

Smart Energy Network

New Gas Technology after the Earthquake

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Damage of the earthquake and tsunami



From top of the Ishinomaki Gas building © Ishinomaki Gas Co., Ltd.

Scale of the Earthquake

- **Date and Time:** 11 March 2011 14:46
- **Magnitude:** 9.0 (the largest earthquake recorded in Japan)
- **Epicenter:** N38.1, E142.9 (130km ESE off Oshika Peninsula)
Depth 24km

	First tsunami	Maximum height of tsunami
Miyako (Iwate)	+0.2m (March 11, 14:48)	+8.5m<= (March 11, 15:26)
Ofunato (Iwate)	-0.2m (March 11, 14:46)	+8.0m<= (March 11, 15:18)
Soma (Fukushima)	+0.3m (March 11, 14:55)	+9.3m<= (March 11, 15:51)
Ishinomaki (Miyagi)	+0.1m (March 11, 14:46)	+7.6m<= (March 11, 15:25)

Major discussion points for a new Basic Energy Plan for Japan

The desired energy mix and direction of energy policy reform

(1) Desired energy mix

- a) Fundamental reinforcement of energy and electricity conservation
- b) Accelerated development and use of renewable energies
- c) Effective utilization of fossil fuels (ex. natural gas)
- d) Reduced dependency on nuclear power

(2) Direction of energy policy reform

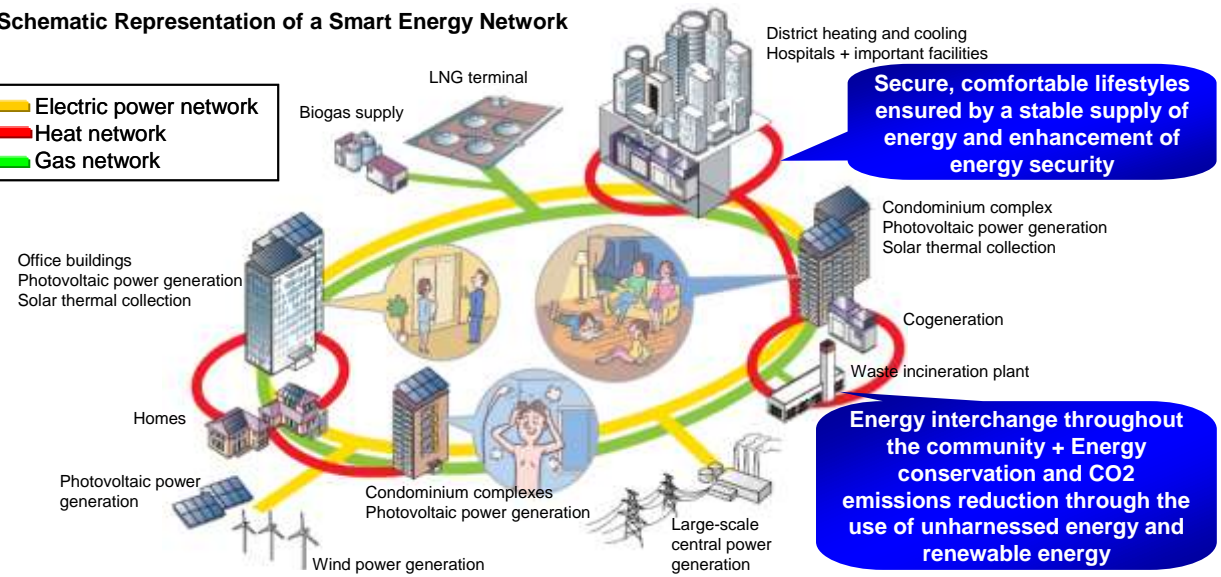
- a) Realizing the world's most advanced energy-saving society
- b) Realizing a distributed next-generation energy system

(3) Need for technical innovation

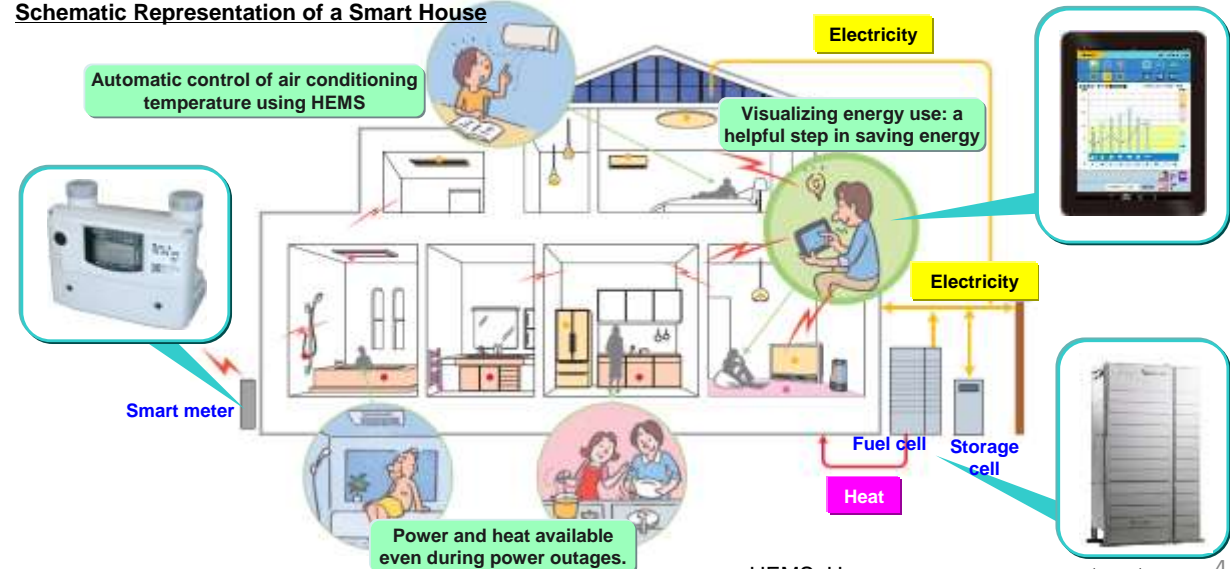
Schematic Representation of a Smart Energy Network and a House

Schematic Representation of a Smart Energy Network

■ Electric power network
■ Heat network
■ Gas network



Schematic Representation of a Smart House



* HEMS: Home energy management system

Technical and Social demonstration of Regional Hydrogen Supply Infrastructure



Hydrogen Highway Project

