



“Natural Gas Trade as a Catalyst for Regional Market Integration ”

**Promoting regional cooperation
in the Asia-Pacific gas industry,
for sustainable development in the region**

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October 7th, 2009

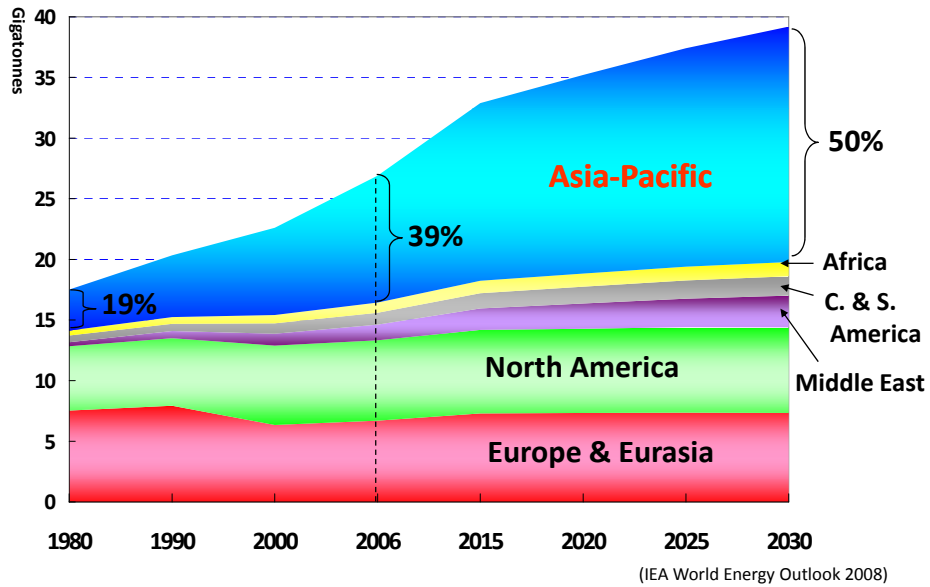
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3. Vision for the natural gas industry in the transition to a low carbon society

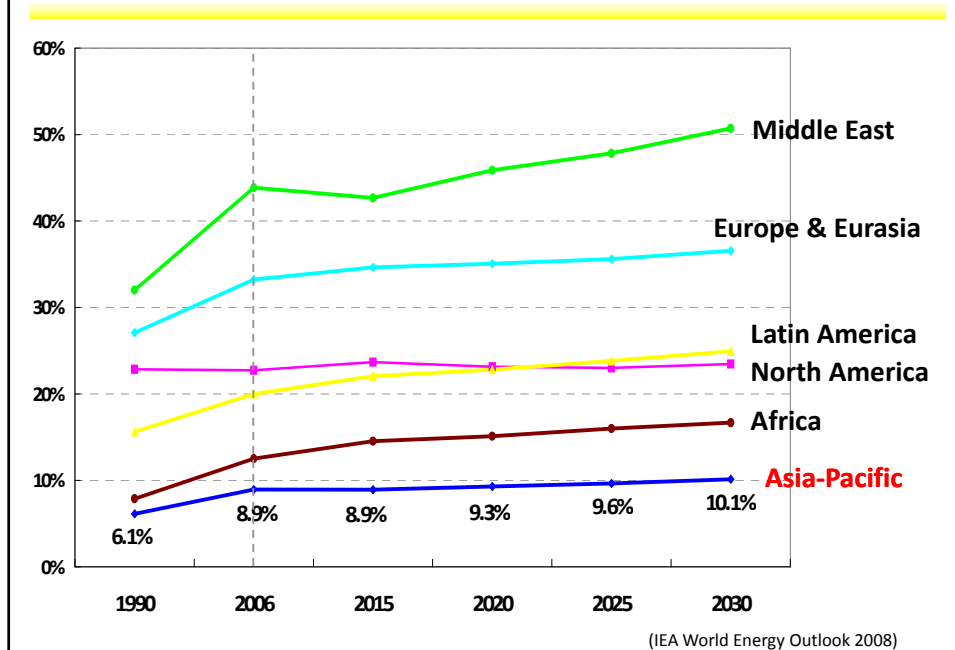
- The case of
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4. Summary

1. Regional cooperation for advanced use of natural gas

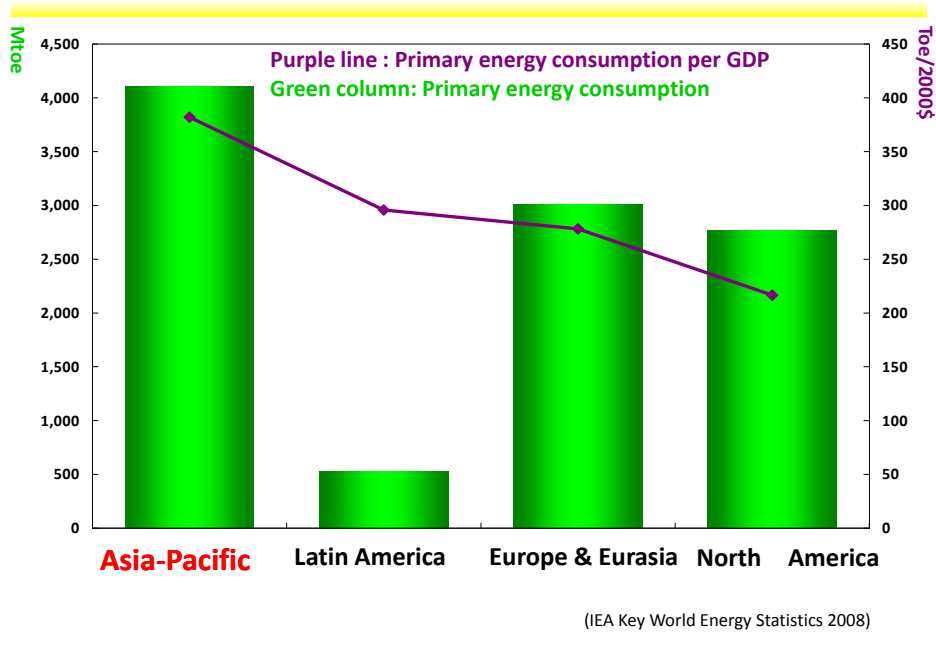
Energy-related CO₂ emissions by region



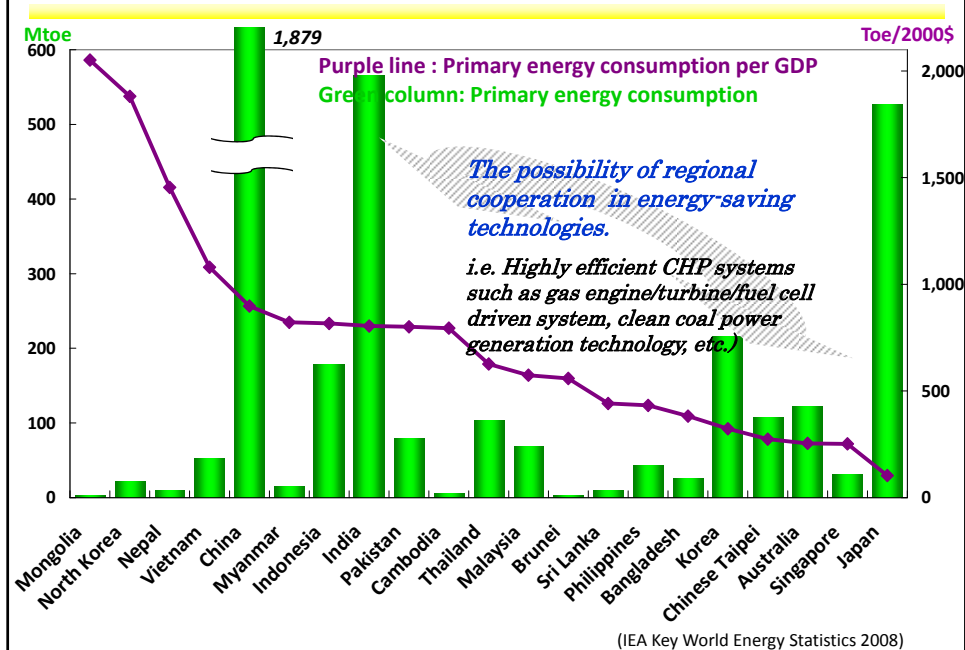
Natural gas share of primary energy supply by region



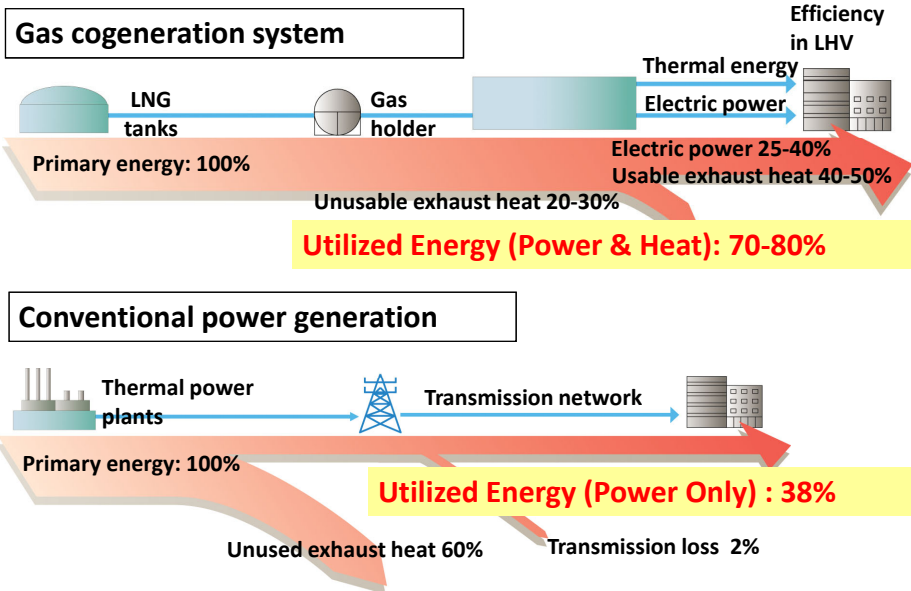
Energy efficiency by region



Energy efficiency in Asia-Pacific countries



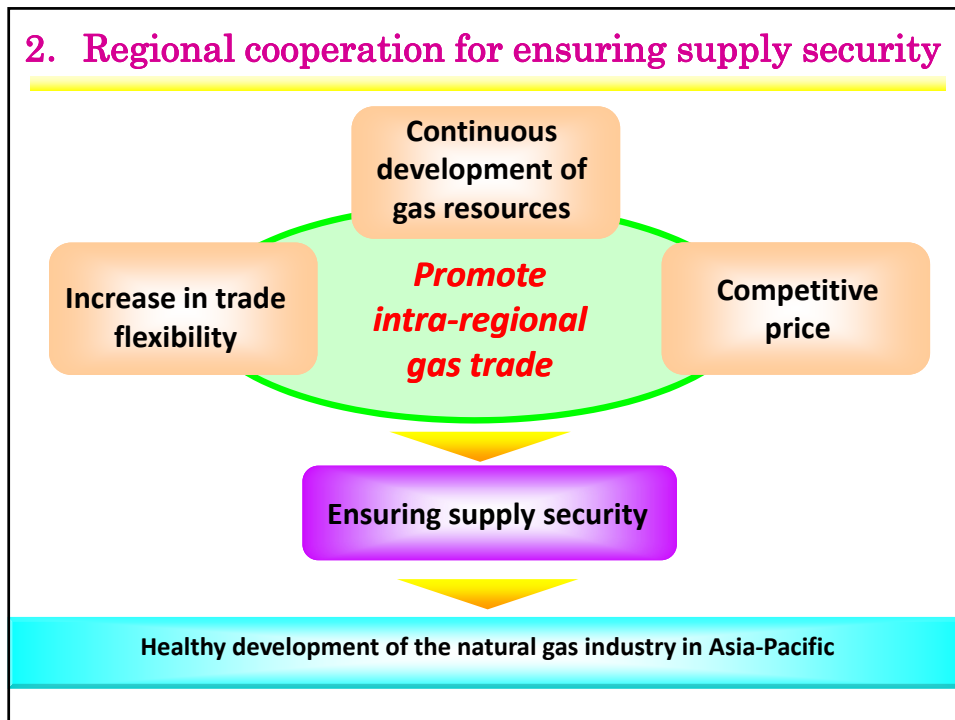
Cogeneration - highly efficient



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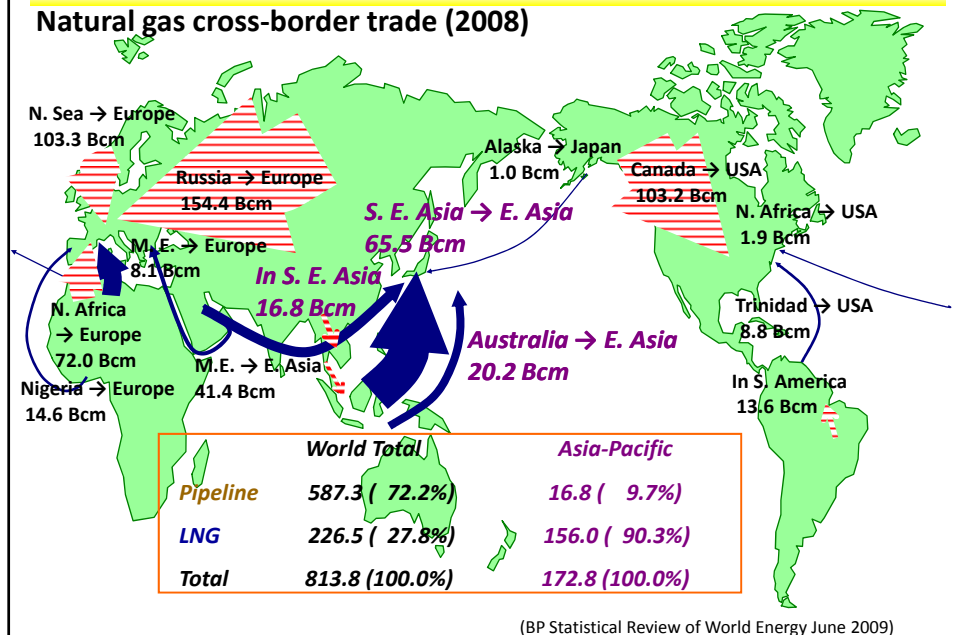
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2. Regional cooperation for ensuring supply security

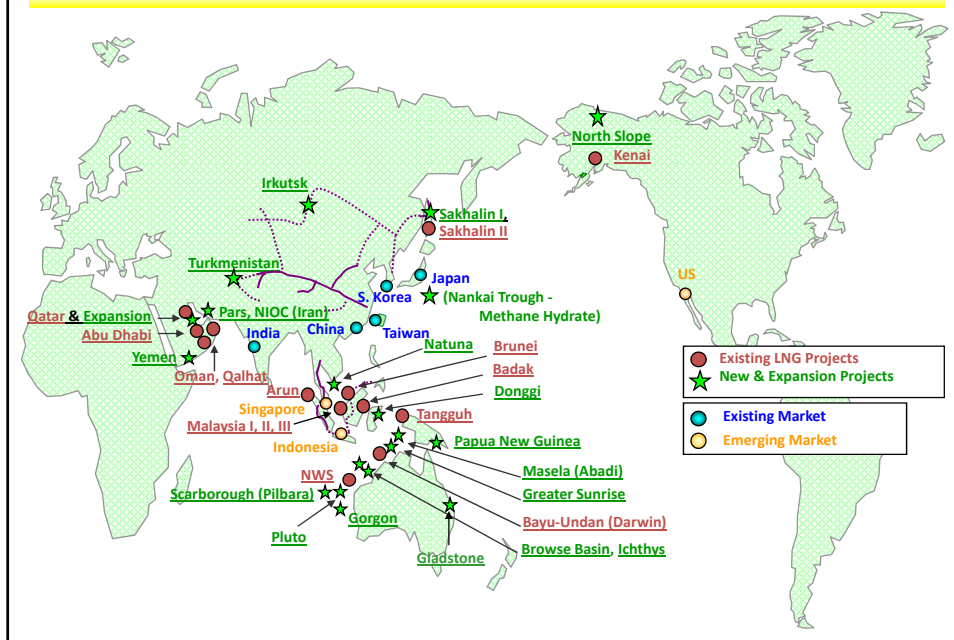


Continuous development of natural gas resources

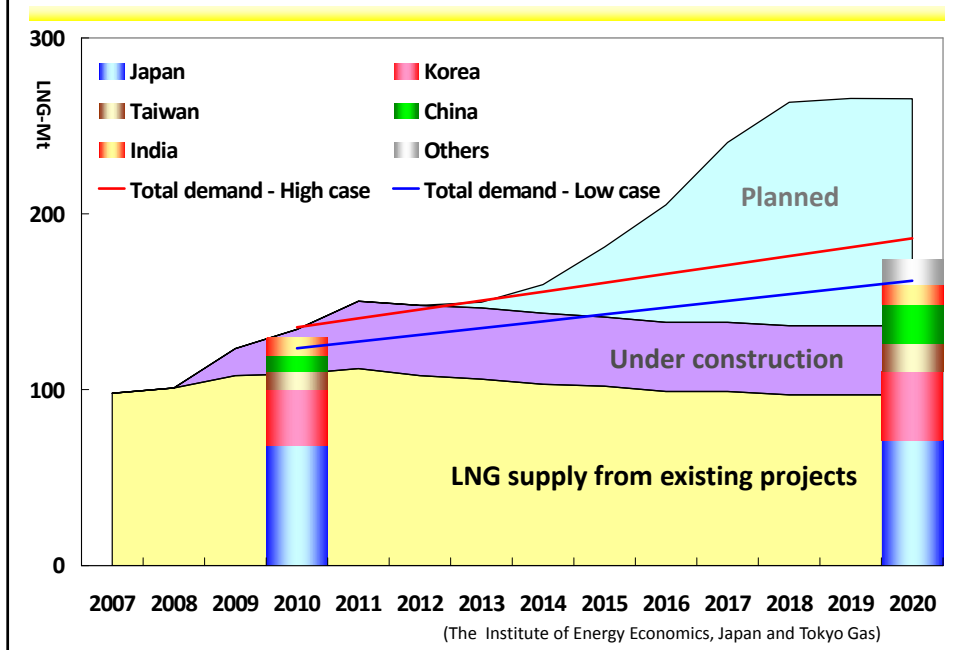
Natural gas cross-border trade (2008)



Natural gas supply potential to Asia-Pacific



LNG supply and demand outlook in Asia-Pacific



Flexible trade

**Terms and conditions for natural gas trade:
A need for flexibility**

- *Ease restrictions on LNG cargo destinations*
- *Expand into Upward Quantity Tolerance and Downward Quantity Tolerance*



Competitive price

**Natural gas pricing :
A need for competitiveness**

- *Reasonable and acceptable price level for sustainable growth of both sellers and buyers.*
- *Less exposure to oil price fluctuations (gentler slope).*
- *Efforts by all to reduce total cost of the gas supply chain.*



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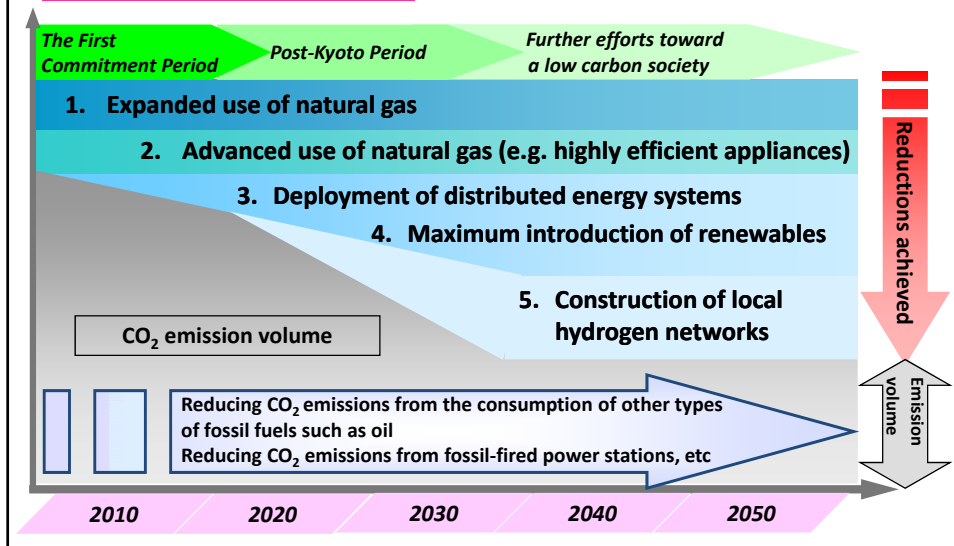
3. Vision of the gas industry towards future growth - The case of Japan -

Target Reduction of GHG Emissions in Japan

Japan's government policy	Reducing GHG emissions by
Kyoto Protocol Target Achievement Plan (March 2008)	6% from 1990 level between 2008 and 2012
Formulation of mid-term target (Speech by Prime Minister Aso on 10 June 2009)	15% from the 2005 level (8% from 1990 level) by 2020
Formulation of mid-term target (Prime Minister Hatoyama announced at the UN climate change summit on 22 Sep 2009)	25% from the 1990 level by 2020
Action plan for Achieving a low carbon society (July 2008)	60-80% from the present level by 2050

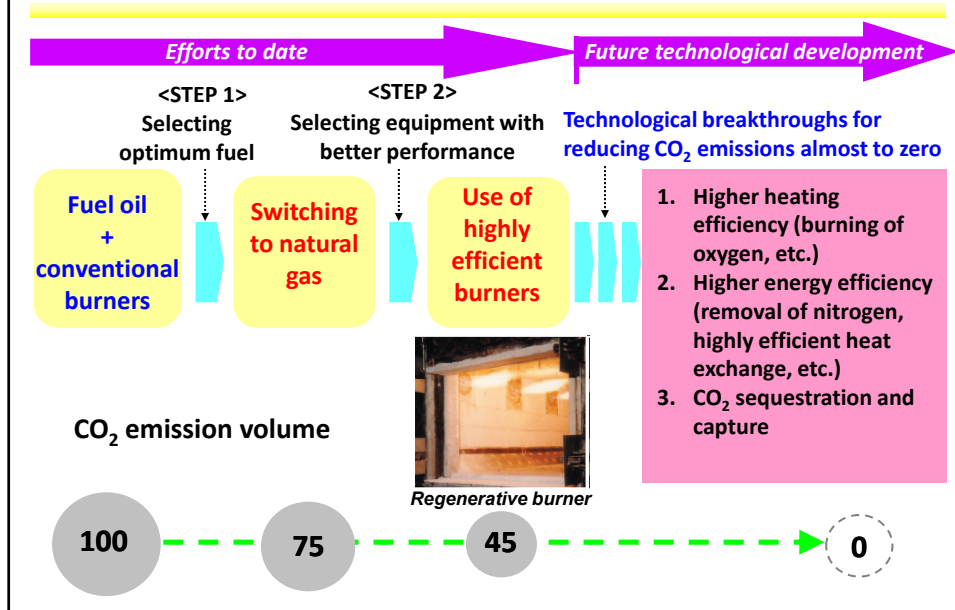
Vision of gas industry for a low carbon society

Supporting 60-80% reduction of CO₂ emissions by expanding the advanced use of natural gas

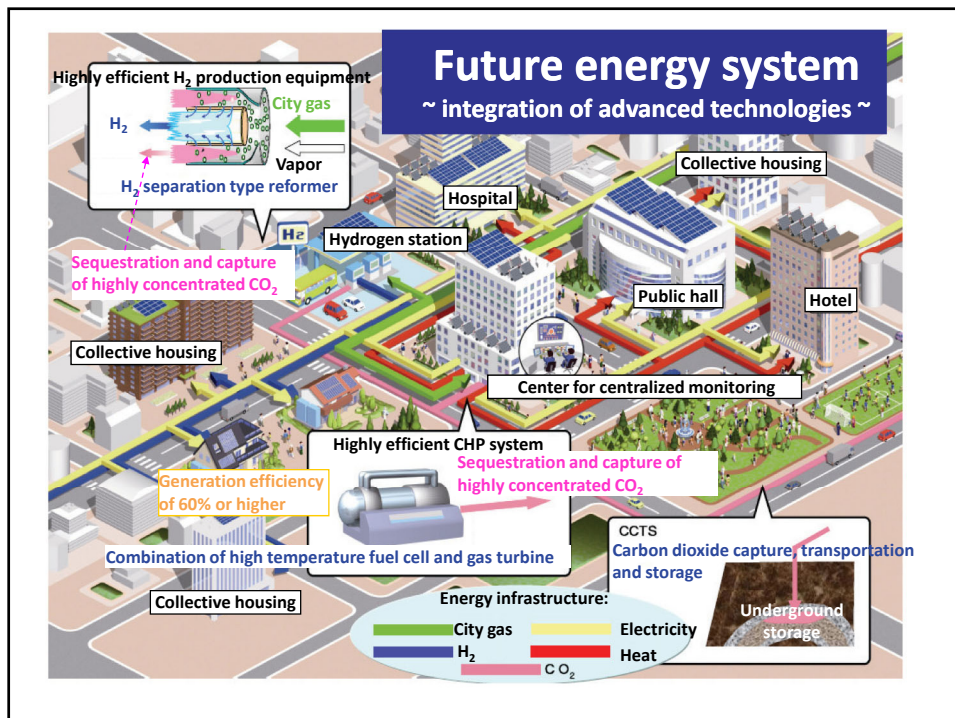
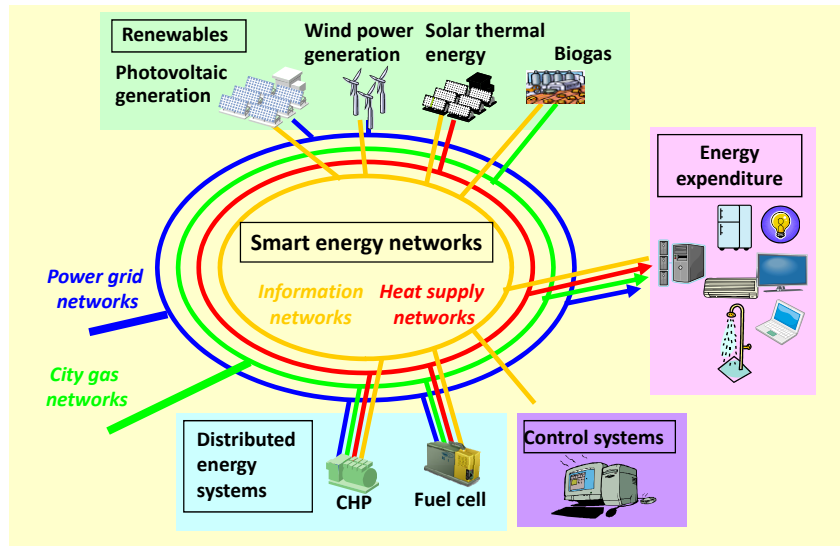


Examples of advanced use of natural gas

(using natural gas with advanced energy conservation technologies)



Distributed energy systems in a low carbon society (Smart energy networks)



Summary

Create closer relationships within the region

Gas exporting countries



Gas importing countries

Ensuring supply security

Advanced use of natural gas

The medium- to long-term vision of the gas industry for growth:

- Advanced use of natural gas such as cogeneration systems
- Promotion of distributed energy system
- Harmony between renewable energy and natural gas
- Construction of local hydrogen networks, etc.



24th World Gas Conference
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The Global Energy Challenge:
Reviewing the Strategies
for Natural Gas

Thank you very much for your attention.

Norio Ichino
Chairman, The Japan Gas Association
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