

Global Vision for Gas



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



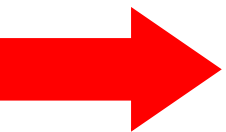
Established in 1931

Global energy issues



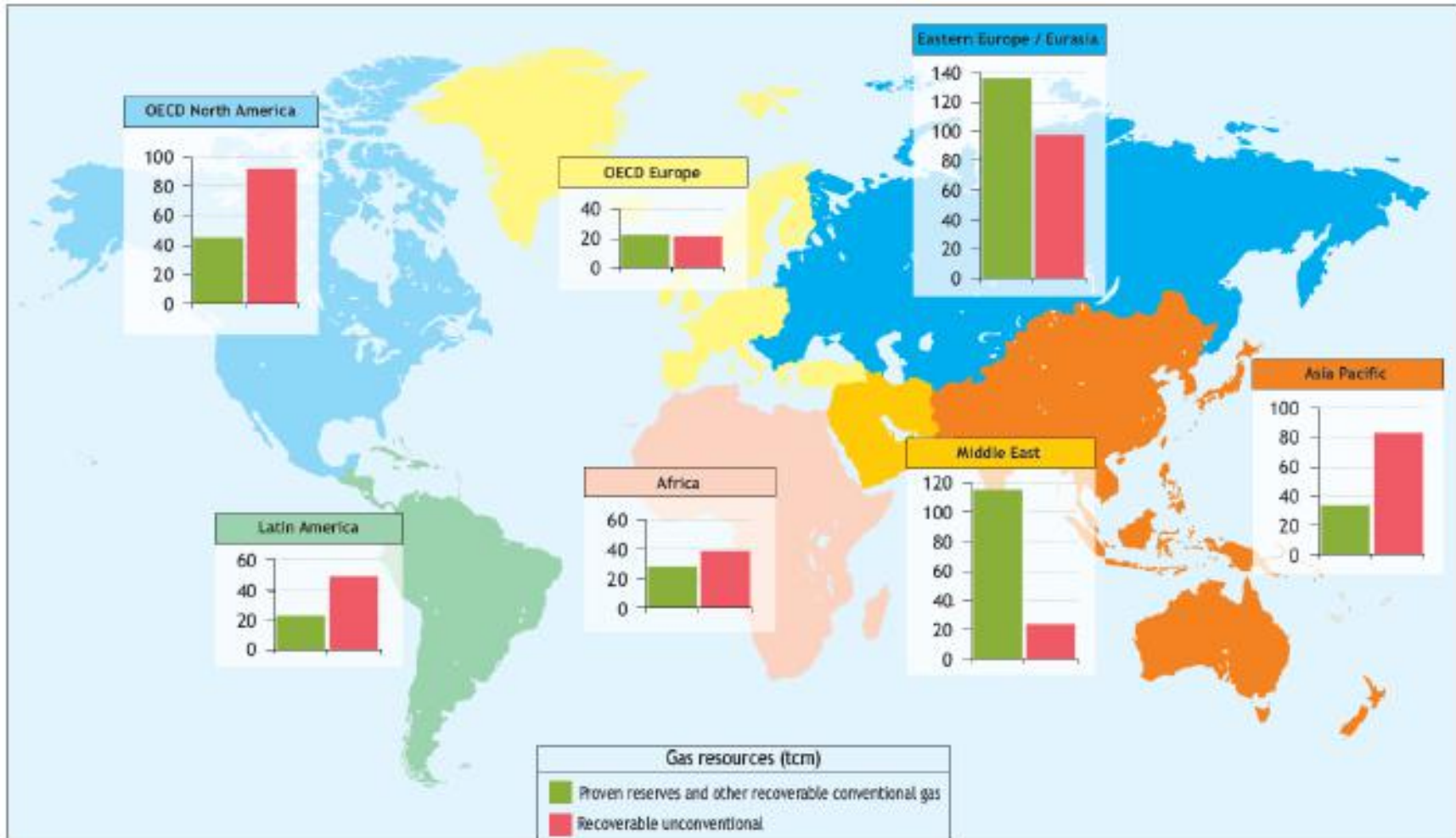
Impact of Fukushima

- Energy security and access
- Competitive energy
- Sustainable energy systems

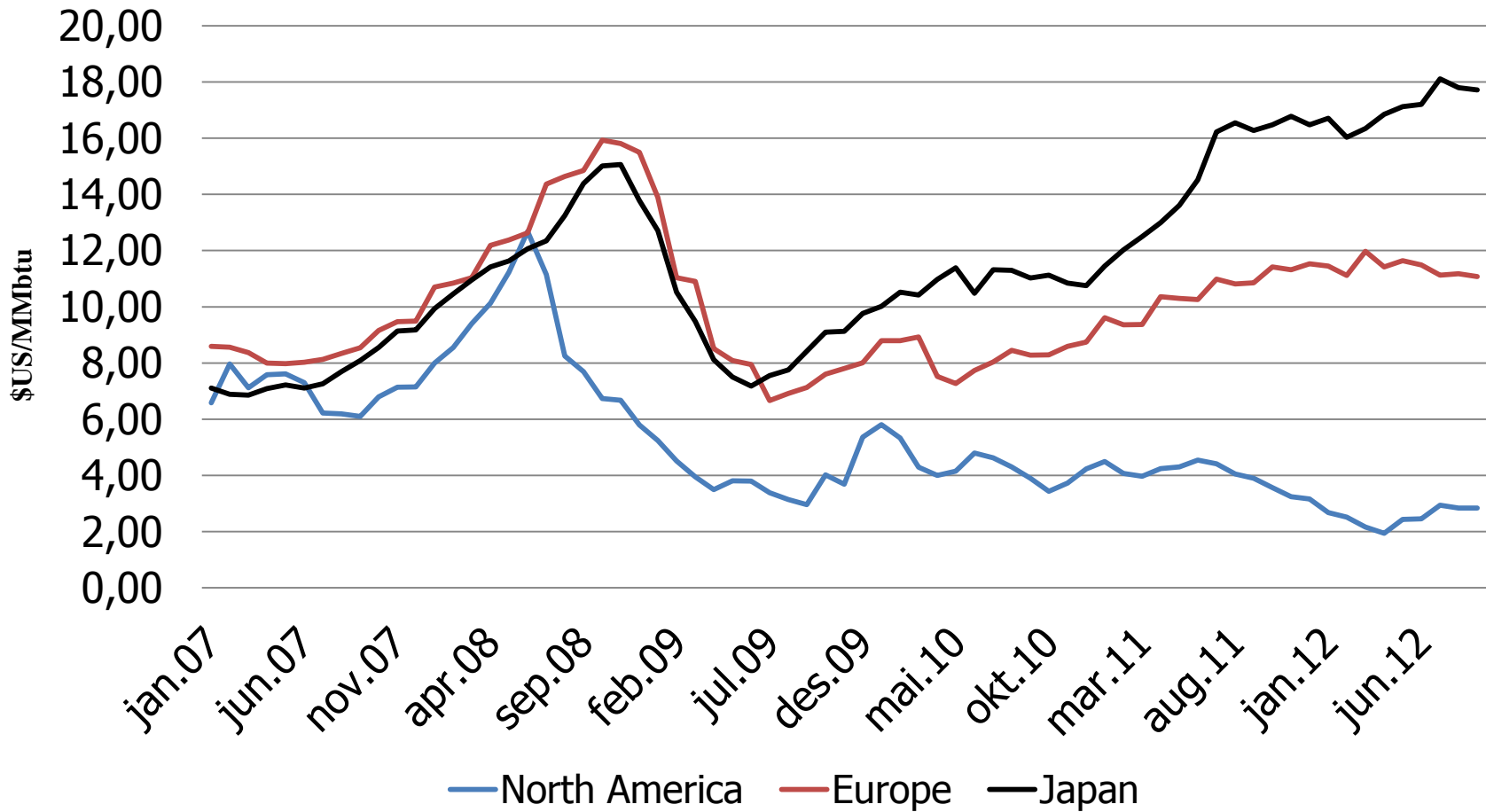


Need a balanced and realistic approach

World Gas Reserves



World Natural Gas Prices

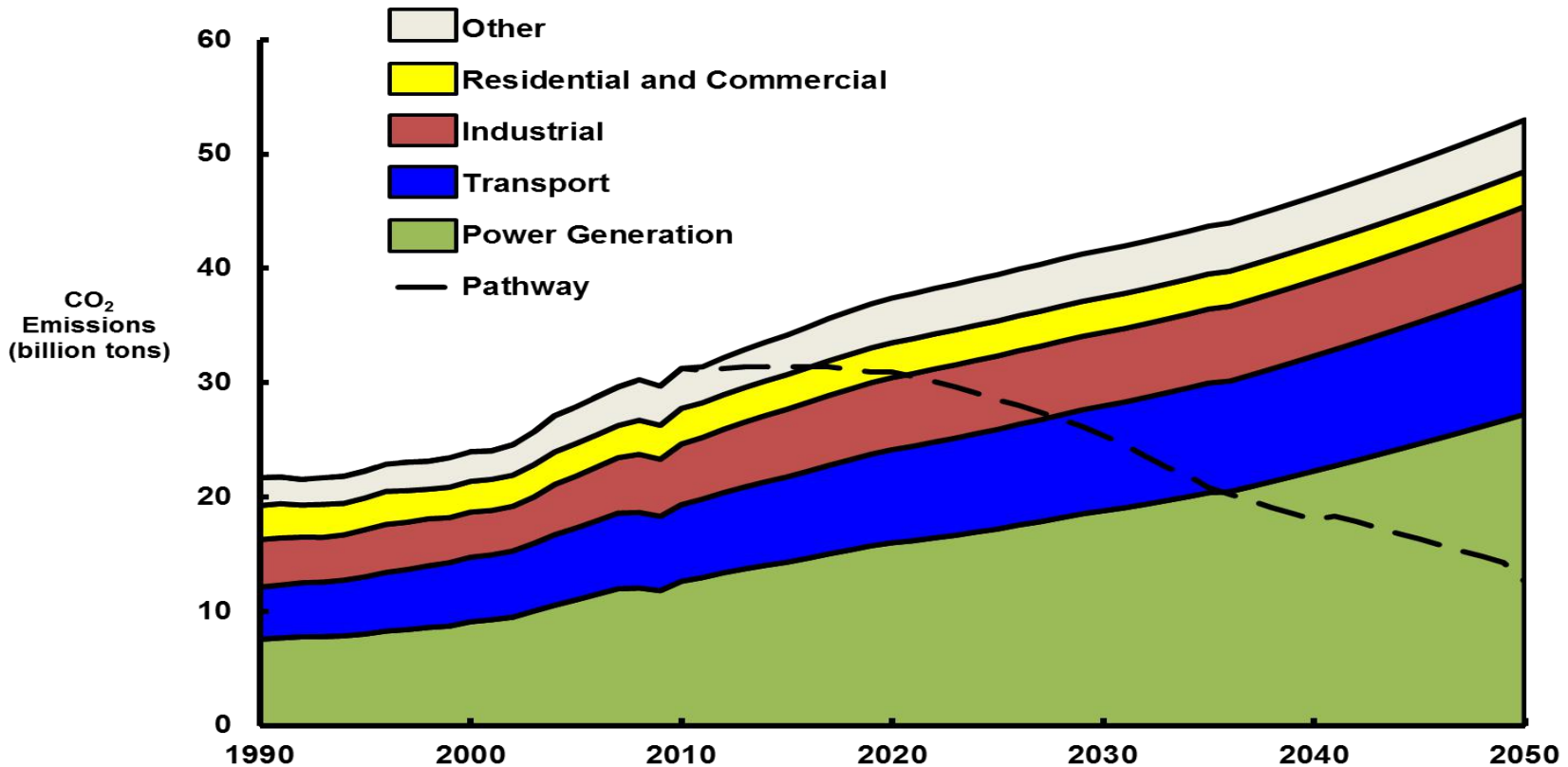


Source: World Bank

The Pathway towards a Sustainable Future

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

Global Emissions Trajectory Base Case



Gas in the power sector

Gas burns with emissions lower than coal:

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



Natural gas enables renewable energy

Natural Gas - Wind - Solar



An ideal combination

Gas for transportation

Marine



Fleets:

- Trucks
- Buses
- Taxis



Road

Public health - air quality

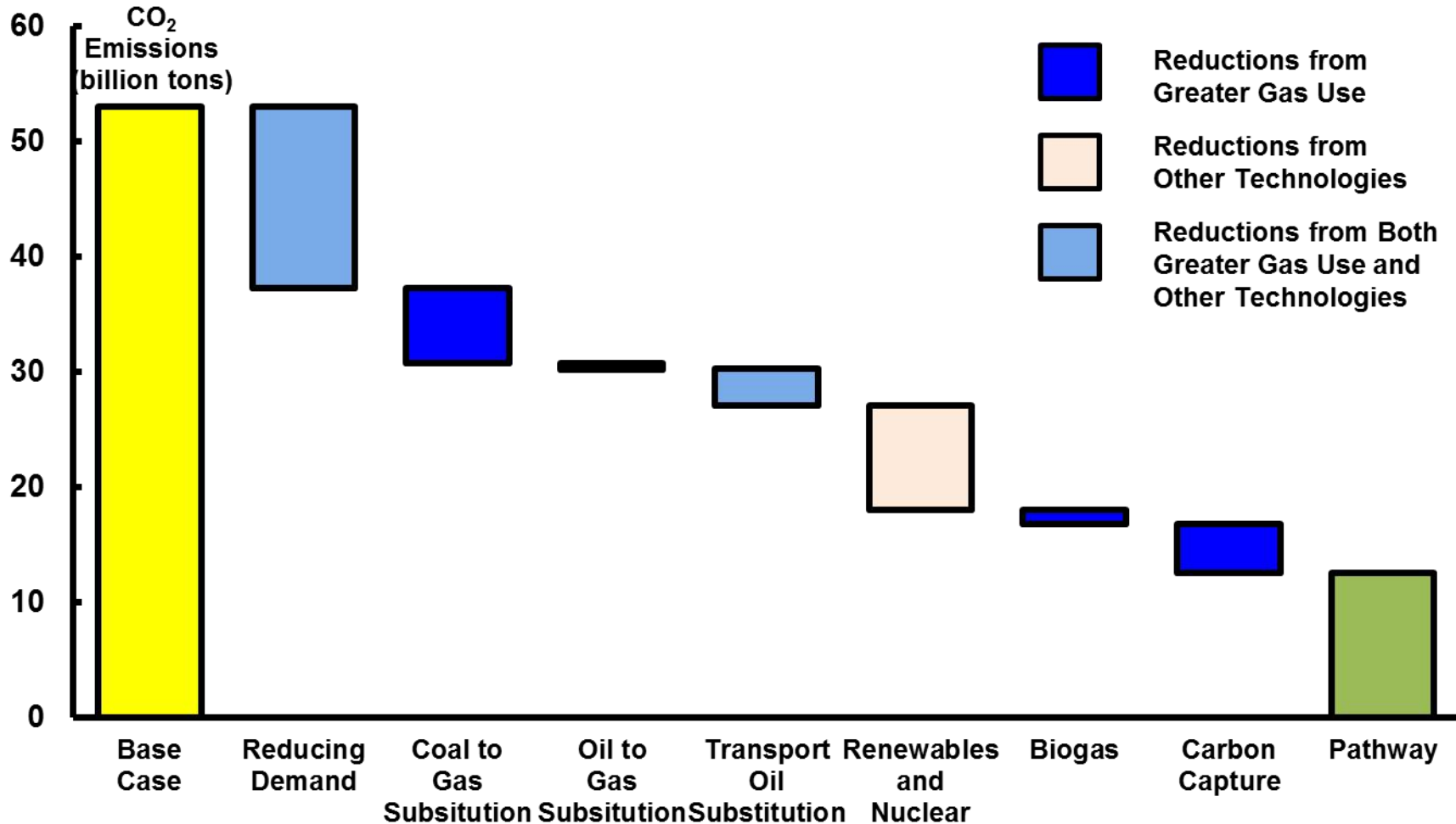
Economics and job creation

- **Economic development and job creation**
- **Build on existing energy system investments**
- **Gas industry contributes to public finances**

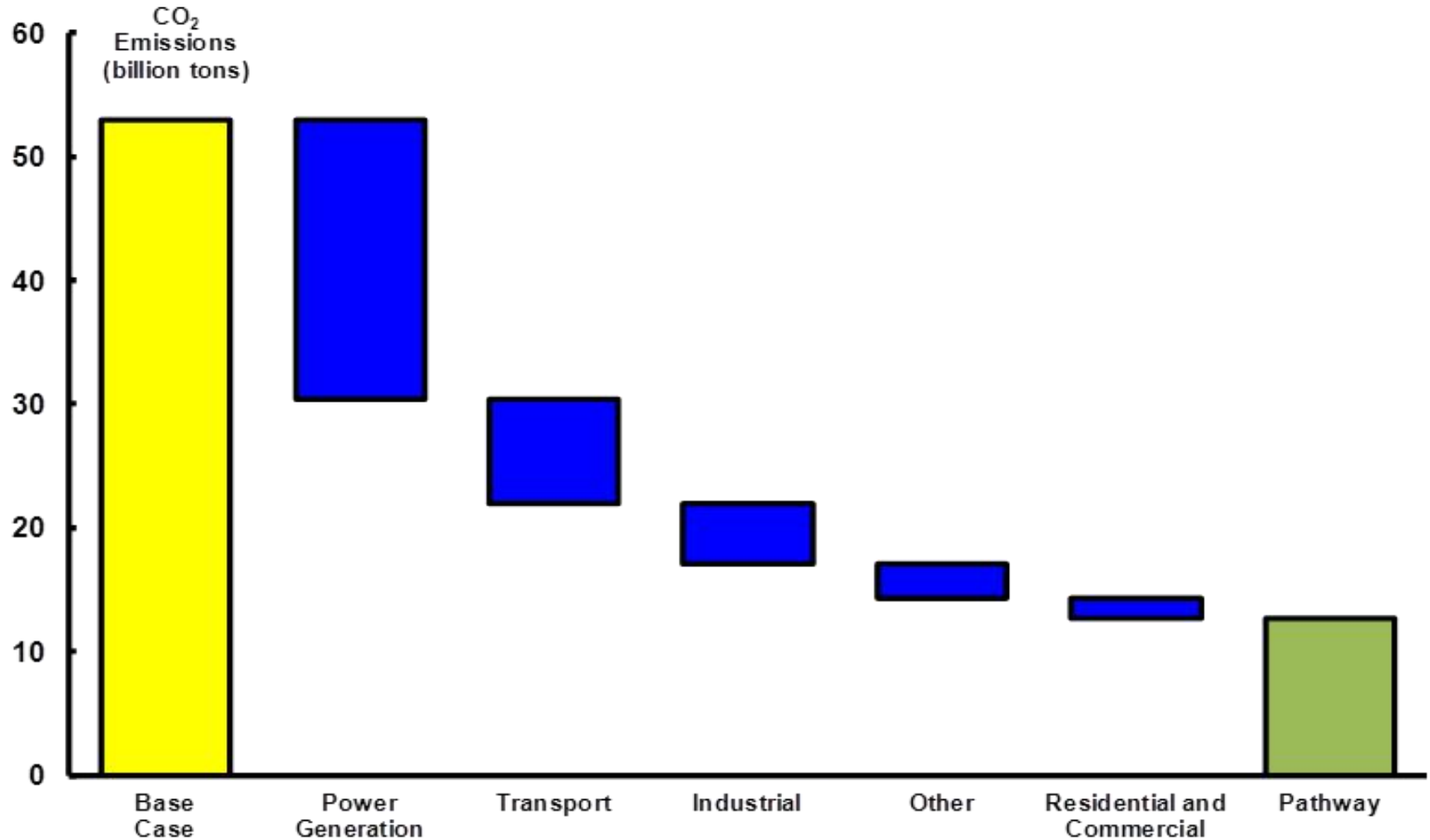


IGU Vision Pathway - various CO₂ abatement options and technology choices

Calculation for 2050



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



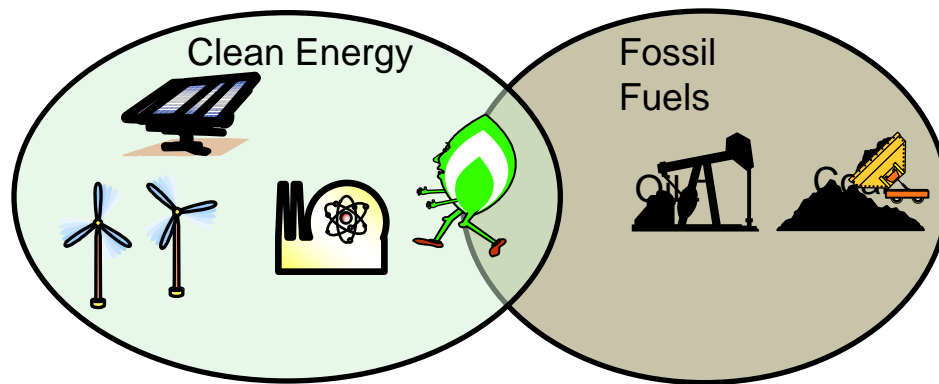
Fuel for Industry

Creating Trust for Gas

- Recognition by policymakers
- Licence to operate



Image of Gas



GHG Emissions Spectrum



A robust and sustainable energy policy

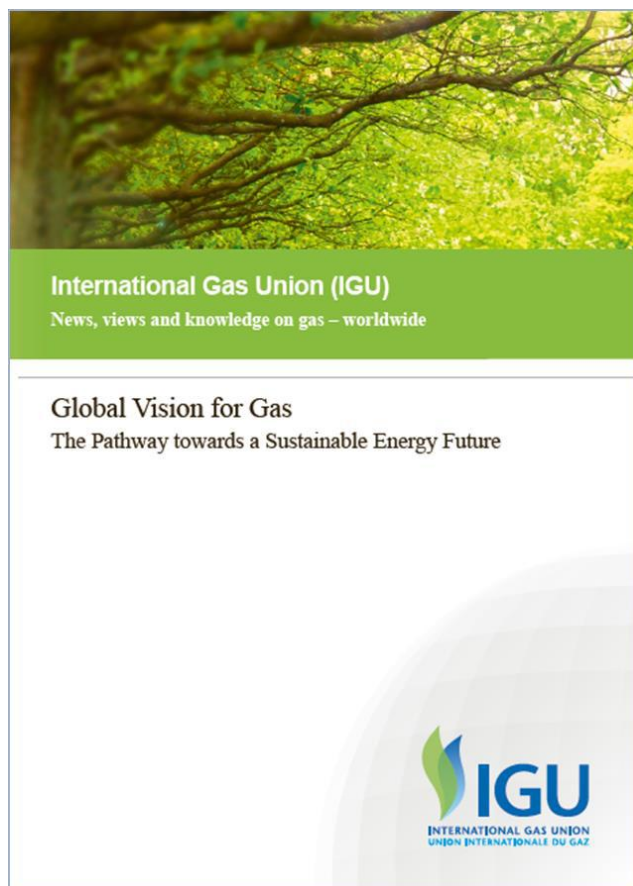
- **Energy efficiency & savings**
- **Use more gas in power generation and transportation**
- **Phase in renewable energy**
- **Develop Carbon Capture and Storage technology**



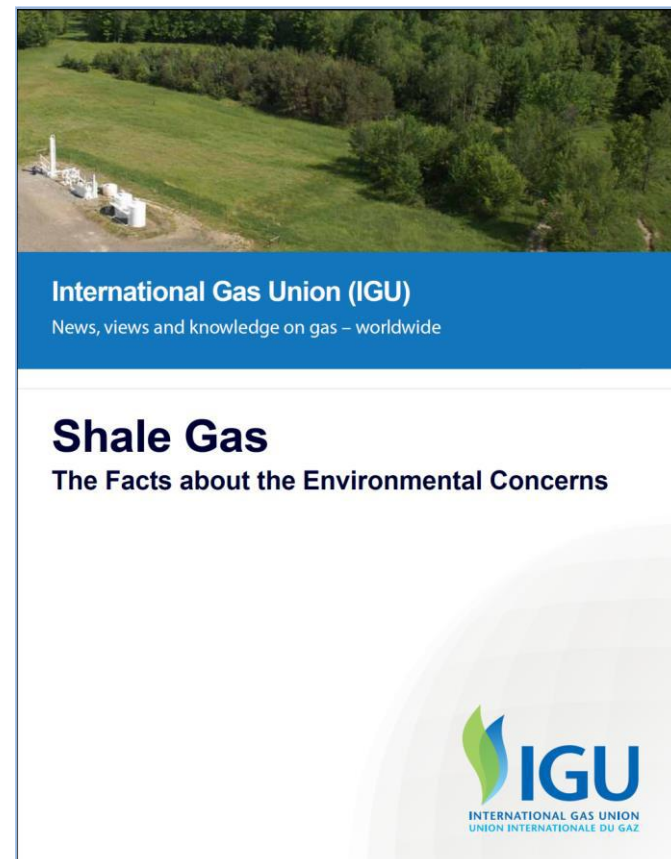
 ***Gas: The fuel of today and tomorrow!***

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

Global Vision for Gas



Shale Gas



***Thank you for your
attention!***



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