

# PARTNER UPDATE Fall 2008





Flaring and Venting Reduction & Natural Gas Utilization Forum

Amsterdam 3–5 December 2008 NH Grand Hotel Krasnapolsky See page 9 for more details.

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## INTENTIONAL OR UNINTENTIONAL: DON'T SETTLE FOR NATURAL GAS LOSSES

### UPCOMING 15th Annual Natural Gas STAR Implementation Workshop

### November 11–13, 2008 + Westin Riverwalk + San Antonio, Texas

Join us in San Antonio for Natural Gas STAR's 15th Annual Implementation Workshop. The workshop begins on November 11th with site tours and technology demonstrations during the day followed by an evening reception. Technical sessions on November 12 and 13 will provide information on the most current, cost-effective methane emission reduction technologies and practices. Partner awards and noteworthy accomplishments will be featured during the Awards Luncheon on November 12th.

Sponsorship and exhibition opportunities are still available. Please visit the workshop registration website for additional details: epa.gov/gasstar/workshops/ annualimplementation/2008.html. Please see page 5 for more information.

If you have any questions, please contact Jerome Blackman (blackman.jerome@epa.gov) at EPA, or Mark Grady (meetings@erg.com) at ERG.

#### epa.gov/gasstar/workshops/annualimplementation/2008.html

# **Partner Profile**

### **ONGC Spends First Year Building Strong Base** for Natural Gas STAR Participation

n August 2007, the Oil and Natural Gas Corporation (ONGC) of India became the first non-North American based and first stateowned company to join the Natural Gas STAR International Program. During their first year of participation in the Program, ONGC has put forth significant efforts to build a strong Program base, focusing on engaging management, raising awareness of the partnership within the company, providing specialized training to personnel on Natural Gas STAR recommended technologies and practices, and building internal

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# 2008 Natural Gas STAR Reporting Summary

# **Another Outstanding Year...**

atural Gas STAR partners are working even harder-this year, partners once again achieved outstanding methane emission reductions. As the 2008 reporting season closed, domestic partners reported reducing nearly 93 billion cubic feet (Bcf) of methane emissions in 2007. These emission reductions, voluntarily undertaken by Natural Gas STAR partner companies, have crosscutting benefits on domestic energy supply, operational efficiency, revenue generation, and greenhouse gas emission reductions. This was also the first year that international partners are submitting Annual Reports to the Program. For 2007, partners in Natural Gas STAR International reported nearly 6.7 Bcf in emissions reductions and a total of 14.4 Bcf since the inception of the Natural Gas STAR International Program.

Partners have implemented more than 120 different technologies and practices since inception of the program, illustrating the effectiveness of information sharing and technology transfer within the Program and amongst partners. As partners continue to report new technologies and practices each year, the top emission reduction opportunities for each industry sector will change. The top technologies and practices implemented in 2007 by Natural Gas STAR partners include:

#### **Production**

- Perform reduced emissions completions
- ★ Install plunger lifts
- ★ Convert to instrument air systems
- ★ Install smart lift automated systems on gas wells
- ★ Identify and replace high-bleed pneumatic devices

#### **Gathering and Processing**

- ★ Directed Inspection & Maintenance at gas plants and booster stations
- ★ Directed Inspection & Maintenance with aerial leak detection using laser and/or infrared technology
- ★ Install electric compressors
- ★ Redesign blowdown/alter emergency shutdown practices
- ★ Pipeline replacement and repair

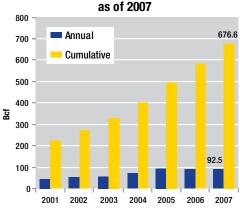
#### **Transmission**

- ★ Use fixed/portable compressors for pipeline pumpdown
- ★ Use composite wrap repair
- ★ Use of turbines at compressor stations
- ★ Install vapor recovery units on pipeline liquid/condensate tanks
- ★ Replace wet compressor seals with dry seals

#### **Distribution**

- ★ Directed Inspection & Maintenance to survey and repair leaks
- ★ Identify and rehabilitate leaky distribution pipes
- ★ Replace compressor rod packing systems
- ★ Install excess flow valves

Natural Gas STAR Emissions Reductions



★ Identify and replace high-bleed pneumatic devices

More information on these technologies and practices, and many others, is available on the Natural Gas STAR Web site at: epa.gov/gasstar/tools/ recommended.html.

Shortly, Natural Gas STAR will distribute summary reports to partners that reported by July 18, 2008. The 2008 summary reports will be individually generated to summarize each partner's progress. The overall Natural Gas STAR Program achievements will be posted on the Program Accomplishments page of the Natural Gas STAR Web site, located at epa.gov/gasstar/ accomplishments/ index.html, later in the year.

EPA congratulates all reporting partners on another exceptional year and thanks them for their efforts!

# In the News

# **Summary of Oil & Gas Subcommittee Meeting**

he Methane to Markets Oil & Gas Systems Subcommittee met in Rome, Italy on May 19th and 20th, 2008. The Methane to Markets Partnership was established in 2004 by 14 partner countries with the purpose of mitigating otherwise wasted methane emissions from key sectors: coal mining, landfills, oil and natural gas, and agriculture.

The Partnership oversees and facilitates work in each of these key sectors through Subcommittees corresponding to each sector (e.g., Oil and Gas Subcommittee). These Subcommittees work with both governments (Partners) and private organizations and businesses (Project Network members) to foster information sharing and project development in their corresponding key sectors.

The May meeting was the fifth meeting of the Oil & Gas Subcommittee. The Subcommittee's meeting featured:

- ★ Updates on country-specific strategic plan development.
- ★ Discussions to engage and acknowledge Project Network members in Subcommittee activities, as well as improve communications between the Project Network and the oil and natural gas industry as a whole.
- ★ Case study presentations on the application and use of vapor recovery units to capture vapors that collect in fixed roofs of tanks.

In addition, as a side event to the meeting, Eni—an Italian multinational oil and natural gas company, with a presence in 70 countries worldwide hosted a tour of their Research Center of Monterotondo. There, participants learned about and shared leak detection and emission reduction experiences.

Mexico has agreed to host the next Subcommittee meeting that is tentatively scheduled for the week of January 26th in Monterrey, Mexico. Meeting proceedings and the most upto-date, country-specific strategic plans are available on the Partnership Web site at methanetomarkets.org/ events/2008/oilgas/oilgas-20may08.htm.

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### Fifth International Symposium on Non-CO<sub>2</sub> Greenhouse Gases (NCGG-5)—Call for Papers

The Air Quality and Climate Change Section of the Netherlands Association of Environmental Professionals will host its Fifth International Symposium on the science, implementation, and policy aspects of non- $CO_2$  greenhouse gases (NCGG-5) in the summer of 2009. In anticipation of this symposium, the association is soliciting proposals for papers or posters for the event.

NCGG-5 will be held from June 30 to July 3, 2009 in Wageningen in The Netherlands and will address not only the role of non- $CO_2$  greenhouse gases and aerosols in human-induced climate change, but also cost-effective options for their reduction and the implementation of these options in industry and society.

Proposals may be submitted by e-mail with a maximum of 250 words to: cfp@ncgg5.org. More information on themes and topics can be found on ncgg5.org. Abstracts should be received by December 1, 2008. Notice on acceptance of proposals will be given by March 1, 2009.

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# Join us at the next Oil & Gas Subcommittee Meeting

### Scheduled for January 2009 in Monterey, Mexico

Check http://www.methanetomarkets.org/ events/index.htm for updates later in the year.

## In the News

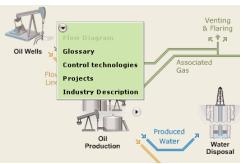
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ook for the new Nodal Analysis Tool. This free, online tool, developed by the government of Canada for the Methane to Markets Partnership, helps you to find cost-effective methane reduction technologies and practices along most points in oil and natural gas systems. And it's nodal, so you choose where to focus: at the well head, in the pipelines, in the station, or anywhere in between. You can link the tool to your intranet site for easy reference.

The tool allows policy makers, project developers, project financiers, environmental professionals and others in the

# Looking for Oil and Natural Gas Methane Emission Reduction Ideas?

oil and natural gas industry to see information on all facets of the oil and natural gas production process. Users can learn how aspects of the oil and natural gas industry and their associated processes interrelate, drill down to detailed diagrams of the supply chain, and find current best practices, guidance documents, and technologies to reduce methane emissions. Each node includes a built-in glossary of key terminology and control technology information on ways to reduce methane emissions. You can also upload information about your projects to engage project developers, emissions brokers, financiers, and technology providers.



This flow diagram shows the "Oil Well" dropdown menu. Users click on the different menus to access additional information on oil wellrelated activities.

Learn more about the Nodal Analysis Tool during the 15th Annual Implementation Workshop in San Antonio! Register at epa.gov/gasstar/workshops/ annualimplementation/2008.html. You can also view the tool online now at gastool.methanetomarkets.org.

# Take a Closer Look at the New Natural Gas STAR Web site!

he Natural Gas STAR Program has a newly redesigned Web site. As part of this redesign, all of the Natural Gas STAR Web pages have been revised, reformatted and "refreshed" to include the most up-to-date information presented in an informative and user friendly way.

#### Below are just a few of the new key features worth checking out:

★ New "Guidelines to Participation"presents a clear guide to implementing and administrating a successful program, including detailed information on developing an implementation plan, gaining support for your Program, and the annual reporting process. The Natural Gas STAR Web site has been redesigned to provide our partners with a clearer path to the latest innovative methane saving technologies and practices. We believe that the redisigned site will improve access to cutting edge tools, technical information, and resources that will assist the oil and natural gas industry in overcoming challenges to reducing methane emissions and delivering more gas to markets.

—Paul Gunning, *Chief of EPA's Non-CO<sub>2</sub> Programs Branch* 

- \* "Beyond the Basics" outlines ideas, tools, and resources for new and existing partners to expand their program beyond the basic requirements, such as our Partner Challenge Service for identifying and prioritizing methane emission reduction opportunities.
- ★ New Communication Templates and Power Point Slides- formatted and ready for use in partner presentations and newsletters to

build support for your Program and showcase your company's achievements, including new case study spotlights on noteworthy Natural Gas STAR partner activities.

★ Improved Industry Data and Graphical Summaries— informing partners of oil and natural gas industry methane emissions and top emission reduction opportunities in the United States and abroad.

## Register today for the 15th Annual Natural Gas STAR Implementation Workshop!

#### **INTENTIONAL OR UNINTENTIONAL:**

### **DON'T SETTLE FOR NATURAL GAS LOSSES**

# The Implementation Workshop will take place November 11–13, 2008, at the Westin Riverwalk in San Antonio, Texas.

Please join us for the Natural Gas STAR Annual Implementation Workshop November 11-13, 2008. In celebration of the 15th occurrence of this can't-miss event, we're hosting the workshop in the exciting Riverwalk area of beautiful San Antonio, Texas. Furthermore, to reflect how the Natural Gas STAR program has grown, the 2008 workshop will highlight our expanding international efforts.

The workshop is designed to focus on a range of issues, including:

- ★ Greenhouse gas awareness programs and management systems
- ★ Technology demonstrations
- ★ Successful mitigation programs
- ★ Carbon financing issues

In addition to three concurrent technology tracks focused on methane emission reduction options for the production, gathering and processing, transmission and distribution sectors, the workshop will also offer attendees the option of visiting a production or gathering and processing facility to see demonstrations of various emission reduction technologies on Tuesday, November 11.

Registration and information on the workshop facility, hotel, and sponsorship opportunities are now available on the Natural Gas STAR Web site at: epa.gov/gasstar/workshops/index.html

- ★ Workshop location: Westin Riverwalk in San Antonio.
- ★ Hotel reservations: Call the Westin at (888) 627-8396 and reference the EPA Natural Gas STAR Workshop to receive the special conference rate of \$219 single/double plus 16.75% state and local tax. This rate will be available until October 13, 2008.
- ★ We welcome inquiries from potential workshop sponsors. This event is a perfect, high-visibility opportunity to network with your colleagues, clients, and others interested and involved in the oil and natural gas industry. In addition to special on-site recognition during the conference, logos of sponsors who commit early will be included in workshop materials. For more information on sponsorship opportunities please contact Mark Grady (meetings@erg.com) at ERG.

If you have any questions please contact Jerome Blackman, EPA [blackman.jerome@epa.gov or (202) 343-9630] or ERG [meetings@erg.com or (781) 674-7374]. We look forward to seeing you in San Antonio!

#### November 11, 2008

Facility Tours 8:00 AM—4:00 PM Opening Reception 6:00 PM—8:00 PM

#### Schedule at a glance:

November 12, 2008

Workshop Sessions 8:30 AM—5:00 PM

Awards Luncheon 12:00 PM—2:00 PM

#### November 13, 2008

Workshop Sessions 8:00 AM—2:00 PM

#### Please visit epa.gov/gasstar/workshops/annualimplementation/2008.html to register!

### **Partner Profile**

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capacity to identify and implement methane emission reduction opportunities within ONGC operations. With a team of just seven people in ONGC's Carbon Management Group, headed by Group General Manager Mr. A. B. Chakraborty, covering all operations throughout India, they accomplished this through a combination of internal communication and outreach efforts, as well as leveraging the resources that EPA offers to partner companies.

Cooperative efforts between ONGC and EPA led to the implementation of four Technology Transfer Workshops at ONGC facilities in Mumbai, Ahmedabad. Nazira, and Raiahmundry in December 2007. The Workshops were designed to both introduce the Natural Gas STAR Program as well as build technical capacity on recommended technologies and practices. Workshops included key ONGC staff from operations, environment, safety, and engineering departments. With the Directors of Onshore Operations, Mr. A. K. Hazarika, and Offshore Operations, Mr. N. K. Mitra, kicking off the entire program, each workshop began with an introduction from respective Asset Managers. Such high-level management engagement was crucial to gaining acceptance and commitment among ONGC staff, as well as communicating the high priority ONGC management places on Program participation. Each workshop was followed the next day by a press release on the ONGC intranet to inform others in the company about this work.

Following the successful EPA Technology Transfer Workshops, EPA and ONGC collaborated to conduct pre-feasibility studies to identify and estimate major methane emission sources from several ONGC sites, in order to gain initial insight into the most promising methane emission reduction projects. These analyses required strong participation by ONGC personnel due to the detailed operational information that had to be gathered to serve as input to the analyses. Based on the results of these studies, four ONGC sites were identified as candidates that could benefit from further methane emission identification and quantification.

In May 2008, a team comprised of EPA Program Manager Carey Bylin and leak detection and measurement experts from Hy-Bon Engineering and Leak Surveys Inc. traveled to India to conduct methane emission detection and measurement studies. Working with ONGC's Carbon Management Group as well as cross-functional teams at each site, these studies were conducted at four ONGC locations: onshore production sites located in Nazira (Assam); an offshore production platform located near Mumbai (Maharashtra); a natural gas processing plant located in Uran (Maharashtra); and onshore production and processing sites located in Ahmedabad (Gujarat). Leak identification was conducted using the GasFindIR camera, with quantification provided by Hi-Flow samplers and bagging techniques (for most fugitive and vent emissions), and turbine flow meters (for storage tank testing).

Having only two weeks to study four sites across India, the team relied heavily on findings from pre-feasibility studies as guides for measurement



activities, which allowed them to focus on identifying and measuring the largest anticipated sources. Additionally, ONGC input at each site led to the inclusion of other opportunities not previously identified. By engaging ONGC staff from the prefeasibility phase through the measurement study phase, the process achieved the goals of 1) providing ONGC personnel with exposure to the use of leak identification and measurement equipment and 2) identifying and quantifying methane emissions in order to both identify potential projects and demonstrate the effectiveness of various leak detection and measurement devices. The studies provided excellent opportunities for ONGC personnel to observe first hand the leak detection and measurement process and understand the utility of the latest technologies.

The results of the leak measurement studies were used as the basis for further analyses in order to make recommendations for potential mitigation options ONGC can implement within their operations. EPA developed sitespecific reports that included a summary of major emission sources; estimated and measured quantification of those sources; recommendations for methane emission mitigation technologies and

# Update: Proposed Climate Change Legislation

# **Mandatory Reporting of Greenhouse Gas Emissions**

ast December, Congress authorized EPA in the 2008 Omnibus Appropriations Act (HR 2764) to develop and publish a draft rule requiring mandatory reporting of greenhouse gases above appropriate thresholds in all sectors of the economy. EPA met with over 100 trade associations and other groups and also conducted extensive reviews of existing reporting approaches in order to inform and support the development of the proposed rule.

EPA has prepared the proposed rule and is moving forward with the required interagency review. The Agency hopes to propose the rule soon as specified in the Appropriations language.

For additional information, see EPA's climate change Web page at: epa.gov/climatechange/emissions/ ghgrulemaking.html.

# EPA Issues an Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act

n July 11, 2008, the EPA released an Advance Notice of Proposed Rulemaking (ANPR) soliciting public input on the effects of climate change and the potential ramifications of the Clean Air Act (CAA) in relation to greenhouse gas emissions. The ANPR is one of the steps EPA has taken in response to the U.S. Supreme Court's decision in Massachusetts v. FPA that allows the EPA to regulate carbon dioxide and other greenhouse gases as pollutants. (For more comprehensive information on the issues surrounding climate change as it impact individuals, business, states and localities, and governments go to epa.gov/climatechange/.) The ANPR process contemplates the complexity and magnitude of the question of whether and how greenhouse gases could be effectively controlled under the Clean Air Act, which covers air pollution from both stationary and mobile sources. The public review period lasts 120 days.

#### For more information:

Read the ANPR at epa.gov/climatechange/anpr.html or view the ANPR fact sheet at epa.gov/epahome/anprfs.htm.

#### To comment:

Follow the instructions at epa.gov/climatechange/anpr.html. Note that all comments should be identified by the following Docket ID Number: EPA-HQ-OAR-2008-0318.

#### Key Issues for Discussion and Comment in the ANPR:

- ★ Descriptions of key provisions and programs in the CAA, and the advantages and disadvantages of regulating greenhouse gases under those provisions;
- ★ How a decision to regulate greenhouse gas emissions under one section of the CAA could or would lead to regulation of greenhouse gas emissions under other sections of the Act, including sections establishing permitting requirements for major stationary sources of air pollutants;
- ★ Relevant issues for Congress to consider for possible future climate legislation and the potential for overlap between future legislation and regulation under the existing CAA; and,
- ★ Scientific information relevant to, and the issues raised by, an endangerment analysis.



EPA is excited to announce the addition of two new partners and one new endorser to the Natural Gas STAR Program. Please join us in welcoming:

#### **Partners** -

#### Comgás

Based in Brazil, Comgás (full

COMGAS Natural

name Companhia de Gás de São Paulo) is the largest distributor of natural gas in the nation by volume and services more than 31% of the Brazilian market. Its network comprises more than 4,000 kilometers of pipelines that deliver natural gas to over 500,000 residential, retail and industrial customers in 57 cities. Comgás aims to achieve consistent world-class performance standards as a leading energy company, while striving to be socially responsible and protect the environment.

#### Xcel Energy



Xcel is an electricity and natural gas energy company, providing a variety of energy-related products and services to 3.3 million electricity customers and 1.8 million natural gas customers. The company has regulated operations in 8 Western and Midwestern states and owns more than 34,500 miles of natural gas pipelines.

#### Endorsers

#### Montana Petroleum Association

The Montana Petroleum Association, Inc. is a non-profit trade association whose members



include oil and natural gas producers, gathering and pipeline companies, petroleum refineries and service providers and consultants. Its government affairs program strives to maintain a positive business climate for the petroleum industry in Montana, and its education program fosters public awareness of the industry's contributions to the state and nation.

### **Partner Profile**

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practices; and full economic analyses of recommended projects using ONGC specified financial criteria.

On September 16th, the EPA team presented measurement study findings and recommendations to the ONGC Board of Directors, with the goal of gaining Board approval for implementing some of the recommended projects. The findings and recommendations were extremely well received, and Mr. R.S. Sharma, Chairman and Managing Director of ONGC, directed staff to move forward with EPA's recommendations. This work will be documented as part of ONGC's Implementation Plan which will be submitted to EPA as part of ONGC's Natural Gas STAR commitment. In addition, acting upon EPA recommendations and best practices learned from other Natural Gas STAR partner companies, ONGC plans to form an internal centralized methane emissions detection and measurement team in order to apply lessons learned to their over 100 other installations.

ONGC has demonstrated an exemplary approach to building their participation in the Natural Gas STAR Program within less than a year. This has been accomplished through management engagement and participation, outreach to and communication with employees, and leveraging EPA's resources and services to accomplish training and capacity building through workshops, pre-feasibility studies, measurement field studies, and methane mitigation project analyses.

### In the News

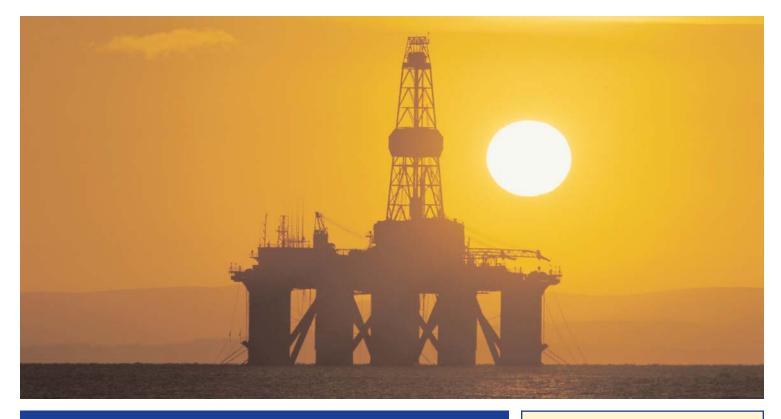
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#### ★ New Information for International Companies-

improved guidance for implementing and adminstering the Natural Gas STAR International Program, as well as new case study examples on international company successes.

We want your feedback! Please contact Suzie Waltzer at waltzer.suzanne@ epa.gov or (202) 343-9544 with comments relating to how the new Web site suits your needs and interests.







### NATURAL GAS STAR Annual Implementation Workshop

★ San Antonio, Texas November 11-13, 2008 Westin Riverwalk Hotel—San Antonio, TX

#### NATURAL GAS STAR Technology Transfer Workshops

#### ★ Transmission Technology Transfer Webcast

October 16, 2008 1:00–2:30 pm (Eastern Daylight Time)

These are events that the Natural Gas STAR Program is currently planning. For updates and further information, please check out epa.gov/gasstar/workshops.htm or contact Carey Bylin at bylin.carey@epa.gov or (202) 343-9669. Additionally, are you a Gas STAR Endorser and have an event you would like listed here? Please notify Gas STAR about it.

### METHANE TO MARKETS WORKSHOP

★ Flaring and Venting Reduction & Natural Gas Utilization Forum Amsterdam, The Netherlands December 3-5, 2008

NH Grand Hotel Krasnapolsky

- Information about this forum can be found at flaringreductionforum.org
- For more information please contact: Roger Fernandez at fernandez.roger@epa.gov or (202) 343-9386

★ Methane to Markets Producers Technology Transfer Workshop & Field Visit Co-hosted by the Instituto Argentino del Petroleo y del Gas Buenos Aires, Argentina November 5-6, 2008

For more information please contact: Carey Bylin at bylin.carey@epa.gov or (202) 343-9669

# Natural Gas STAR Contacts

#### **Program Managers**

Jerome Blackman ★ (202) 343-9630 blackman.jerome@epa.gov

Carey Bylin ★ (202) 343-9669 bylin.carey@epa.gov

Roger Fernandez ★ (202) 343-9386 fernandez.roger@epa.gov

Suzie Waltzer ★ (202) 343-9544 waltzer.suzanne@epa.gov

Natural Gas STAR Program U.S. Environmental Protection Agency 1200 Pennsylvania Ave., NW (6207J) Washington, DC 20460

For additional information on topics in this *Update*, please contact Jerome Blackman.

