

Conditions for Successful Natural Gas Business in Northeast Asia : Power Company Perspectives

By

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Japanese Economy and Electricity Sales Figure 1

TEPCO's Electricity Power Demand Growth Rate

1999	2000	2001	2002	2003* ¹	2002 2013 * ²
2.7%	2.3%	▲1.8 %	2.3%	▲1.9%	1.5%

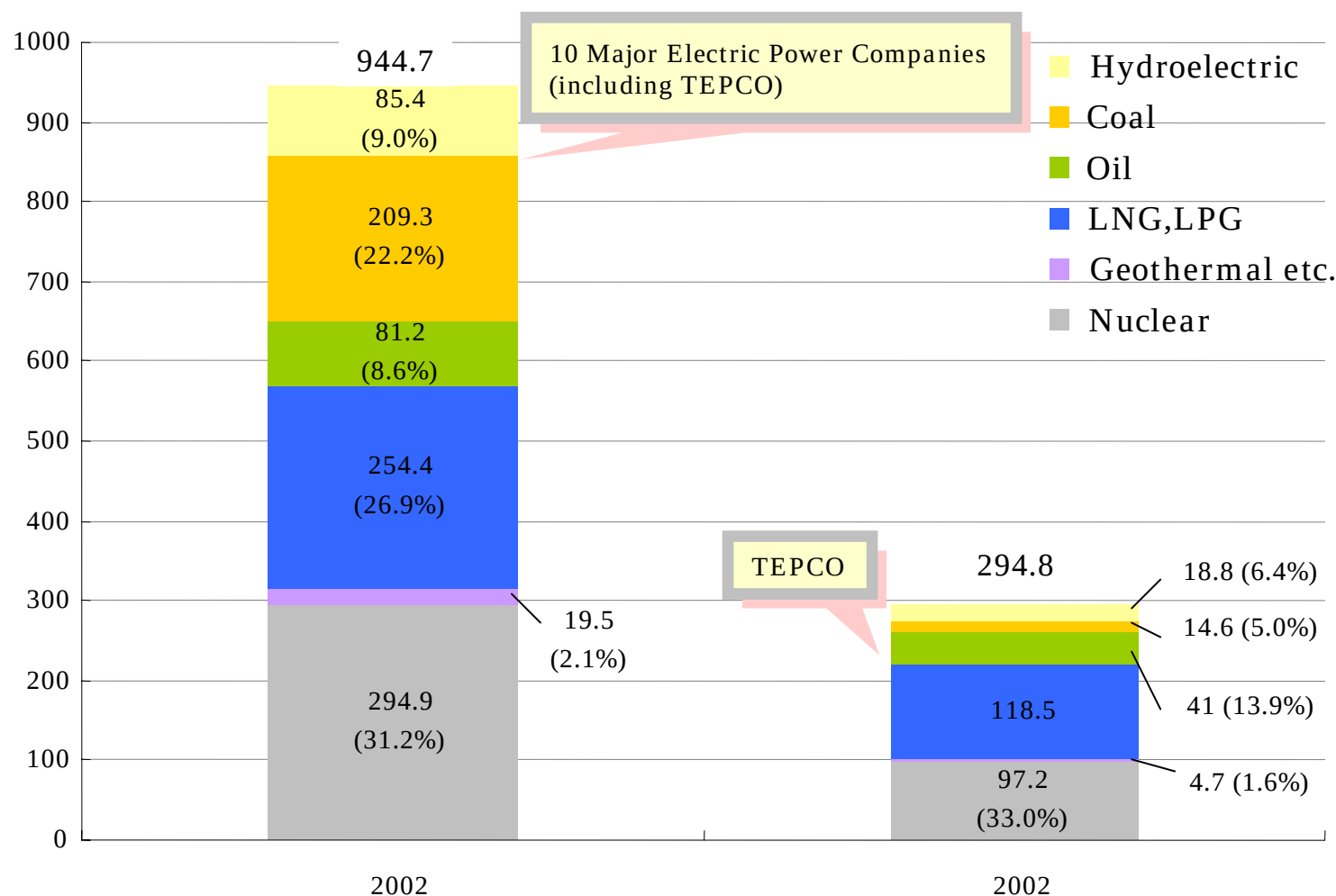
(FISCAL YEAR BASIS)

*¹ Estimated by TEPCO

*² Estimated by EI

Electricity Generation by Type of Fuel (TWh) (Including Purchased Power)

Figure 2



Source : Management Plans from Japanese Electric Power Companies

Figure 3

Outline of LNG/LPG Projects

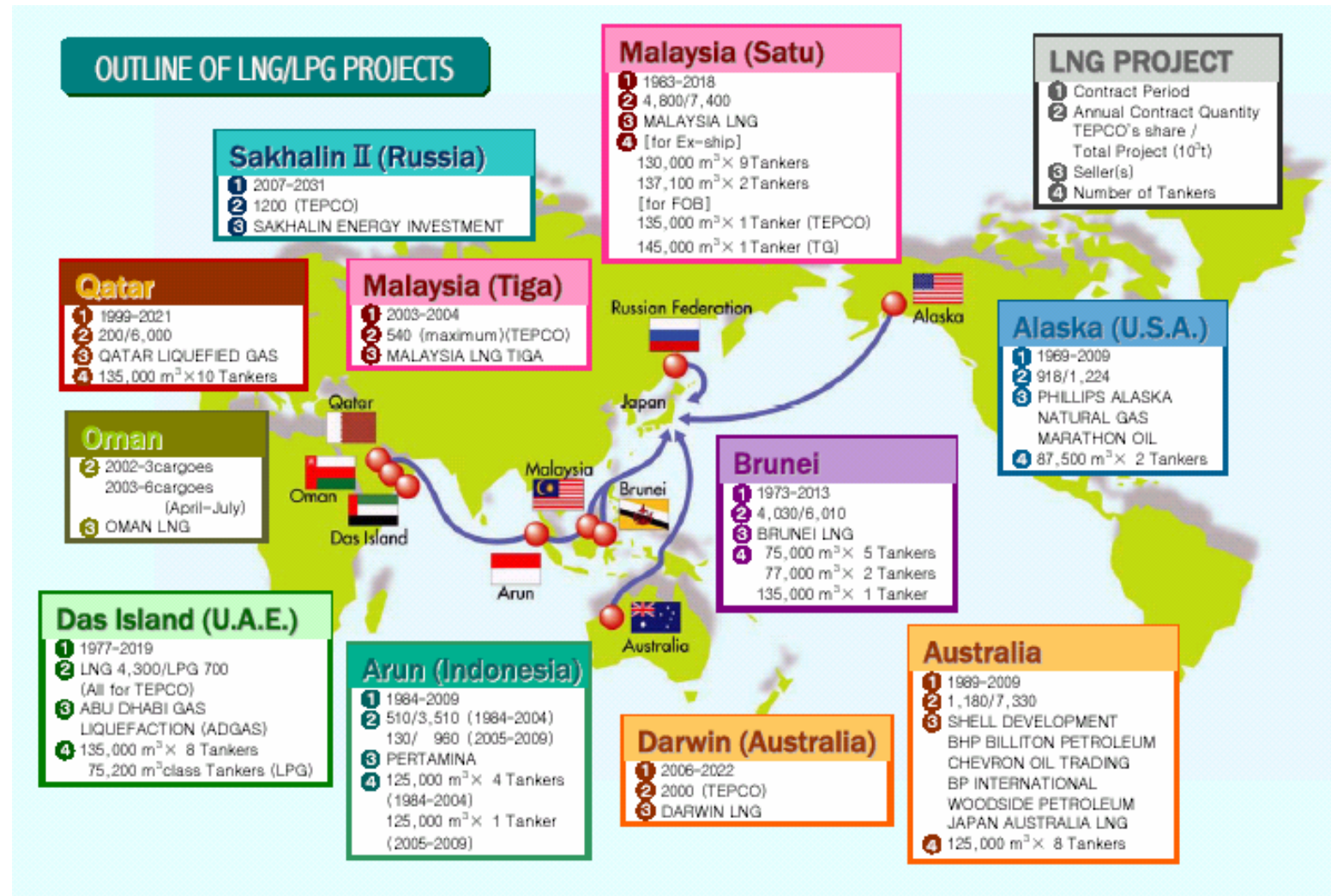
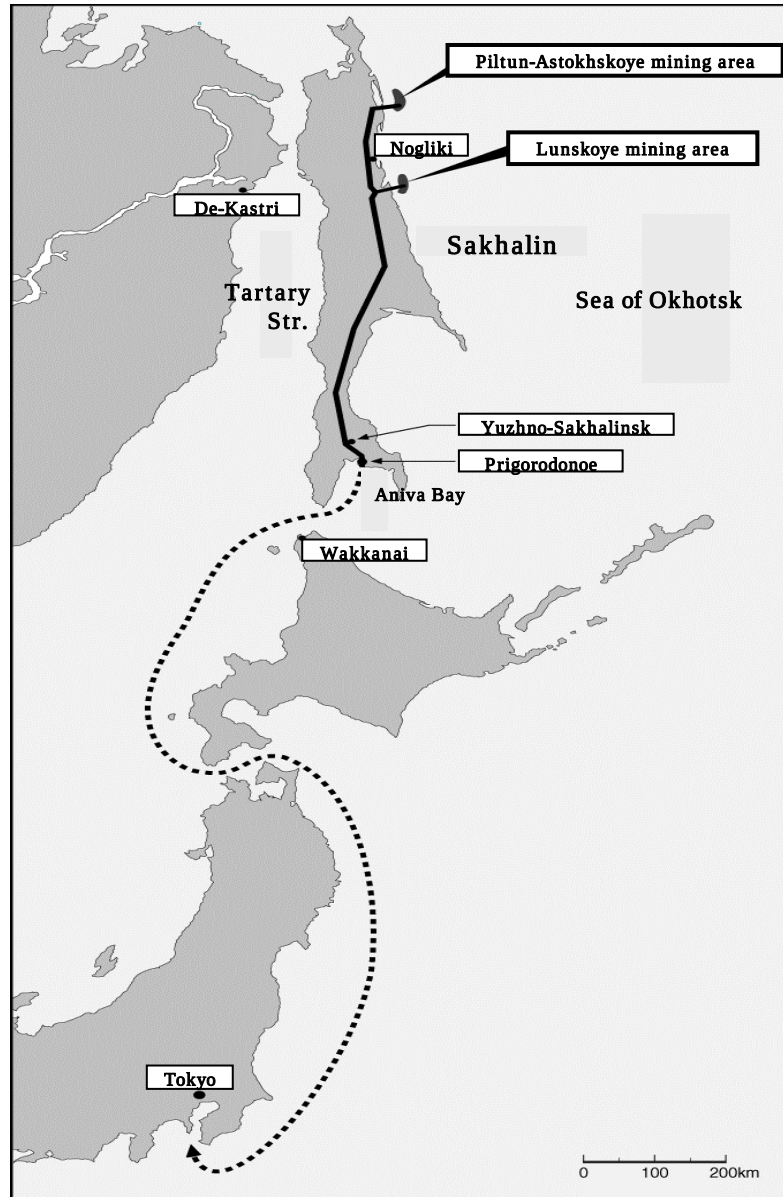


Figure 4

LNG Purchase under Sakhalin II Project



- Seller :
Sakhalin Energy Investment Company Ltd.
- Term :
22 years from April 2007
- Volume :
Base volume is 1.2 million tons per year, plus buyer's volume option
- Delivery Terms : FOB

Figure 5

Participation in Darwin LNG Project

(Bayu-Undan Field map)

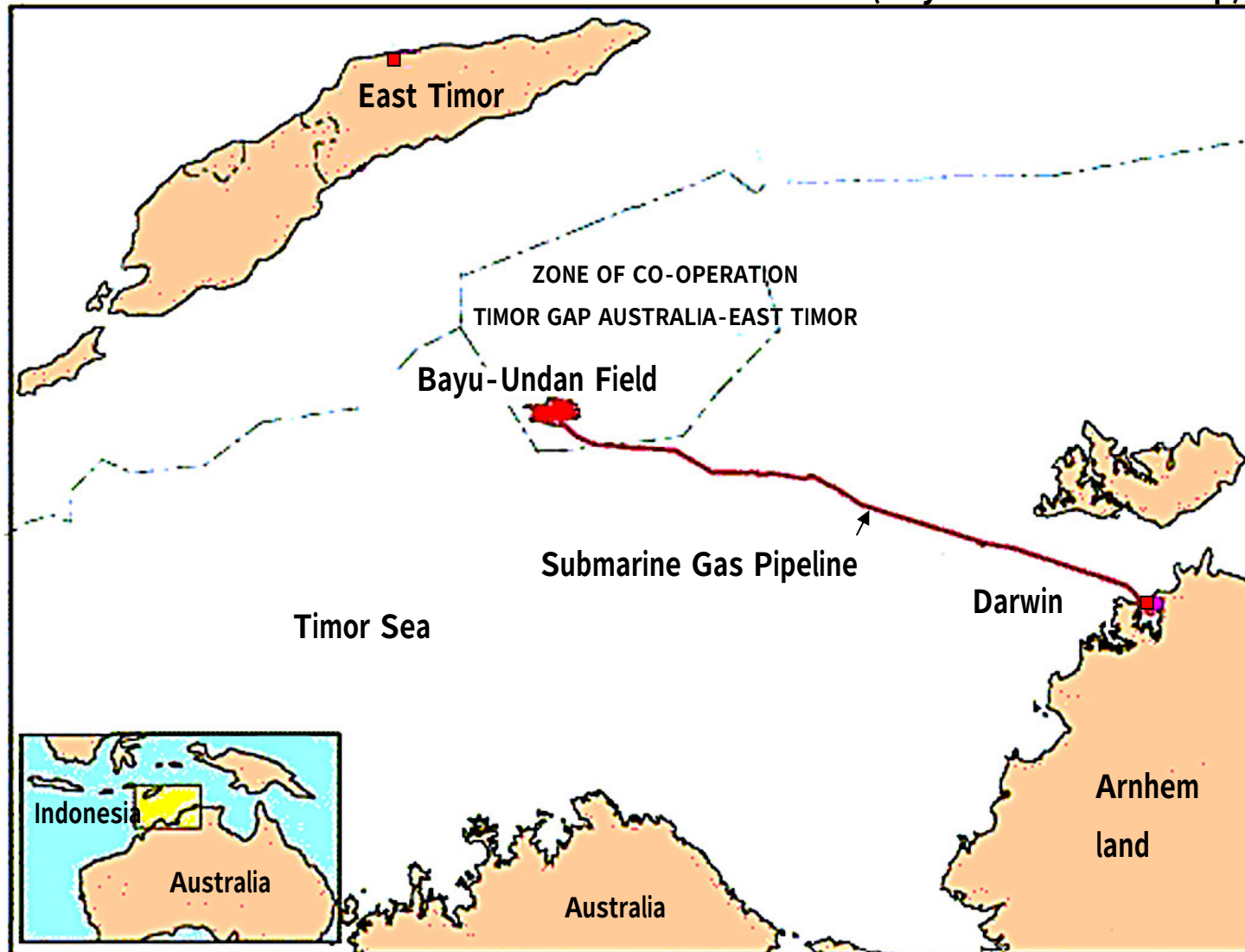
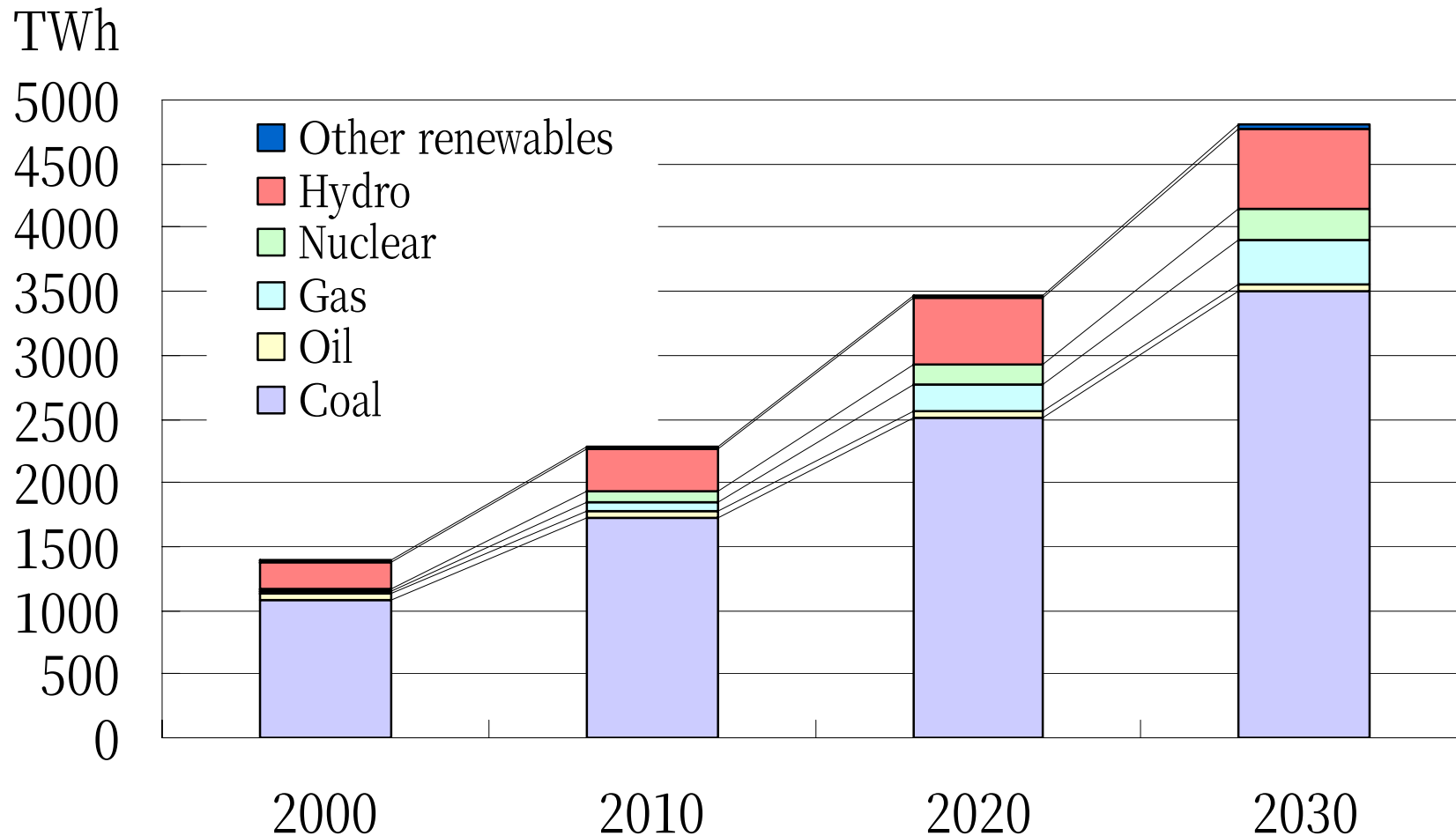


Figure 6

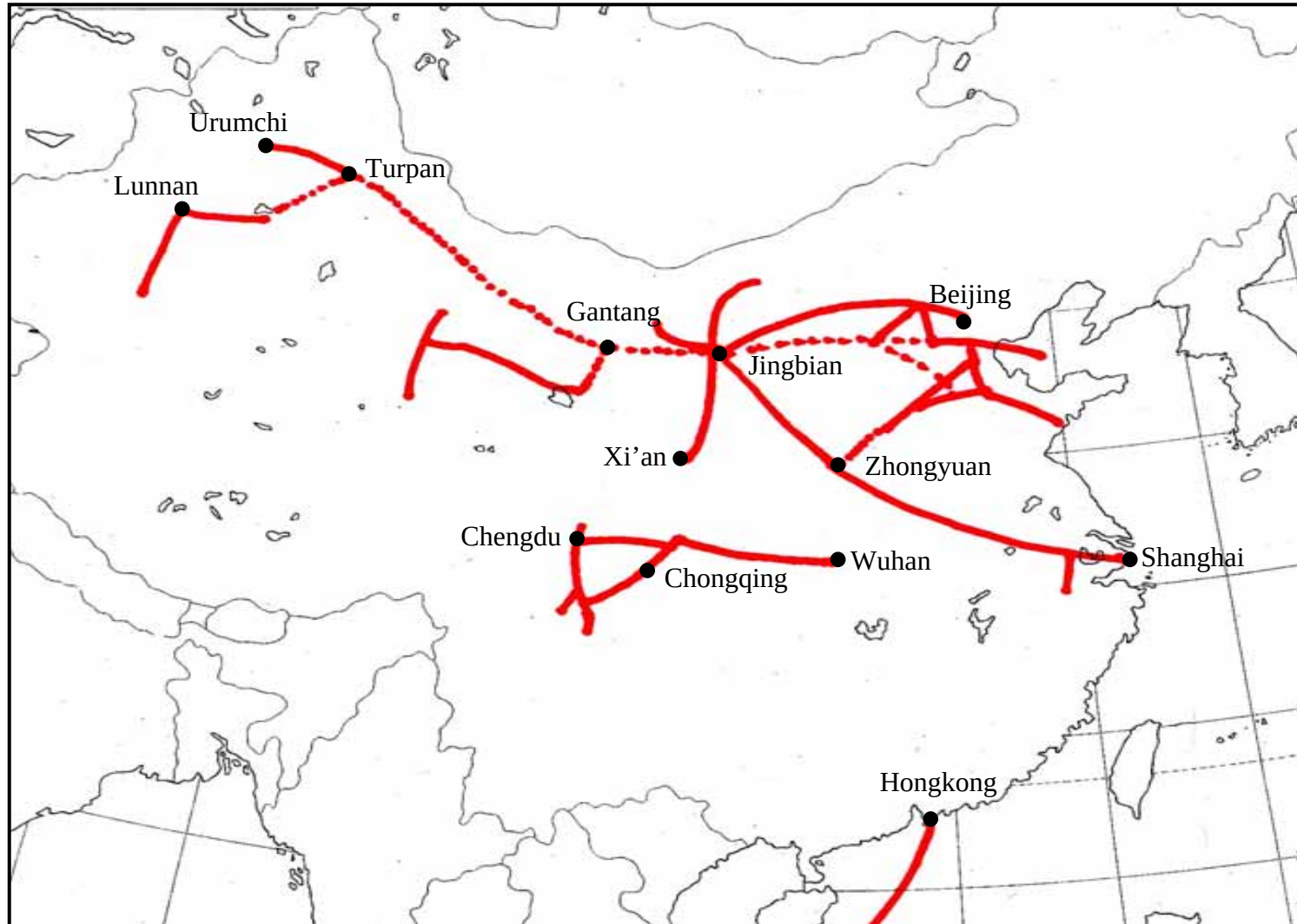
Electricity Generation Mix in China



Source: IEA

Figure 7

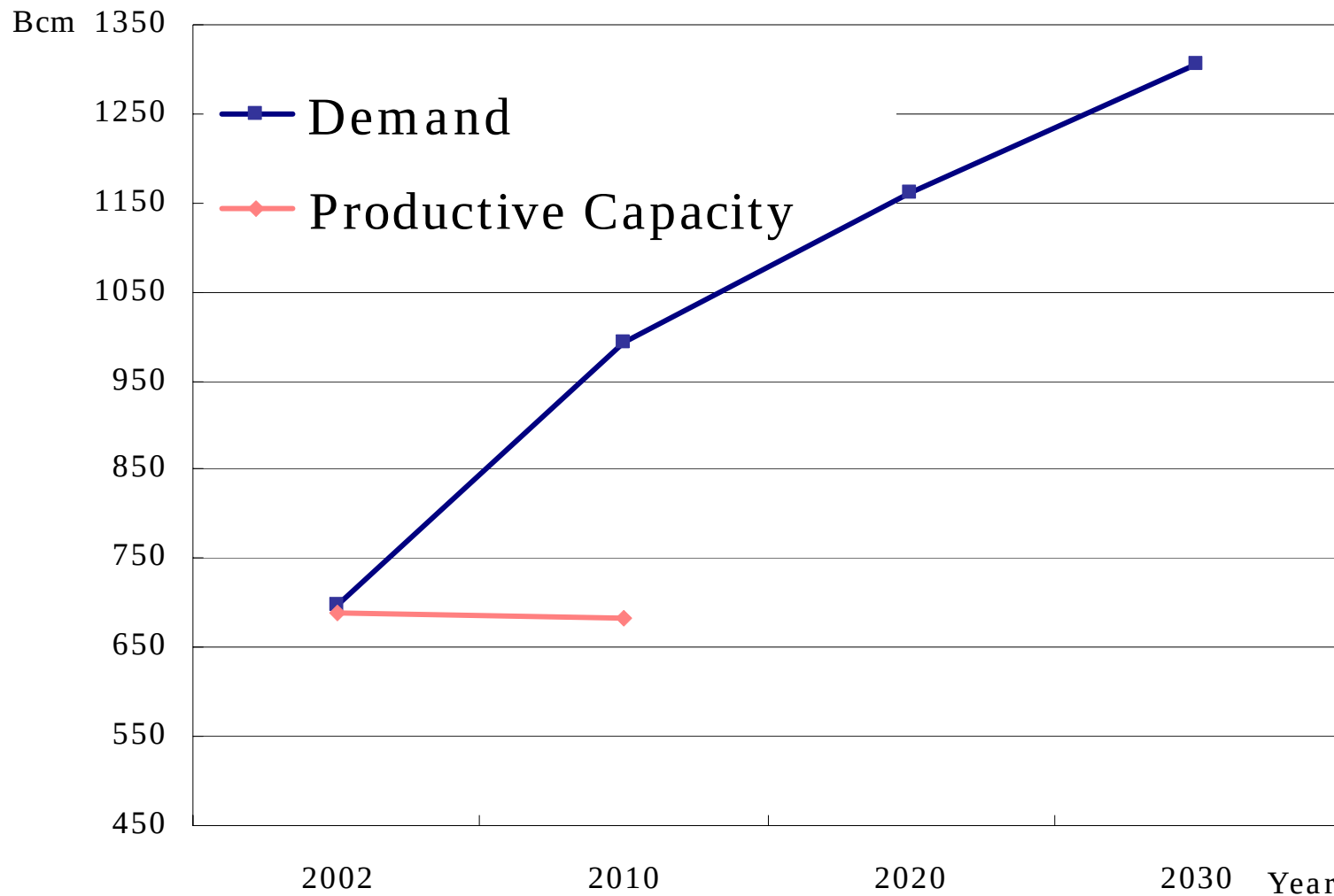
Existing and Planned Natural Gas Pipelines in China



North American Gas Demand and Productive Capacity

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Figure 8



Source : IEA / Others

Electricity Deregulation Process

Apr. 2004 Customers consuming more than 500kW

Apr. 2005 All industry and business customers

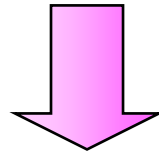
TEPCO must compete with PPS etc. for 60% of all demand.

※1 Entire power market deregulation is under consideration

※2 Before Apr. 2005, wholesale electricity market and independent system operator will be founded

Changes in the LNG Market

- Difficulty in estimating future LNG requirement
- Downsizing of Oil Power Plants in Japan
- Usefulness of LNG spot markets



- Expansion of flexibility, Short-term and Spot Trades
- Elimination of “Take or Pay”
- Attractive price for LNG buyers

Request to PNG from user is equal to LNG

Ownership of LNG Ships by TEPCO

First Ship “Pacific Notus” Briefing



Oct. 2003

First arrival in Futtsu terminal

Cost reduction by operation of own LNG ship is around 5% compared to Ex-ship

Second ship

April 2006 Operation between Darwin and Japan

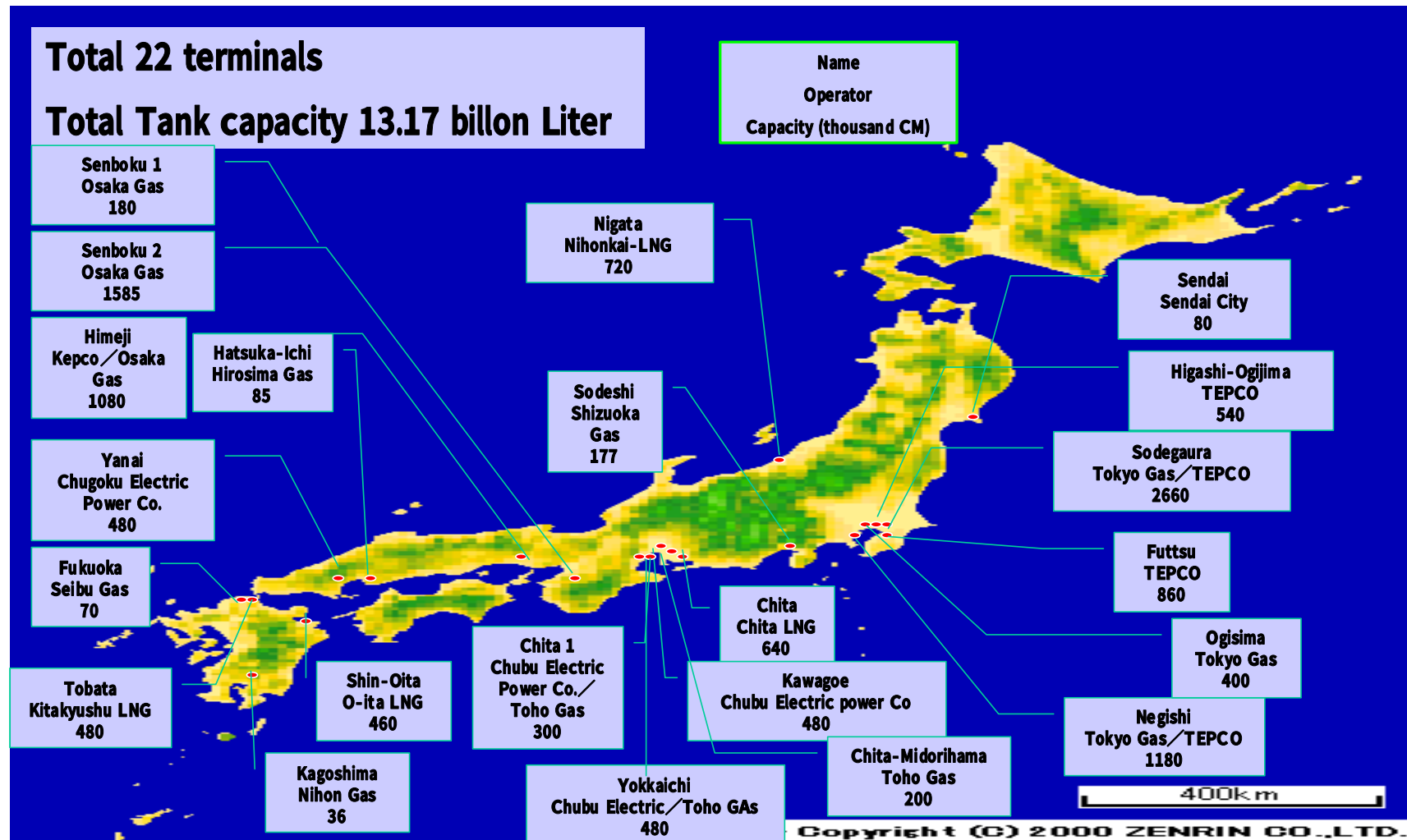
Name	Pacific Notus
Type	Moss Rosenberg Spherical
Tank Capacity	135,000m ³ (5 tanks)
Length	290m

TEPCO can contribute to the expansion of Pacific LNG trade

Figure 12

LNG (1)

- Terminals in Japan



- Existing infrastructures such as LNG terminals (22 terminals)

LNG (2)

- To be able to meet the small amount of increased volume required by using the reserve capacity of LNG facilities
- To connect LNG terminals to power plants through short distance pipelines
- To restrict entry of ships in congested ports such as Tokyo bay

Pipeline Gas

- Few records of construction of under sea pipeline in Japan.
- The matching of supply and demand volume is more crucial than LNG
- A large volume is necessary to build up a new pipeline in a short time period.

Conclusion

- Both LNG and Pipeline Gas are key to meet increased energy demand in East Asia
- We must bear in mind
 - Stability
 - Competitiveness