The gas industry contribution to the goals of the Sustainable Energy for All initiative?

Mats Fredriksson, Director
International Gas Union

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The Sustainable Energy for All Initiative

Three interlinked objectives by 2030:

- Universal access to modern energy services
- Double the global rate of improvement in energy efficiency
- Double the share of renewable energy in the global energy mix

Gas can contribute on all targets
IGU Membership

Founded in 1931
www.igu.org

91 Charter members
51 Associate members

* Status as of end October 2014
Gas production to increase

Natural gas production growth by region, IEA WEO New Policy Scenario (bcm)

Source: IEA World energy outlook 2014, New Policy Scenario
Inter-continental trade will increase rapidly

**Major net gas importing regions:**
Imports (bcm)

- 2012: [Data]
- 2025: [Data]
- 2040: [Data]

**Major net gas exporting regions:**
Exports (bcm)

- 2012: [Data]
- 2025: [Data]
- 2040: [Data]

Source: IEA World energy outlook 2014, New Policy Scenario
**Need for:**

- Standardized Inter-regional and Inter-continental regulatory agreements for use of pipelines

- Open access for third party agreements

- Better options and use of reverse flow possibilities

Source: Gazprom
Industry needs to address and focus on the environment challenges

Find «light» infrastructure solutions

Use Best practice from already developed areas in North America
Energy Access - LNG

- Provides flexibility to already existing gas markets
- Give options for buyers and sellers in a price volatile market
- Small scale LNG is less expensive and can open up gas use in new regions
- Give options to areas with limited access to competitive alternatives

The LNG terminal will offer business opportunities:

- LNG trading
- LNG storage
- Infrastructure for small-scale LNG activities
Energy Efficiency

- Replacing older power stations with modern CCGT
- Substitution for oil in transport
- Increase use of biogas
- Gas in heating
Environment Challenges

**Gas as Transportation fuel**
- CNG and LNG
- Infrastructure developments
- Address Sox and Nox
- Only available alternative
- LNG as bunker fuel will reduce sulphur pollution in shipping

**CCS**
- Need more and improved test facilities
- Need strong finance support from authorities
- Important to be able to keep environmental targets with continuation of use of gas

**Methane emission and Flaring**
- Important for the industry to take initiatives to find best practice for reduction of methane emission
- Huge potential in building infrastructure to distribute gas from developments that today are flaring gas
- Best practice needed
Environmental Challenges

- The Natural Gas Industry needs no subsidies
  - Deal with climate and supply in a natural way
- The Gas Industry is supporting a well functioning «cost for carbon» scheme
- Gas as transportation, heating & cooking and power generation fuel will reduce pollution in big city areas
- Good compliment to wind and solar power generators
- Emissions of particles from natural gas are almost negligible

Source: IPCC and IHS CERA
Natural gas partnering with renewables

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<th>Energy Source</th>
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<td>90-100%</td>
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<tr>
<td>Wind</td>
<td>30-40%</td>
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<td>10-25%</td>
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Natural gas easy to turn on and off
Thank you for your attention!

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