



Key activities of the Global Gas Flaring Reduction Partnership



Methane to Markets Ministerial Meeting,
November 15-17, 2004

Dr. Sascha T. Djumena

Background of Global Flaring

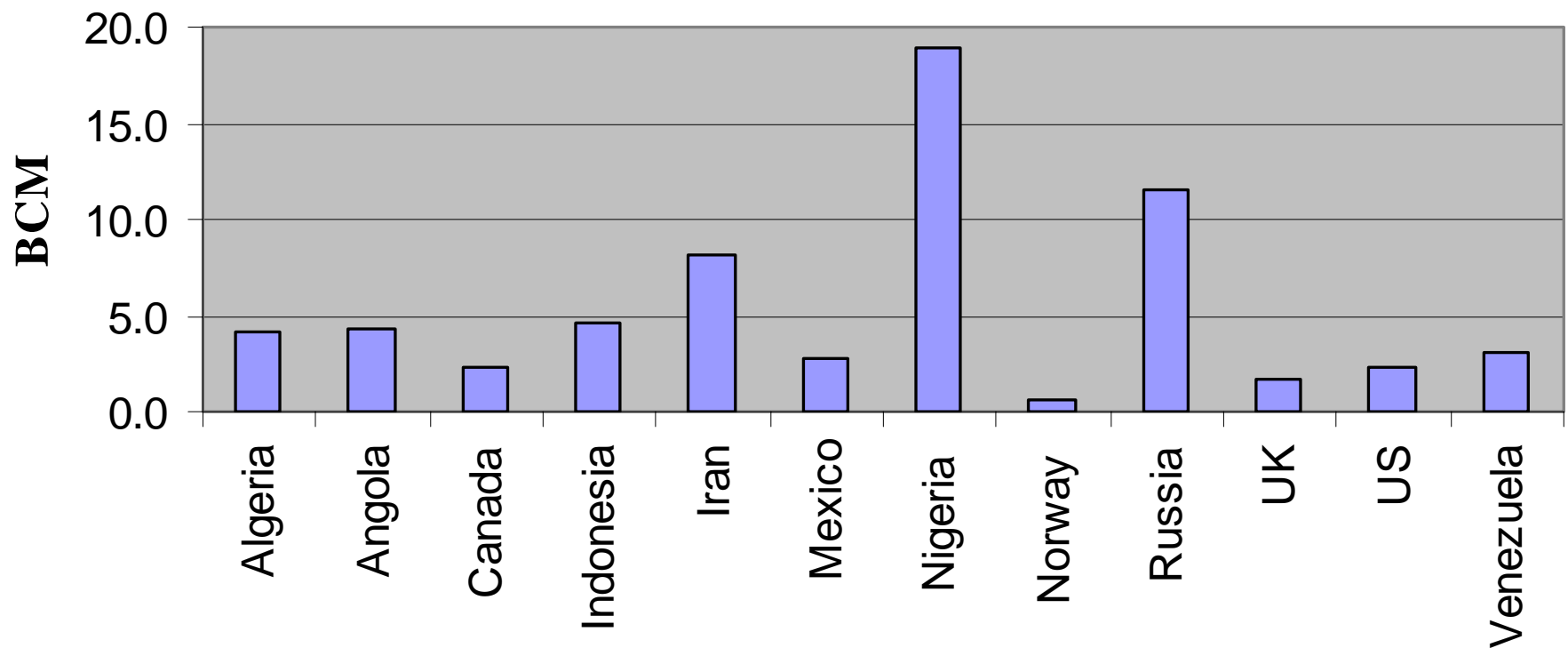
- Global venting and flaring level over 100 bcm/year, equal to:
 - Annual gas use of Italy and France combined;
 - Total world gas consumption for half a month;
 - >10 percent of committed emission reductions by developed countries under the Kyoto Protocol for the period 2008-2012.
- This level has stayed constant for the last 20 years
- 80% of global venting and flaring occurs in fewer than 15 countries
- Reliability of available data varies widely

Why still over 100 BCM / Year ?

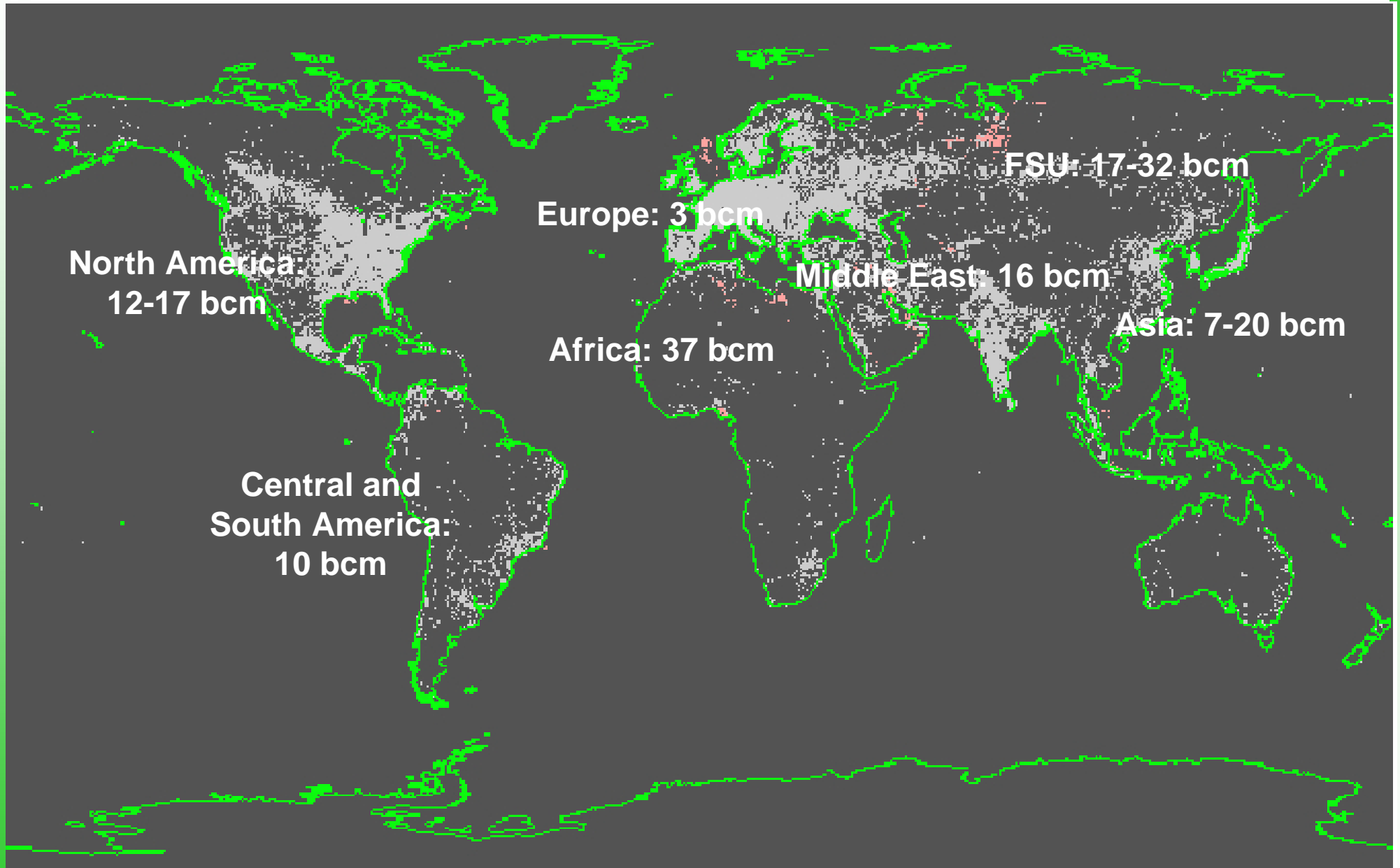
- Individual governments and companies have had successes in reducing flared gas, and significant investments in reduction projects are continuing.
- However, two key factors limit the global impact of these efforts:
 - Global oil production increase leads to associated gas production increase, offsetting efforts to reduce gas flaring
 - Development of gas markets, gas infrastructure, and flaring reduction projects often requires collaborative rather than individual action

International Comparison

"Best Estimate" of Gas Flared and Vented in Selected Countries in 2002

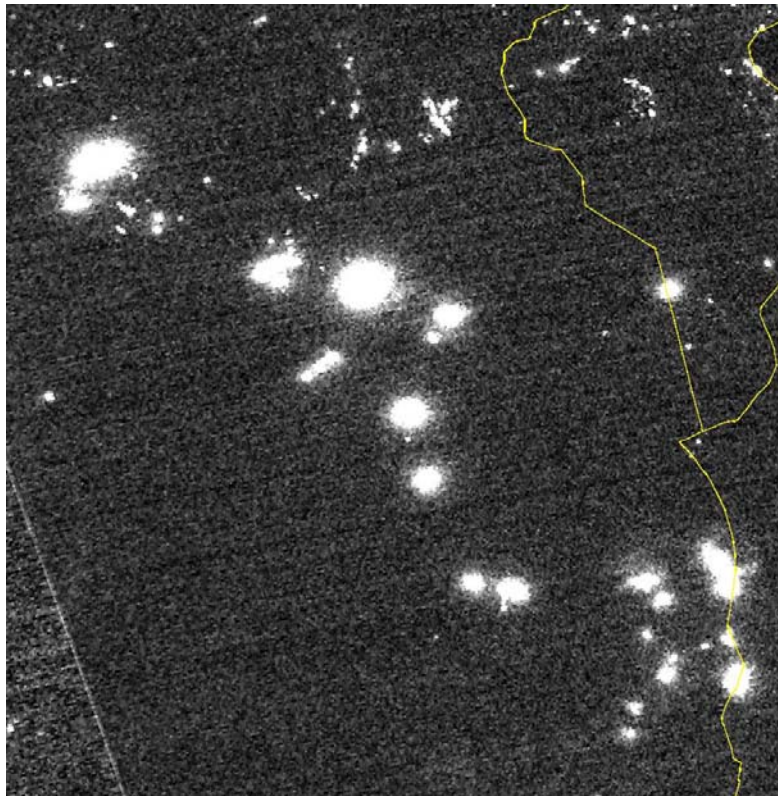


How Much and Where?

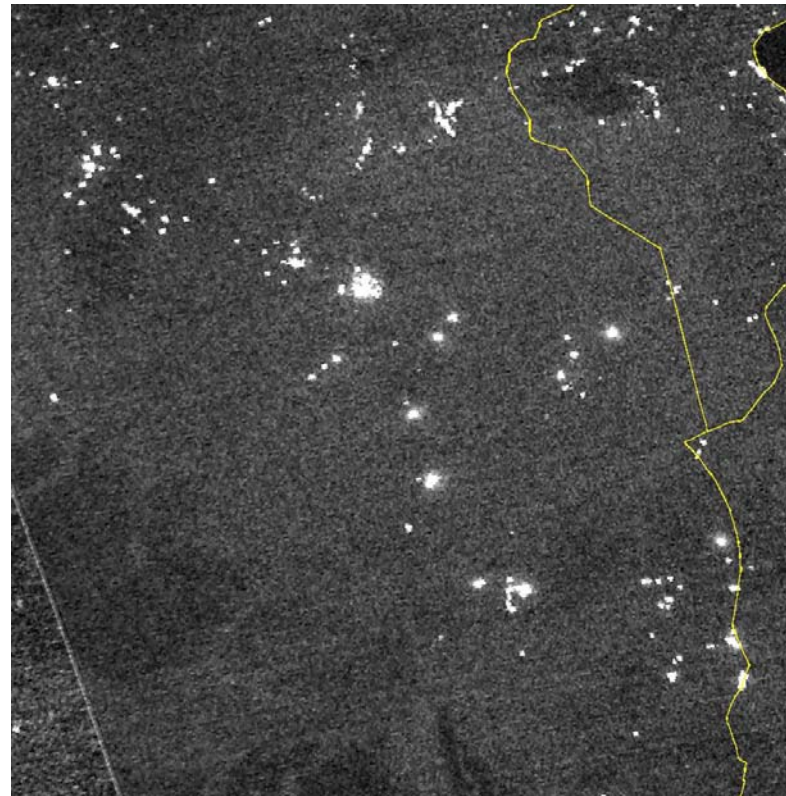


Algeria

September 24, 1992

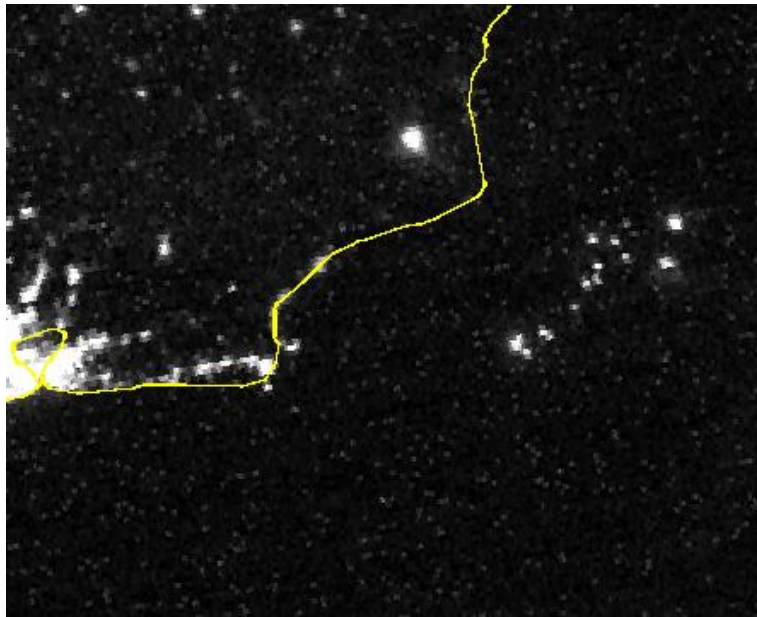


March 20, 2002

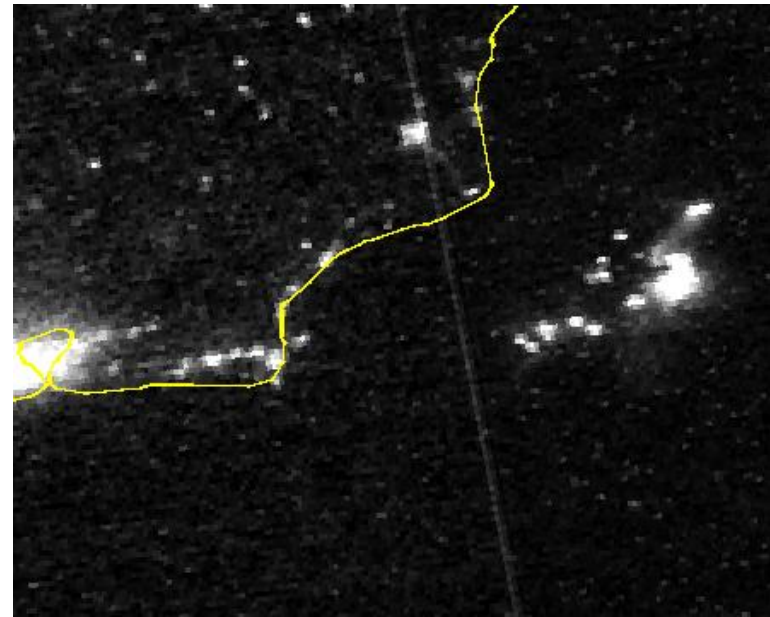


Brazil

October 24, 1992

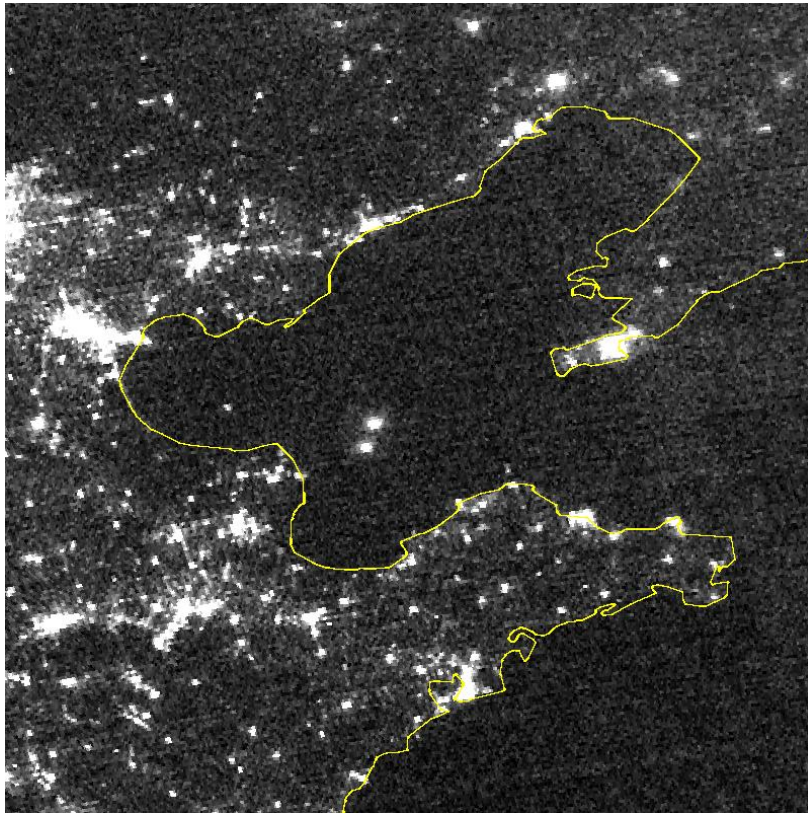


January 9, 2002

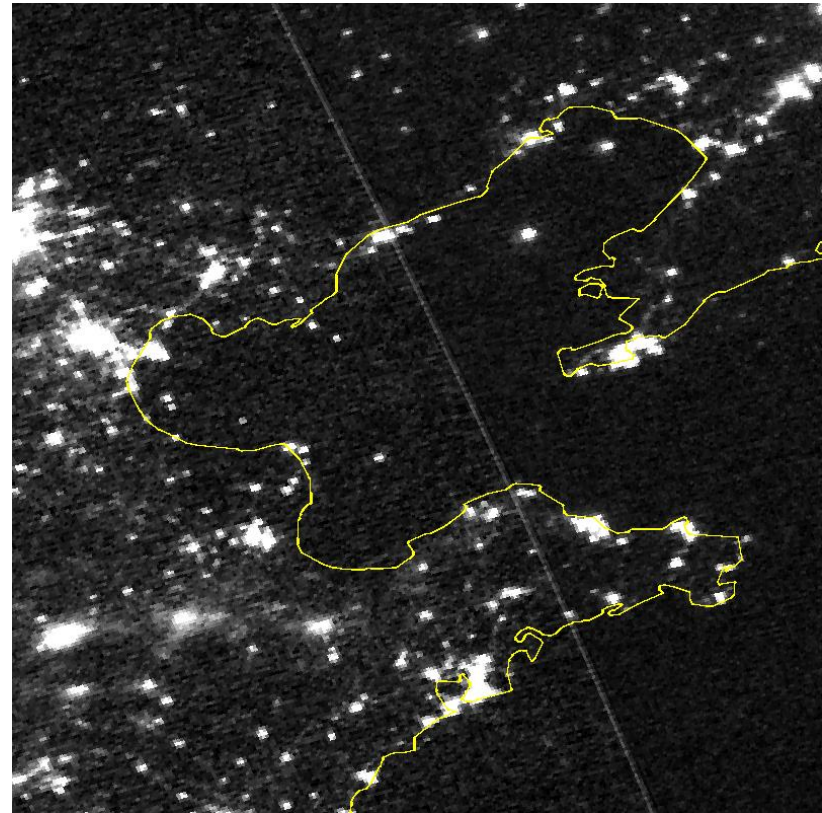


China

October 24, 1992

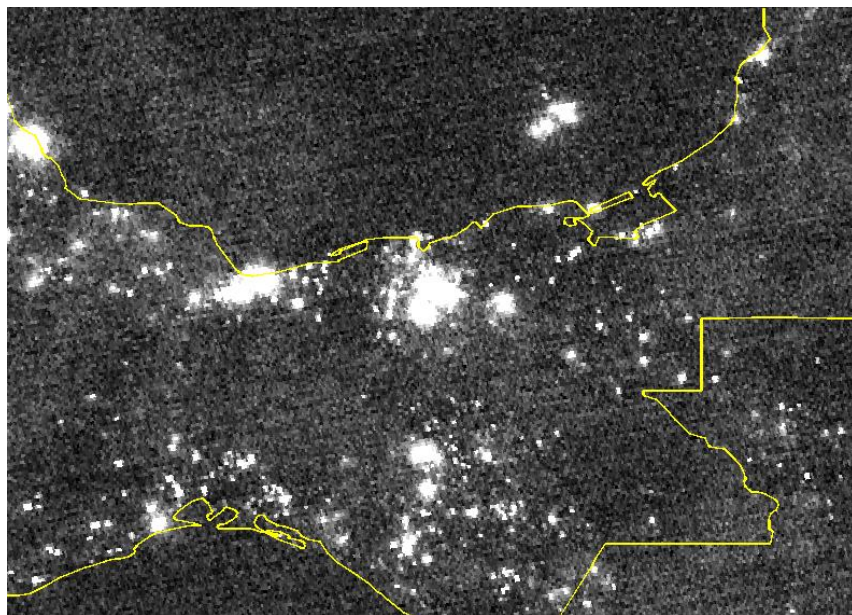


January 9, 2002

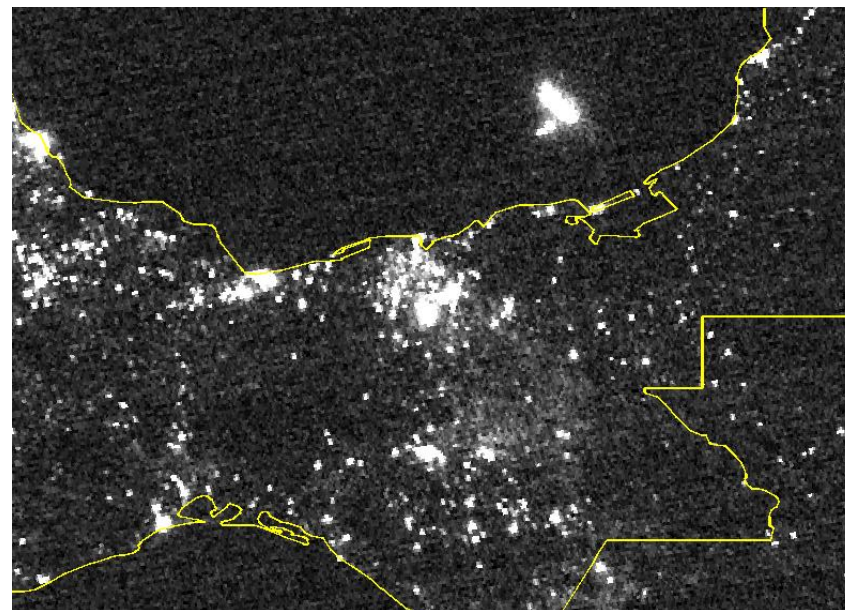


Mexico

April 27, 1992

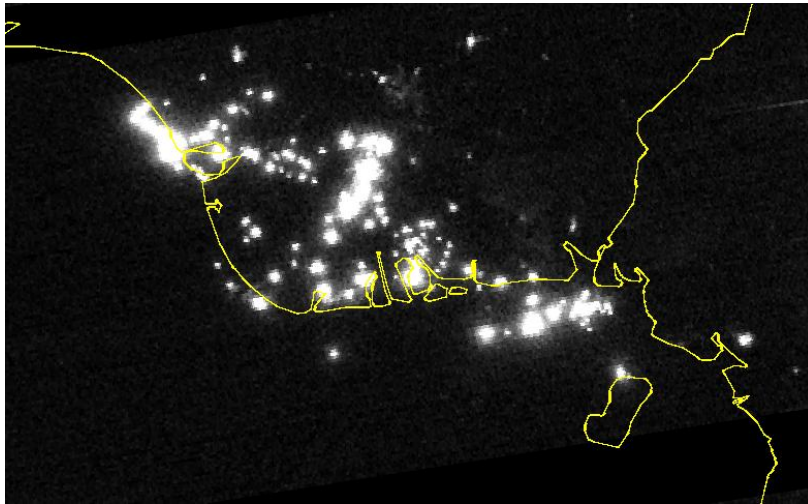


March 20, 2002

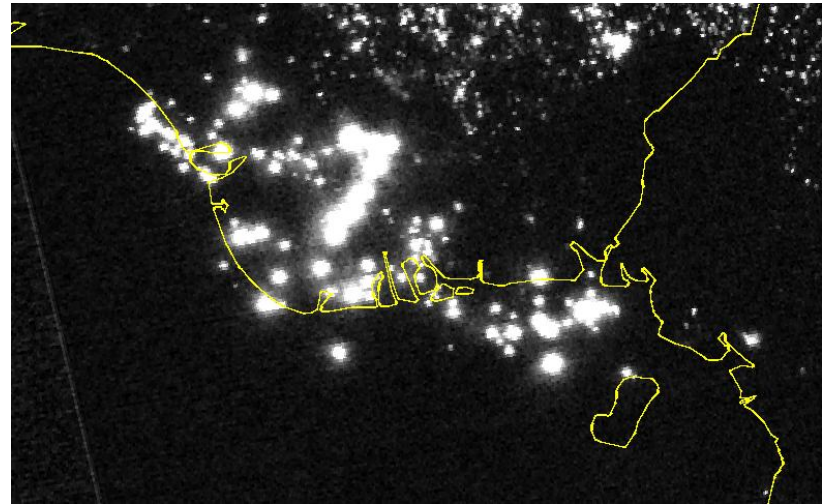


Nigeria

October 25, 1992

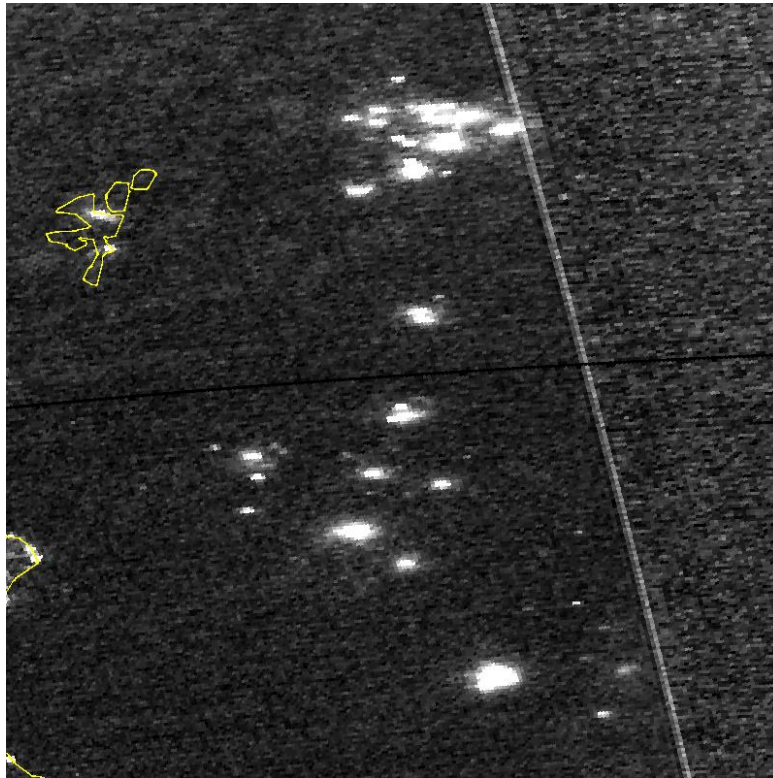


January 9, 2002

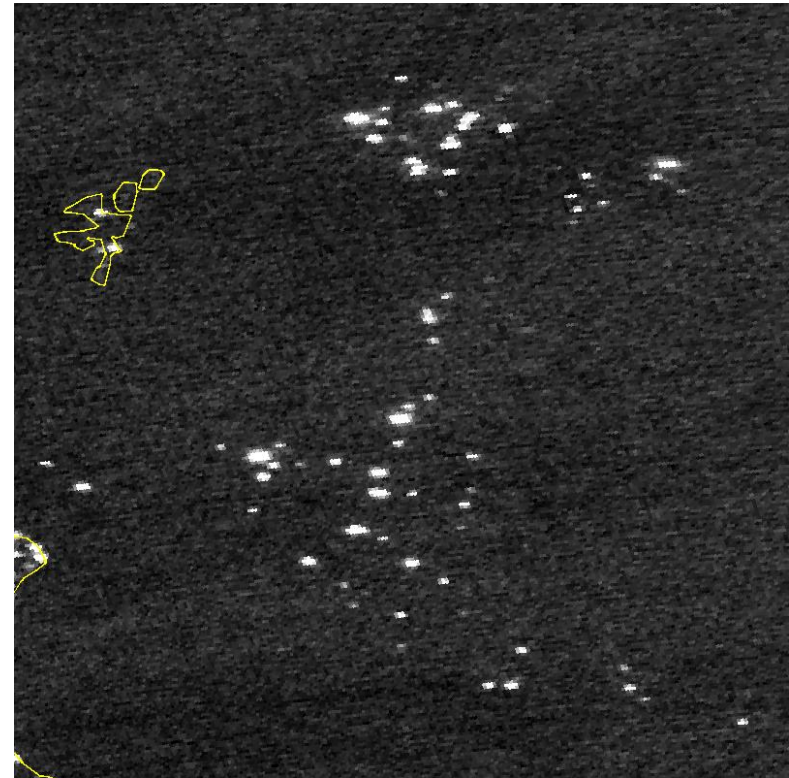


North Sea

December 18, 1992



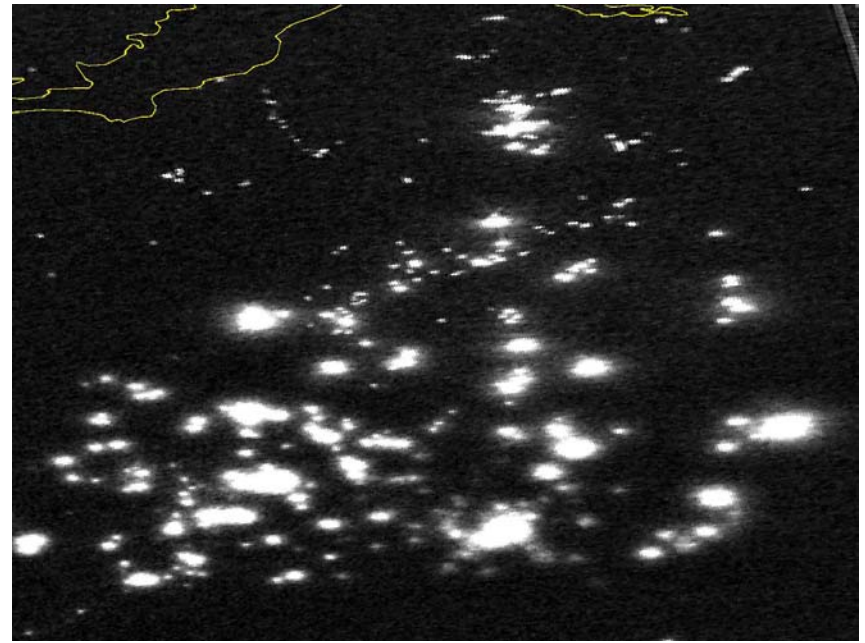
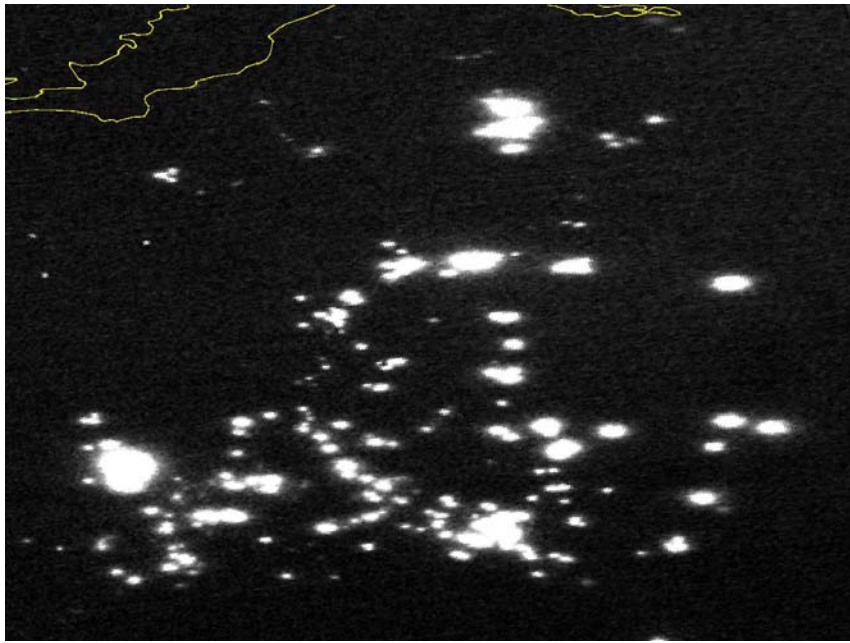
January 9, 2002



Siberia

December 25, 1992

January 9, 2002



GGFR

- Started as an Initiative with Norwegian Gov. in 2001
- GGFR was formed at the World Summit on Sustainable Development in Johannesburg in August 2002
- GGFR includes governments from oil-producing countries, state-owned and international oil companies, and the World Bank Group, together accounting for some 45% of global flaring.
- OPEC recently joined GGFR increasing total coverage to over 70% of global flaring.
- GGFR would like to have more Latin American partners

Current GGFR Public and Private Partners

Countries/NOCs

Algeria (Sonatrach)

Angola

Cameroon (SNH)

Chad

Ecuador

Equatorial Guinea

Indonesia

Khanty Mansiisk (Russia)

Nigeria

Donors

Canada

Norway

USA

UK (Foreign & Commonwealth Office)

IOCs

BP

ChevronTexaco

ENI

ExxonMobil

Norsk Hydro

Shell

Statoil

Total

Multilateral Organizations

The World Bank

OPEC

NGOs

Sahel

GGFR Work Program

- **Commercialization**
 - Consultations to identify and address associated gas utilization barriers
 - Remote fields solutions
 - Small scale gas use
- **Regulations for (associated) gas sector development**
 - Identification and dissemination of regulatory best practice
 - Contractual issues surrounding associated gas
- **Global Gas Flaring Standards**
 - Common flaring standards and guidelines, including measurement and reporting
- **Carbon Credits**
 - Capacity building including methodology for flaring projects
 - Representative projects assistance with crediting process

How GGFR may assist associated gas use

- **Facilitate local public-private partnerships**
 - Agree with Gov't, producers and customers key issues, barriers and approaches
 - Agree implementation plans for associated gas use and flare reduction
- **Advise governments, producers and consumers**
 - Formulating high level support (e.g. gas strategies, gas master plans)
 - Local, regional and international market development and/or access
 - Frameworks for incentives, legislation and fiscal systems
 - Contractual issues (e.g. gas ownership, PSAs, system access)
 - Flaring standards and guidelines
- **Conduct focus studies**
 - Associated gas utilization reviews
 - Gas market surveys
 - Project feasibility reviews
- **Links with existing WB instruments**
- **Capacity and institution building**
 - Carbon credits
 - Institutional capability to deal with contractual matters

Poverty Reduction

- Small-scale power production/distribution at gas flaring site
- Small-scale gas distribution in vicinity of anchor customer
- LPG distribution scheme
- Improve quality of life around flaring sites
- Direct poverty alleviation impact

Carbon Credits

- Capacity building for stakeholders, including improving methodology issues
- Assisting with demonstration projects and facilitating linkages to carbon finance
- Creating a forum for best practice on flare reduction and CDM/JI
- Providing technical assistance to help host countries in national approval processes and sustainable development
- Encouraging donors and providing study funding to support reduction projects

Carbon Credits

- Currently programs in action in Algeria, Angola, Indonesia on developing projects and assisting capacity building
- GGFR interested in co-operation on Latin American Gas flaring Reduction Projects
 - Demonstration projects and facilitating linkages to carbon finance
 - Assist with the crediting process
 - Develop Project Design Documents

Global Gas Flaring and Venting Reduction Voluntary Standard

- GGFR announced the Global Gas Venting and Flaring Reduction Voluntary Standard at the 2nd International Gas Flaring Reduction Conference in Algeria in May 2004, which:
 - Encourages integrated approach including market and infrastructure development, commercialization, legal and fiscal regulations, carbon credits;
 - Provides framework for governments, companies, and other key stakeholders to consult each other and take complementary and supportive action;
 - Aims to achieve global applicability and impact by allowing for flexibility to local conditions and balancing ambitious timescale with realistic constraints.
- Collaborative action of stakeholders will help reduce barriers to associated gas utilization in a country
- Implementation of the Standard aims to reduce venting and flaring significantly within 5 to 10 years

Key Concepts of the Standard

- Voluntary and performance based rather than prescriptive
- Initial Goal with focus on large sources that can make a significant difference early
- Collaborative action and implementation planning through
 - Identification and consultation of key stakeholders;
 - Potential expansion of “flare reduction project boundaries” to include other fields / operations / infrastructure / customers in region;
 - Consideration of range of options to enhance the feasibility of associated gas utilization (“tool box”);
 - Producer driven Associated Gas Recovery Plans and Government driven Country Implementation Plan.
- Ultimate Goal for longer term continuous improvement
- Measurement and public reporting
- Recommended Timeline

Thank You Very Much

For further information:

<http://www.worldbank.org/ggfr>