





UNITED NATIONS Economic Commission for Europe



Managing Change: Enabling the Shift to Sustainable Energy



Torstein Indrebø, Secretary General International Gas Union

Geneva, 28 November 2012

IGU represents more than 95 % of the global gas market





Established in 1931

Global energy issues







Energy security and access

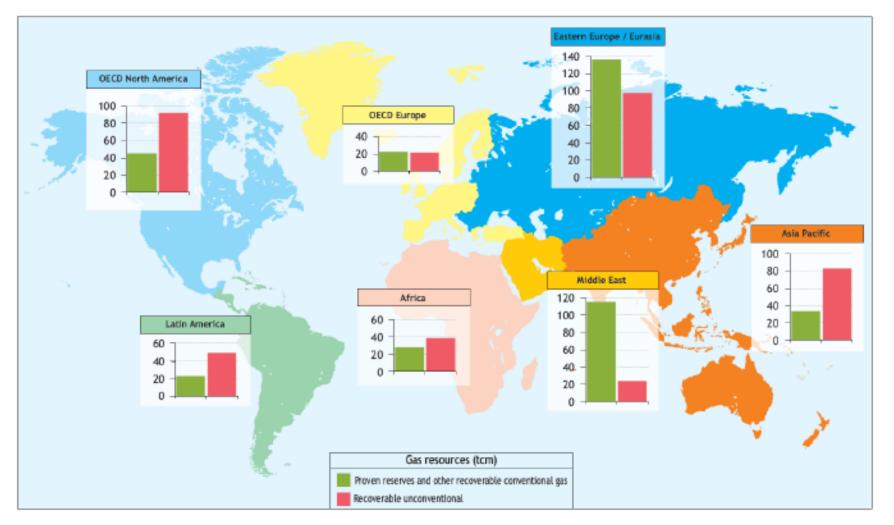
Impact of Fukushima

- Competitive energy
- Sustainable energy systems

Need a balanced and realistic approach

World Gas Reserves

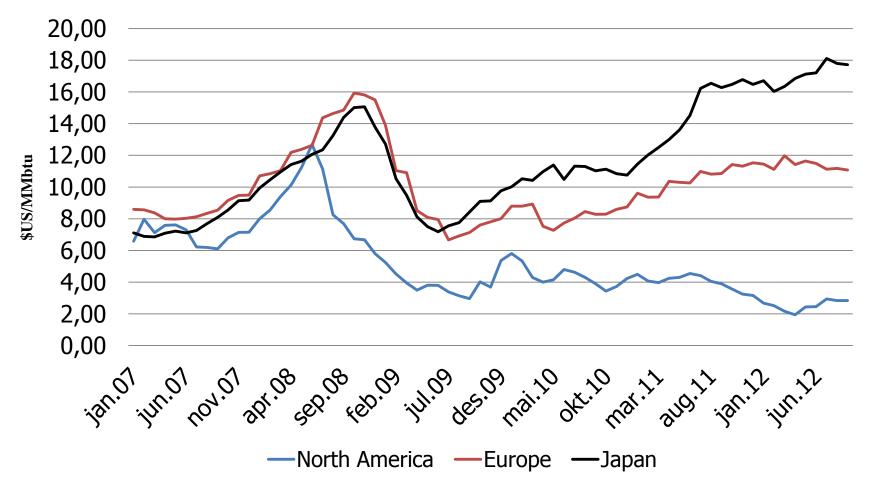




IEA 2011

World Natural Gas Prices



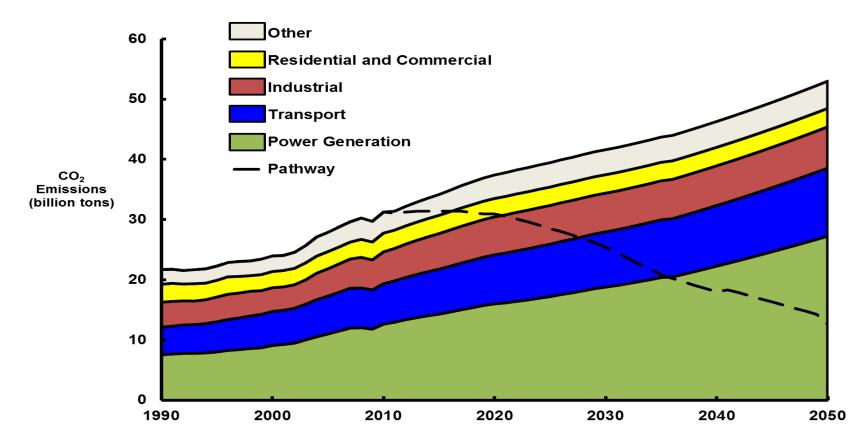


Source: World Bank



Meeting future global energy needs whilst addressing air quality and climate change concerns

Global Emissions Trajectory Base Case





Gas burns with emissions lower than coal:

- CO2: 50 %
- CO: 81 %
- SO_x: 100 % acid rain
- NO_x: 80 % ai
- Particles/soot:
- Hg (Mercury): 1
- 80 % air quality
- 99.99 % air quality
 -): 100 %







Natural Gas - Wind - Solar



An ideal combination

Gas for transportation



Marine







Fleets:

- Trucks
- Buses
- Taxis

Road

Public health - air quality

Economics and job creation



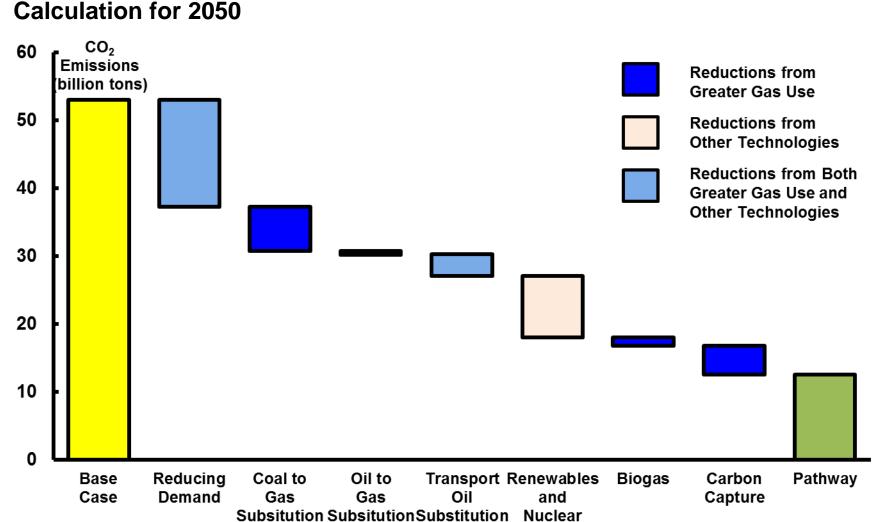
Economic development and job creation

- Build on existing energy system investments
- Gas industry contributes to public finances



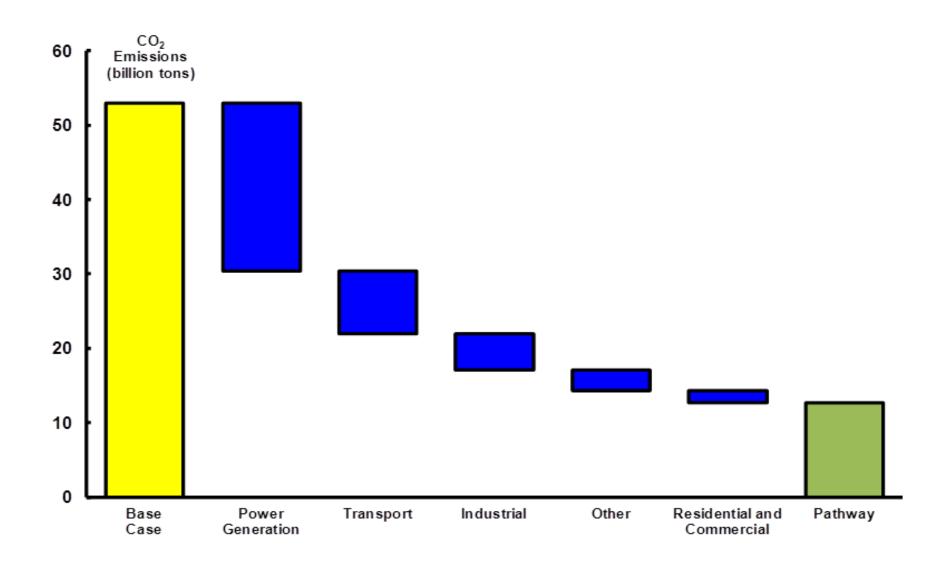
IGU Vision Pathway - various CO₂ abatement options and technology choices





IGU's Pathway Trajectory: Global Emissions Reductions, by Consumer Sector





Sustainable Energy for All – UN initiative



Some facts:

- More than 1.4 bn people without access to electricity
- Some 2.5 bn people use traditional biomass for cooking & heating

Need for:

- Electricity 24 h / 7 days
- Clean energy to ensure a healthy living
- Enhanced economic development
 & more jobs

Investment barriers have to be overcome

Need for political, legal and regulatory framework.

Gas and Social Development





Indoor air quality



Petrochemical Feedstock



Fuel for Commercial



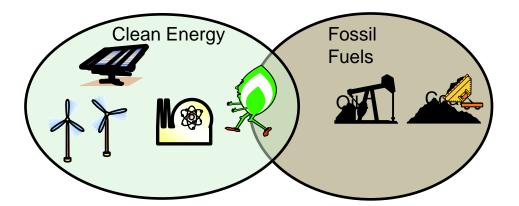
Fuel for Industry

Creating Trust for Gas



Recognition by policymakers

Licence to operate



GHG Emissions Spectrum









A robust and sustainable energy policy

- Energy efficiency & savings
- Use more gas in power generation and transportation
- Phase in renewable energy
- Develop Carbon Capture and Storage technology

Gas: The fuel of today and tomorrow!





Among our publications: http://www.igu.org



Global Vision for Gas



International Gas Union (IGU) News, views and knowledge on gas – worldwide

Global Vision for Gas The Pathway towards a Sustainable Energy Future



Shale Gas



International Gas Union (IGU) News, views and knowledge on gas – worldwide

Shale Gas The Facts about the Environmental Concerns





Thank you for your attention!



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