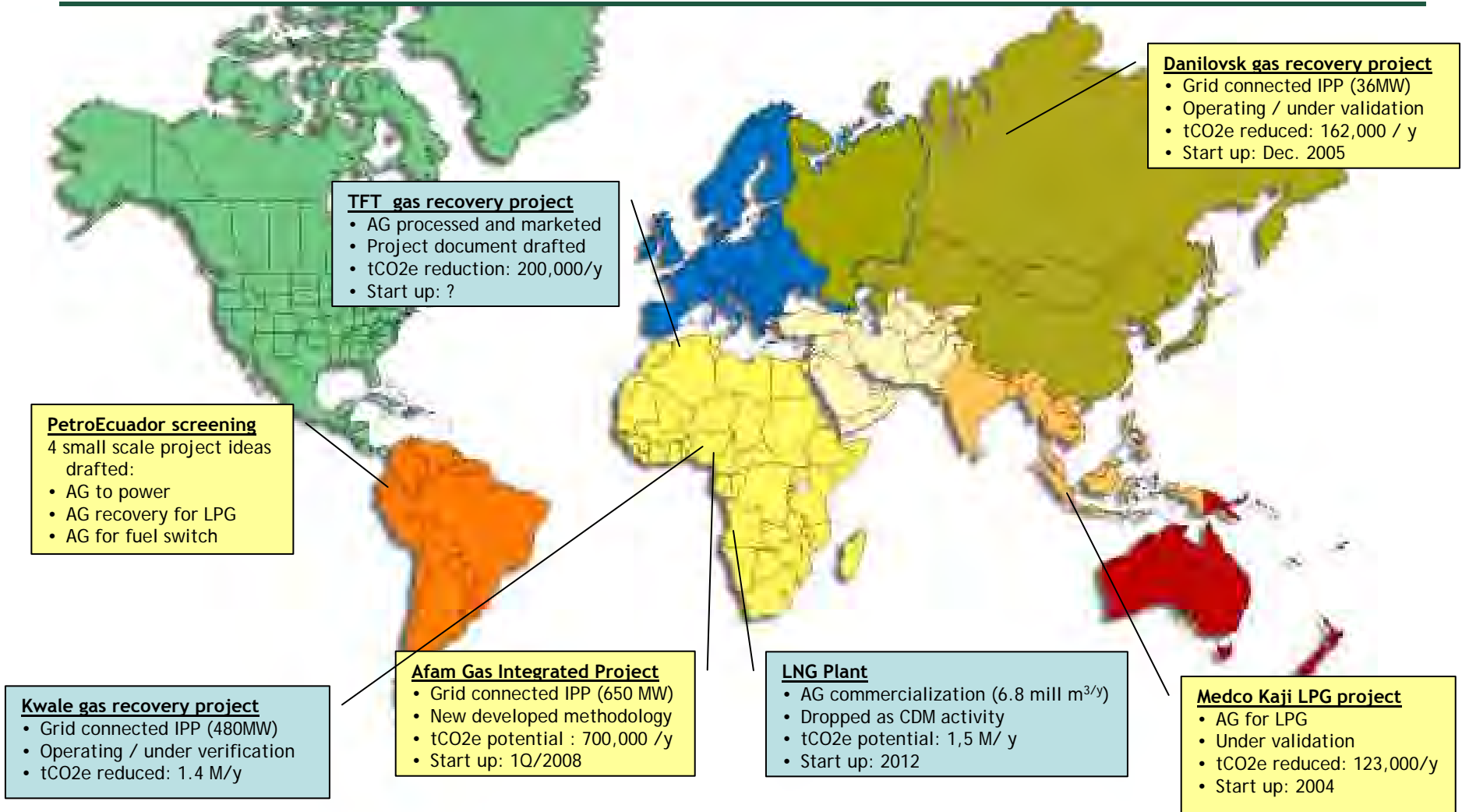
# Carbon Finance Activities

---



- Technical Assistance
  - Drafted four Project Idea Notes with PetroEcuador
  - Workshop for the Nigeria Flare Reduction Committee
  - Evaluating further TA for NFRC and NNPC
- CDM Methodologies
  - Awaiting approval for Afam methodology (Nigeria)
  - Strengthening existing approved methodology (AM009 v3)
  - Supporting new gas re injection meth (under review)
- Scaling Up under new funds:
  - Carbon Partnership Facility: Programmatic Approach
  - Seeking Eligibility under Clean Technology Fund
- Demo projects
  - Seven demonstration projects (see next slide)

# Carbon Finance Demonstration Projects



As of June 1, 2008, the Kwale project has been registered.

# Best Practice Dissemination

---

---



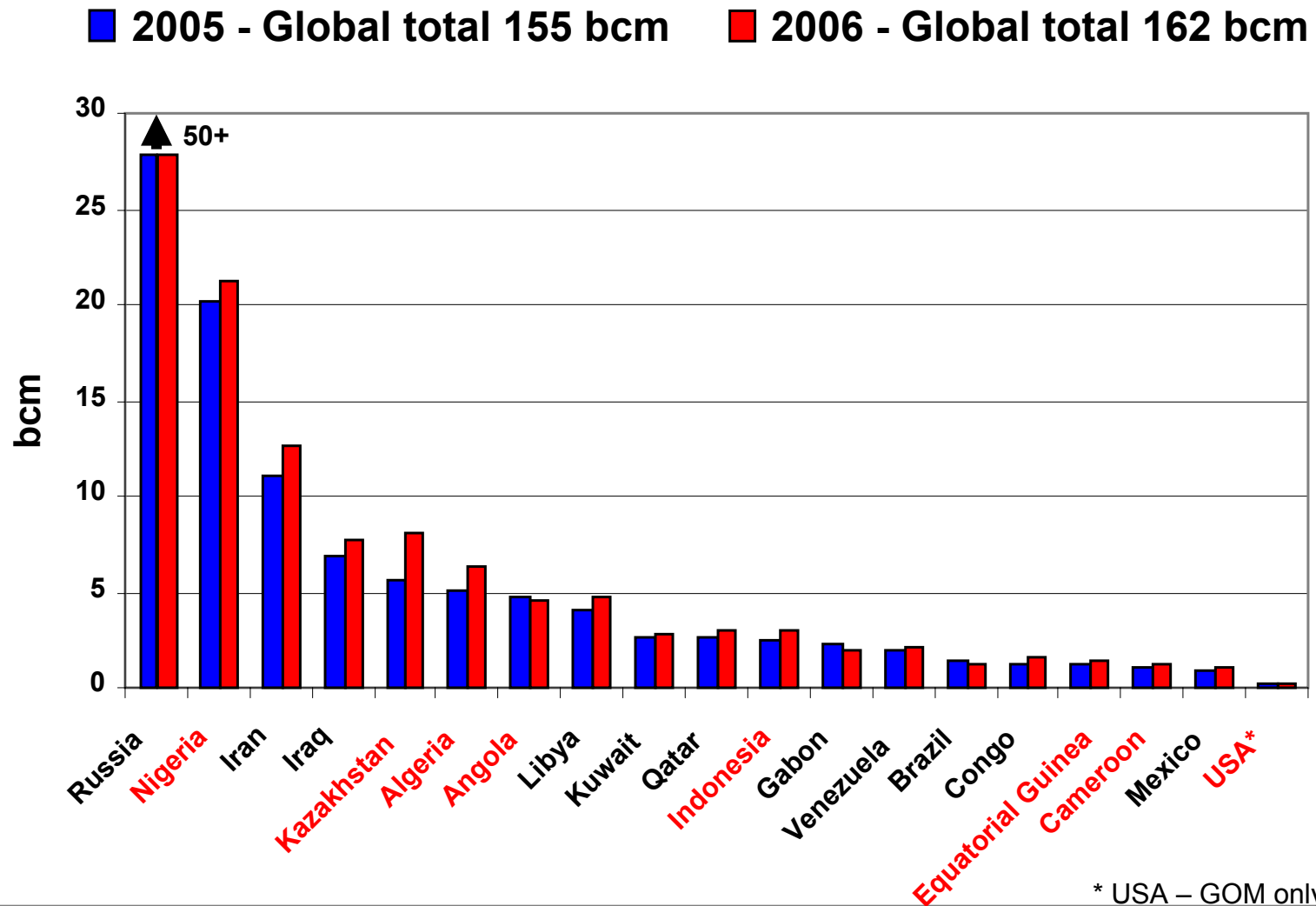
- Recent Activities

- Conference on Associated Gas Utilization, Moscow, Oct. 07
- Regulatory workshop, Calgary, May 08

- Planned/ongoing Activities

- Global Forum on Flare and Vent Reduction and Natural Gas Utilization, Amsterdam, 3-5 December, 2008
- Guidance on Flare and Vent Policy and Regulation
- Best Management Practice (BMP)
- Regional conference in Middle East Q1 2009

# Satellite Flaring Data - 2005 and 2006



\* USA – GOM only

Source: NOAA study for GGFR

Ninth Steering Committee Meeting, 30<sup>th</sup> May 2008  
Houston, Texas, USA

# Communication - Cooperation with Partners

---



- Article in ShellWorld magazine
- Drafted Communications Strategy for Nigeria Flare Reduction Committee
- Success story in IFC's Frontier Focus (Eni's Kwale)
- Satellite view of gas flares film, animation of flaring data using Google Earth (NOAA)
- More cross-linking across Bank Group sites, partner sites, and other relevant sites
- Web redesign to identify GGFR partners

# Web Activities/Stats

---

- 13,000 visitors from 50 countries (India, Brazil top 10)
- 50,000 pages visited (Publications, About GGFR, Status reports, Global Standard)
- Top 5 downloads (satellite film, News Flare 4-5, ppflares, report #6 carbon finance)
- Highest activity on Sept 2 (launch of satellite report)

# Media & Other Outreach Activities

---

- Increased coverage: 60 stories mention gas flaring and GGFR over the past year
- Stronger brand recognition: 24 mention GGFR or World Bank in headline and/or lead paragraph
- Increased visibility in top mainstream media (Wires, WSJ, FT, IHT and The Economist)
- Other outreach activities
- Presentations in a dozen of conferences worldwide
- Side events at CarbonExpo, and 2nd Carbon Fund Conf. (Peru)
- Extensive showing of documentary, internally + externally, as educational, awareness raising tool