



Global Gas Flaring Reduction
A Public-Private Partnership

Top News Flared in
This Issue:

- ✓ **Qatar: Important Progress on Flaring Reduction**
- ✓ **Gabon: GGFR to Review Flaring Reduction Plans**
- ✓ **Azerbaijan Hosts Regional Conference**
- ✓ **Partners Improve Data Collection**
- ✓ **GGFR Meets with China Reps**
- ✓ **In the Pipeline: EBRD Joins Efforts to Reduce Flaring**
- ✓ **Briefly Vented**

The News Flare

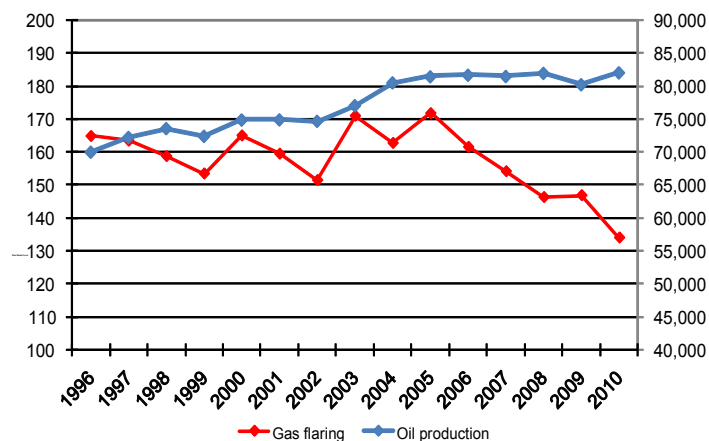
Issue No. 12 March - October 2011

Gas Flaring Down for Fifth Consecutive Year

GGFR's work in different regions, from Russia to Mexico and from Nigeria to Qatar, illustrates a common effort of harnessing potential opportunities to reduce waste of a valuable resource (natural gas), expand access to cleaner energy, and contribute to climate change mitigation and energy efficiency- hence promoting sustainable development.

Administration (NOAA), show that overall efforts to reduce gas flaring are paying off. For the fifth consecutive year flaring of gas associated with oil production has registered a drop worldwide: between 2005 and 2010, gas flaring decreased by 22% from 172 billion cubic meters (bcm) to 134 bcm, according to satellite estimates

Global gas flaring from satellite data



In this context, the GGFR partnership continues to gain traction with the upcoming inclusion of more partners such as Kuwait and the European Bank for Reconstruction and Development; the organization this year of a major regional conference in Azerbaijan; and the preparation of GGFR's upcoming tenth anniversary since the partnership was launched in 2002.

Satellite data on global gas flaring, which is a joint effort between GGFR and the US National Oceanic and Atmospheric

Administration (NOAA), show that overall efforts to reduce gas flaring are paying off.

Last year's reductions, from 147 bcm in 2009 to 134 bcm in 2010, occurred despite a two-million barrel-a-day increase in crude oil production over the same period. The 13-bcm decline in 2010 is roughly equivalent to 30 million tons of CO₂ emissions, or to taking almost six million cars off the road.

Most of last year's estimated reductions were achieved in Russia and

This newsletter is prepared by the GGFR core team in Washington, DC. Any comments, suggestions or contributions from any of the GGFR partners are very welcome and should be sent to Mauricio Rios at: mrrios@worldbank.org

For more information, visit our website at www.worldbank.org/ggfr

Kazakhstan, where various stakeholders have increased investments in associated gas utilization projects.

Overall, Russia and Nigeria have seen the largest reductions but still top the list of flaring countries in 2010, which also includes Iran, Iraq, Algeria, Angola, Kazakhstan, Libya, Saudi Arabia, and Venezuela. Countries which are members of GGFR have been relatively more effective in reducing their gas flaring intensity than non-members. Latest satellite figures confirm an almost 20-percent drop in gas flaring intensity (ratio of gas flared to oil production volumes) since 2005.

Despite the significant reductions, there is no room for complacency. The 134 bcm of gas still flared worldwide in 2010 is equivalent to almost 30 per cent of the European Union's yearly natural gas consumption. Overall, the flaring of gas adds some 360 million tons of carbon dioxide in annual emissions, roughly equivalent to the yearly emissions from 70 million cars. Some flaring also emits black carbon, or soot.

There is no doubt that more efforts are needed to sustain the flaring reduction momentum and keep the downward trend. This is the challenge that all GGFR partners now face.

Country Flare Ups

Qatar: Important Progress on Flaring Reduction

GGFR and Qatar are making important progress on its gas flaring reduction program. Some of the key actions of this program include: assistance to Qatar Petroleum and the regulatory agency with the drafting of regulation on gas flaring; and the implementation of a major gas flaring reduction project consisting in collecting the boiled-off gas at the tankers jetty to re-inject it in a LNG plant.

GGFR and Qatar Petroleum also organized a workshop in May on gas flaring and GHG measurement and reporting. QP will make a decision on their overall GHG emission reporting system at the end of the year. At the workshop it became evident that Qatar has done a remarkable job in the past few years to control the flaring and venting during a period in which its oil and gas production has increased substantially.

Qatar has also set ambitious objectives in its "Qatar National Development Strategy for 2016" in terms of further controlling the flaring and venting from its operations.

Finally, Qatar has established a regulatory entity to control the HSE aspects of its work. This entity, GGFR's main counterpart, needs to develop tools to monitor the environmental situation of the industry in the country, and to identify key weaknesses and priorities. GGFR is ready to help the regulators with these challenges.

Gabon: GGFR to Review Flaring Reduction Plans

During a mission to Libreville, Gabon, a GGFR representative met with the Minister of Hydrocarbons and members of the Cabinet and agreed on a work program for the next couple of years. The Government of Gabon has established clear objectives for their gas utilization plans, including two new power generation plants, a one million ton per year fertilizer plant, and possibly a LNG plant (reserves permitting).

In the context of Gabon's gas utilization plans, GGFR will review the gas flaring reduction plans presented by operators by the end of the year. The objectives of this review are to ensure

that the operators' plans are sufficiently ambitious but also realistic, and to identify the main constraints to the implementation of these reduction plans (whether technical, market or regulatory-related). GGFR would also provide proposals for alternative regulations on gas flaring based on the experience from other countries.

Azerbaijan Hosts Regional Conference

Some 120 people participated in a regional conference on flared gas reduction co-organized by the government of Azerbaijan and GGFR in Baku on June 16-17. Participants included representatives of Azerbaijan,



GGFR participants at Regional Conference in Azerbaijan

Kazakhstan, Russia, Turkmenistan, Uzbekistan, Canada, Italy, and Norway. At the conference participants discussed different aspects of flared gas utilization and agreed on further cooperation in this area.

A GGFR representative also met with country counterparts in the region to assess progress on work plans, including the preparation of a CDM program of activities in Uzbekistan, the organization of a regional workshop in Russia (Salekhard), assistance in the preparation of Kyzyl-Orda regional gas utilization project (Kazakhstan), and capacity building on flared gas volumes measurement (Azerbaijan).

GGFR also participated in a meeting of a working group, including BP-SOCAR-GGFR, on the utilization of flared gas from the ACG oil field.

Partners Improve Data Collection

GGFR organized and facilitated a joint GGFR-UNG workshop in March on the improvement of gas flaring data collection in Tashkent, Uzbekistan. GGFR also discussed potential assistance on preparation of a CDM program of activities with representatives of the Ministry of Economy (MoE) and UNG.

GGFR also organized with SOCAR a similar workshop on improving gas flaring data collection, utilizing measurement equipment facilitated by GGFR.

GGFR in Talks with China Reps

GGFR representatives met on June 11th in Beijing with representatives of the Tianjin Climate Exchange and Chinese oil and gas companies to present the GGFR's global and country activities, as well as some of the tools for advancing flaring and venting reduction in oil and gas upstream operations.

GGFR representatives also discussed the potential of flare and vent reduction in China's upstream operations, including the role of the planned national cap and trade emission system; and the

potential areas of GGFR assistance to Chinese oil and gas companies in addressing GHG and black carbon emissions from flaring, and improving energy efficiency of upstream facilities.

Indonesia: Case Studies on Regulations

A GGFR representative met in Jakarta with various government and industry stakeholders, including a team from Economic Consulting Associates which is conducting a study on "International Practices in Flaring and Venting Policy and Regulation and their Adaptation for Indonesia".

The meeting aimed to review the first part of the study and the presentation materials for the first capacity building and stakeholder consultation workshop held on June 9. The study was commissioned by the GGFR at the request of the Directorate General of Oil

and Gas of the Ministry of Energy and Mineral Resources (MIGAS) to assist the government of Indonesia in designing the country's policy and regulations on flaring and venting management.

The first part of the study consists of seven case studies on policy and regulatory framework on flare and vent management in Norway, Alberta (Canada), Kazakhstan, Algeria, Nigeria, Qatar and Malaysia. The case studies, which focus on lessons learned about flaring regulations, were presented at the capacity building workshop which was attended by various stakeholders, including representatives of oil and gas companies.

The GGFR representative also met with government officials and various oil and gas industry representatives to get their feedback on the existing impediments and challenges for further reducing flaring and venting in Indonesia.



Aerial view of Shanghai

In the Pipeline

EBRD and GGFR Join Efforts to Tackle Flaring in Central Asia

The European Bank for Reconstruction and Development (EBRD) and the World Bank-led GGFR partnership are joining efforts to reduce gas flaring in Europe and Central Asia. Both organizations will co-manage a one-million euro study entitled “Associated Petroleum Gas (APG) Flaring Study for Russia, Kazakhstan, Turkmenistan, and Azerbaijan” which aims to identify potential projects for associated gas utilization in those four countries.

The joint study will assess gas flaring and venting operations on about 100 oil fields in the four countries, and identify the main obstacles that hinder more associated gas utilization. In addition, the study will analyze current legal and regulatory frameworks, and look into how to address market and financial barriers.

Europe and Central Asia region flared some 40 billion cubic meters (bcm) of associated gas (about 30 percent of global flaring) in 2010, and countries like Russia, Kazakhstan, and Uzbekistan are among the top 20 flaring countries in the world.



Tashkent, Uzbekistan Independence Square

Briefly Vented

At the annual meeting of the GGFR-ECA Regional Coordination Committee (RCC), committee members elected Ms. Rafiga Huseyn-zade, from SOCAR, as the new RCC Chair, and approved the work plan of the committee for the period 2011-2012. The next annual meeting of the ECA- RCC will be held next June in Tashkent, Uzbekistan.

GGFR participated in the Iraq Energy 2011 conference held in Istanbul at the end of September. Gas flaring reduction was one of the key issues discussed throughout the event, and GGFR gave a presentation and facilitated a panel discussion on the potential utilization of flared gas for much needed power generation in Iraq. Shell, TOTAL and Iraqi authorities were also part of the panel.

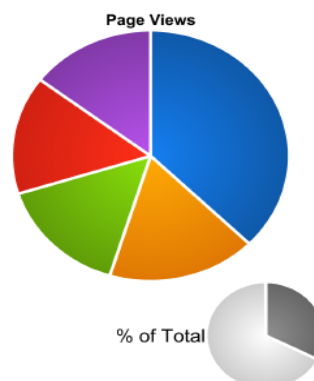
The GGFR has been invited to participate at the upcoming World Petroleum Conference in Doha. GGFR Manager Bent Svensson will present in December a paper on progress made in gas flaring reduction around the world.

Web Stats–April–October 2011 Most Downloaded Files

Files Downloaded Report

Legend

- (ggfr_news_flare_11.pdf)
 - (GGFRbrochure(updatedNov08).pdf)
 - (Guidelines_Flare_Vent_Measurement.pdf)
 - (Flares.ppt)
 - (Monitoring_Reporting_Guidelines.pdf)
- Showing ■ Remaining



GGFR Partners include: Algeria (Sonatrach), Angola, Azerbaijan, Cameroon, Ecuador, European Bank for Reconstruction and Development (EBRD), France, Gabon, Indonesia, Kazakhstan, Khanty-Mansiysk (Russia), Kuwait, Mexico (Sener), Nigeria, Norway, Qatar, United States; BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Maersk Oil & Gas, Marathon, Pemex, Shell, Statoil, Total; European Union, World Bank Group. Associated Partner: Würrsilä