

The Asia Pacific/Atlantic Basin Interplay

A presentation to
The APGAS Forum 2007

by

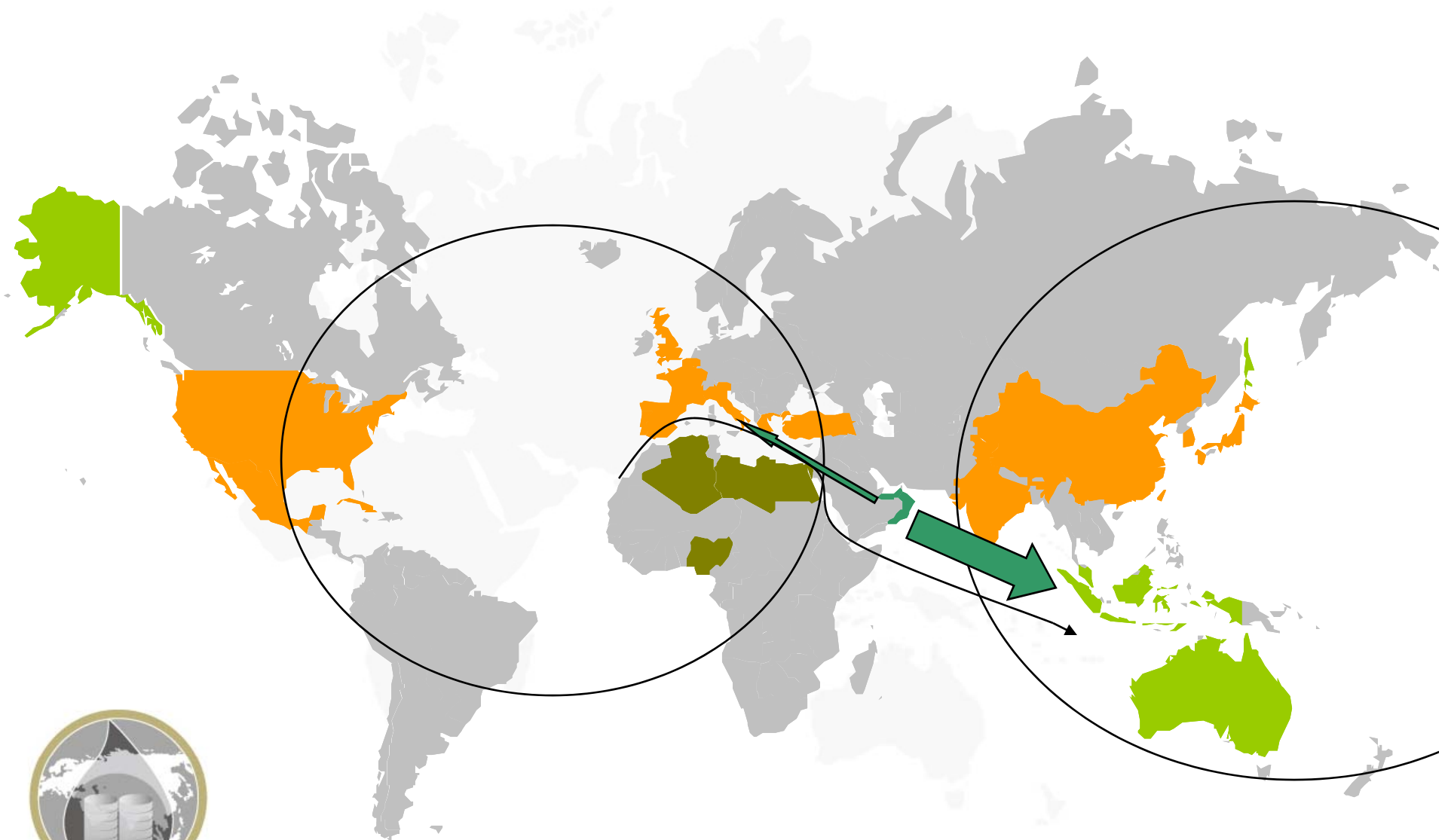
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San Diego, California

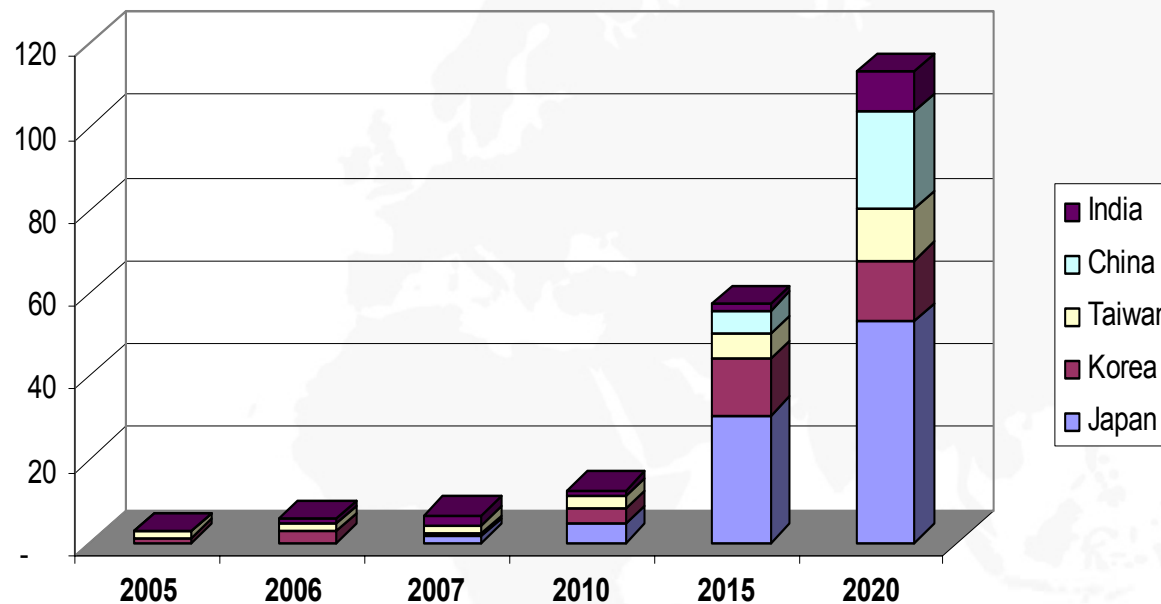


LNG is Still a Regional Market Today



Asian LNG Markets Outlook

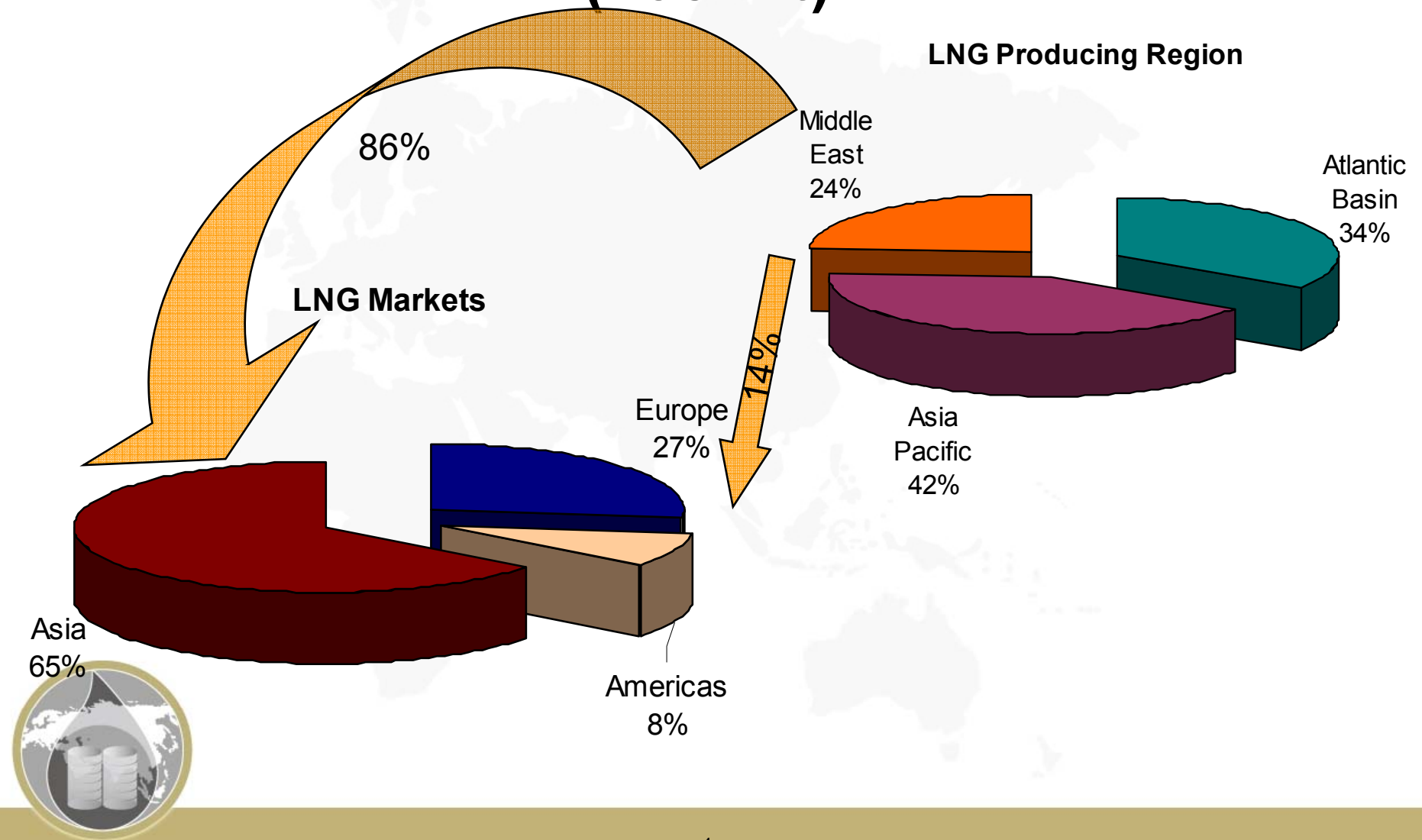
LNG Uncommitted Demand (mtpa)



- ✓ 6.7% average annual growth for LNG demand until 2010, 5% afterwards.
- ✓ Most new markets will develop mainly after 2010-15 and will be very sensitive to prices.
- ✓ LNG uncommitted demand: 12 mt in 2010, 57 mt in 2015, and 113 mt in 2020.

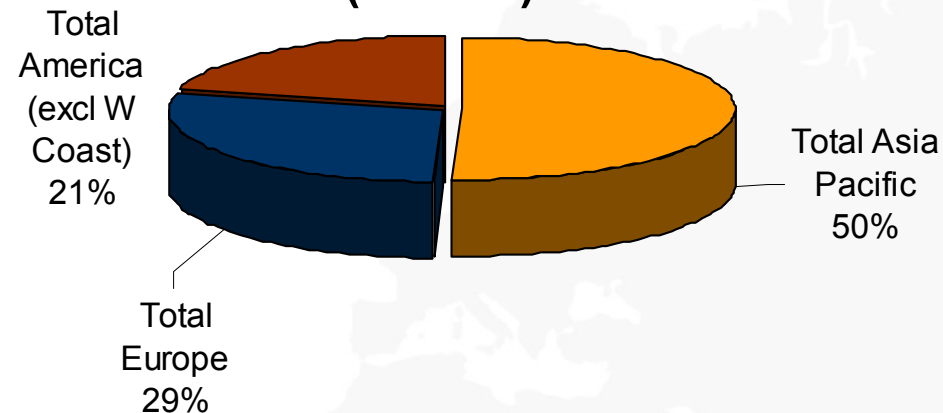


Structure of the LNG Market in 2006 (158 mt)

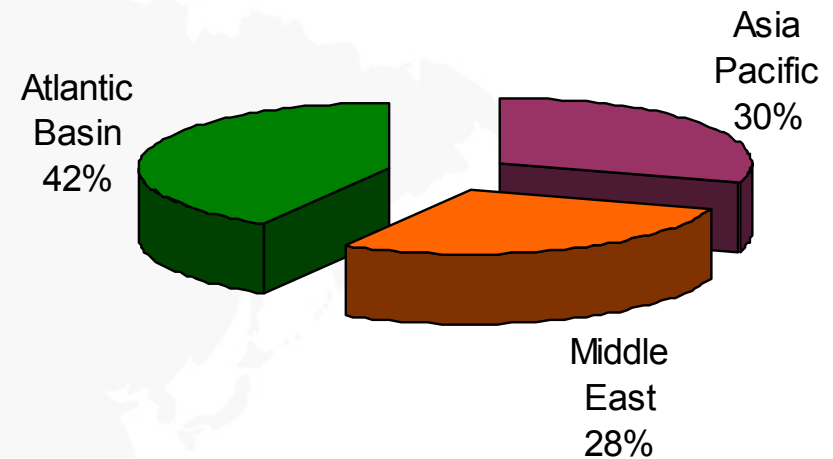


Structure of the LNG Market in 2015

**LNG Demand in 2015
(349 mt)**



LNG Producing Region

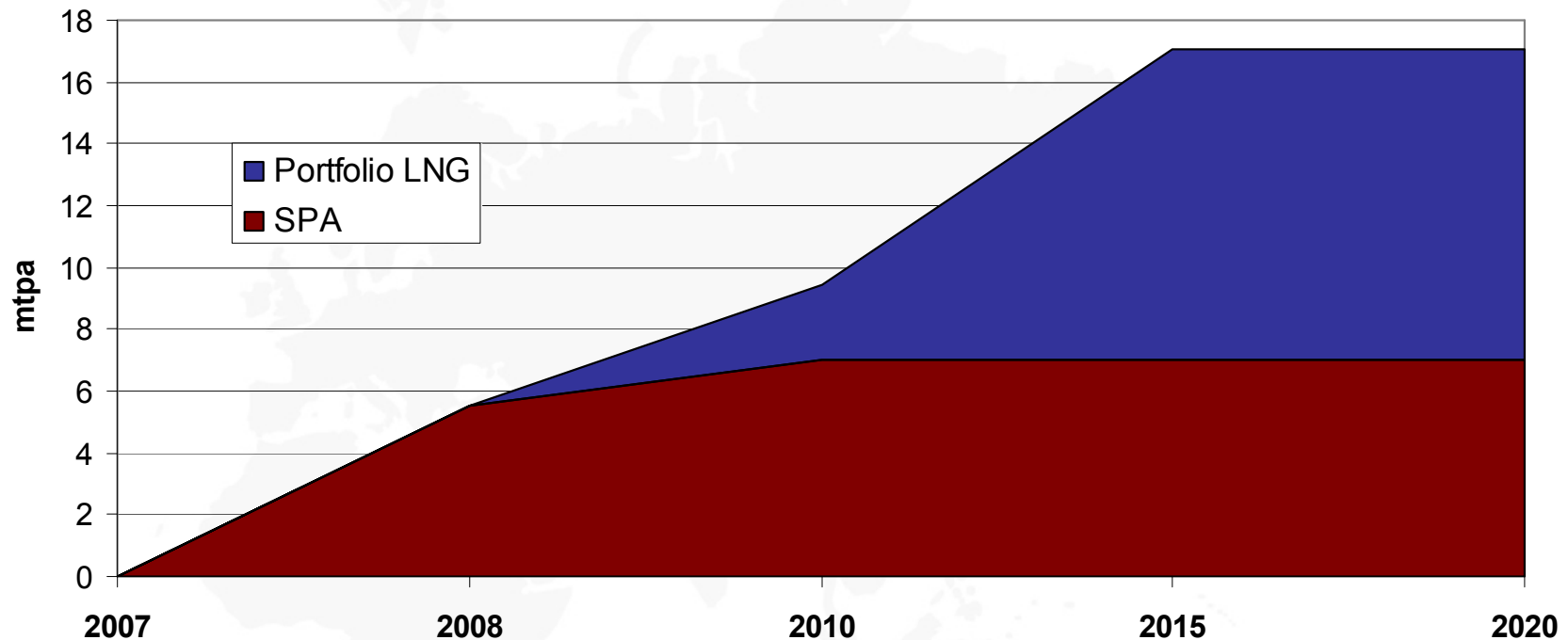


- ✓ Further reduction of the share of the Asia Pacific in the world's total portfolio of supply.
- ✓ Even if all liquefaction projects scheduled to start by 2015 in the East materialize, regional producers will still cover only 80% of Asia Pacific demand.



Impact on the American West Coast

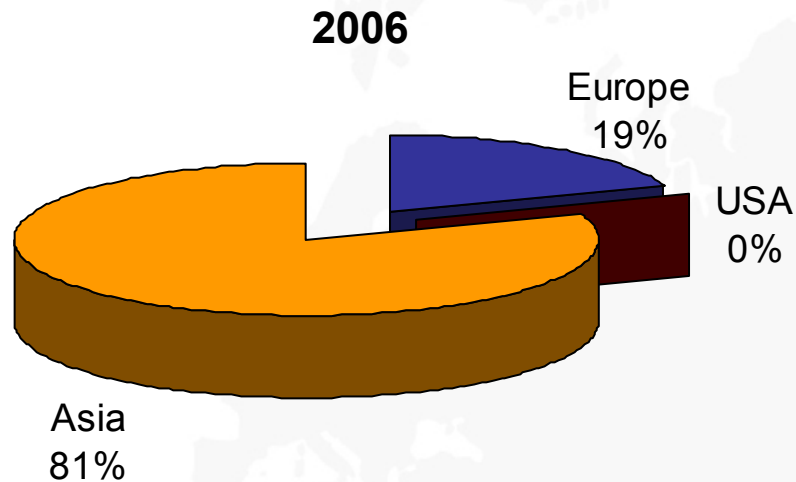
LNG Contracted For the American West Coast



- Virtually all of the supply contracted for the American West Coast can be redirected.
- Impact on receiving terminal projects, outside Costa Azul and Chile?

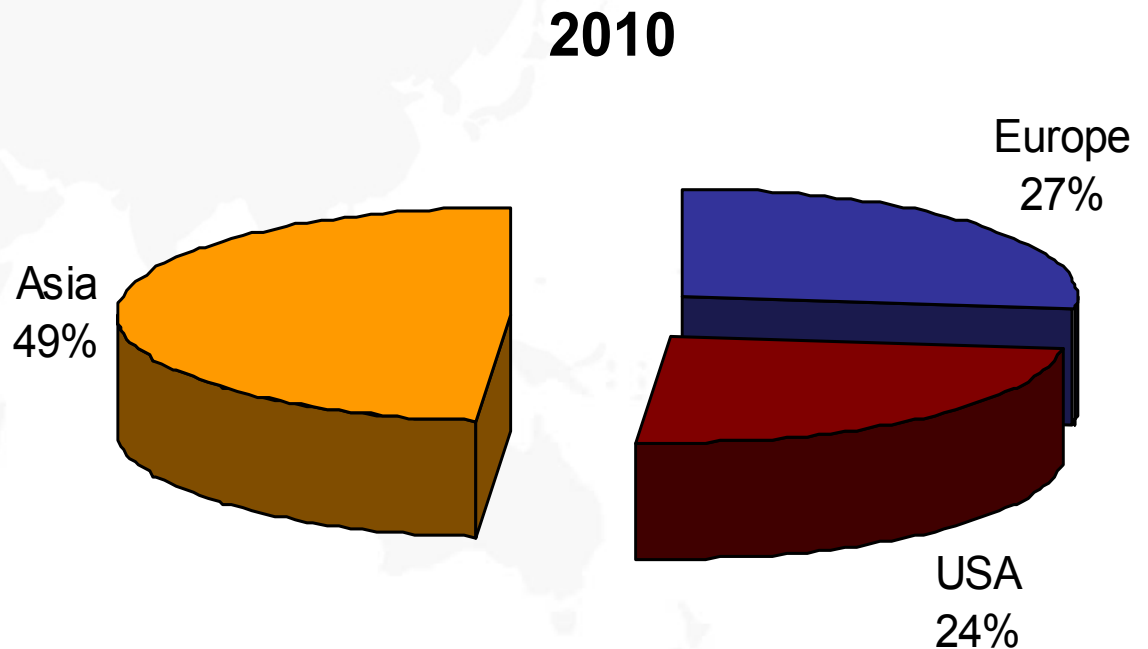


Contracted Supplies from the Middle East



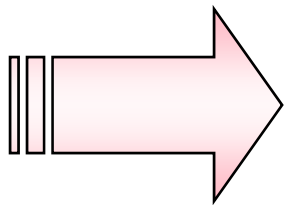
From exclusivity
in Asia until
2002...

... to becoming a
swing producing
region.



Increasing Integration on the LNG Chain

- ✓ The vast majority of US terminals won't have a dedicated SPA, but will be supplied by portfolio LNG.
- ✓ In Europe we estimate that more than one-third of capacity in operation in 2010 will be supplied by portfolio LNG.
- ✓ Vertical Integration.
 - ✓ Projects in Qatar will own regasification capacity in Europe (UK, Belgium) and the US.

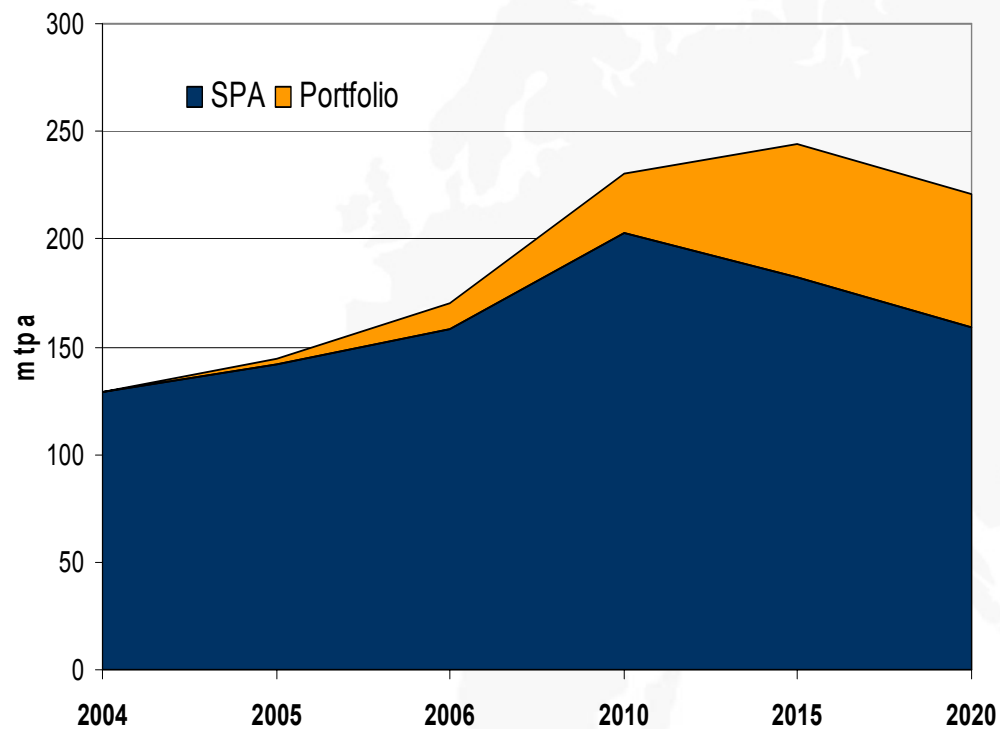


LNG SUPPLIES IN THE ATLANTIC BASIN ARE NO LONGER LOCKED TO ONE DESTINATION AND CAN EASILY BE DIVERTED.



Increasing Destination Flexibility

Contracted LNG Supplies in the World

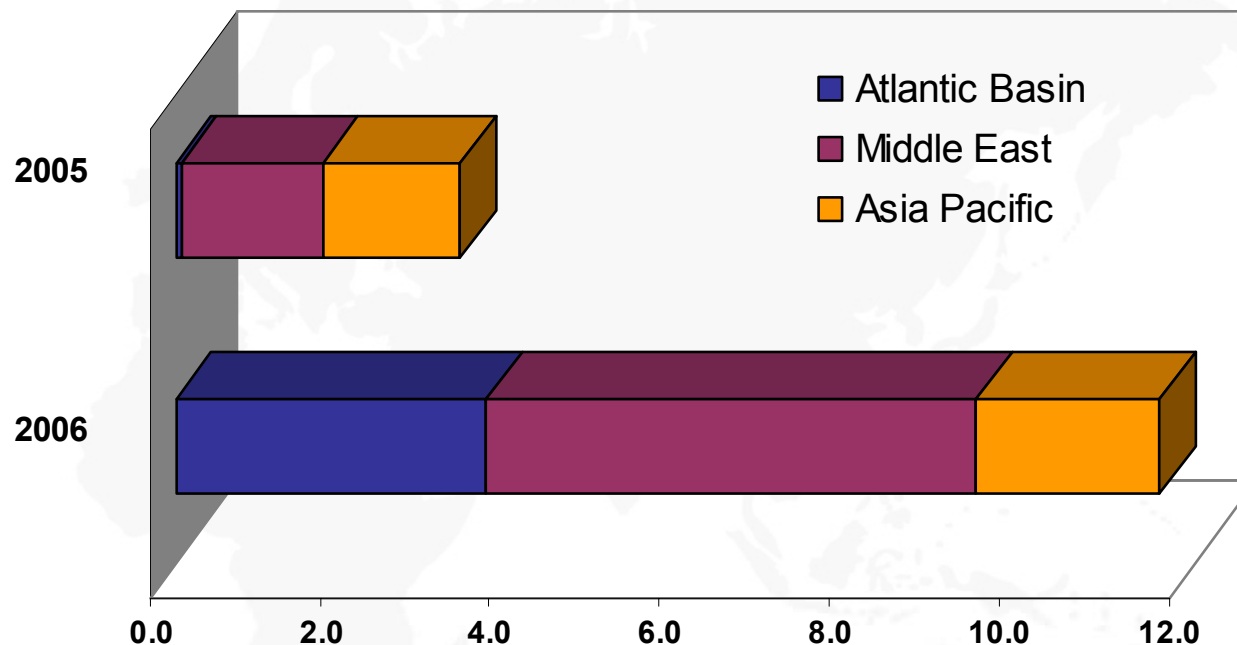


- Historical roles of the seller or buyer are fading away.
- Flexible portfolio LNG accounts for 1/3 of LNG supplies in the Atlantic Basin and nearly 1/4 of global LNG contracted supplies known for 2015.
- These volumes can easily be diverted to alternative markets.



Asian Demand is Already Affecting the Spot Market

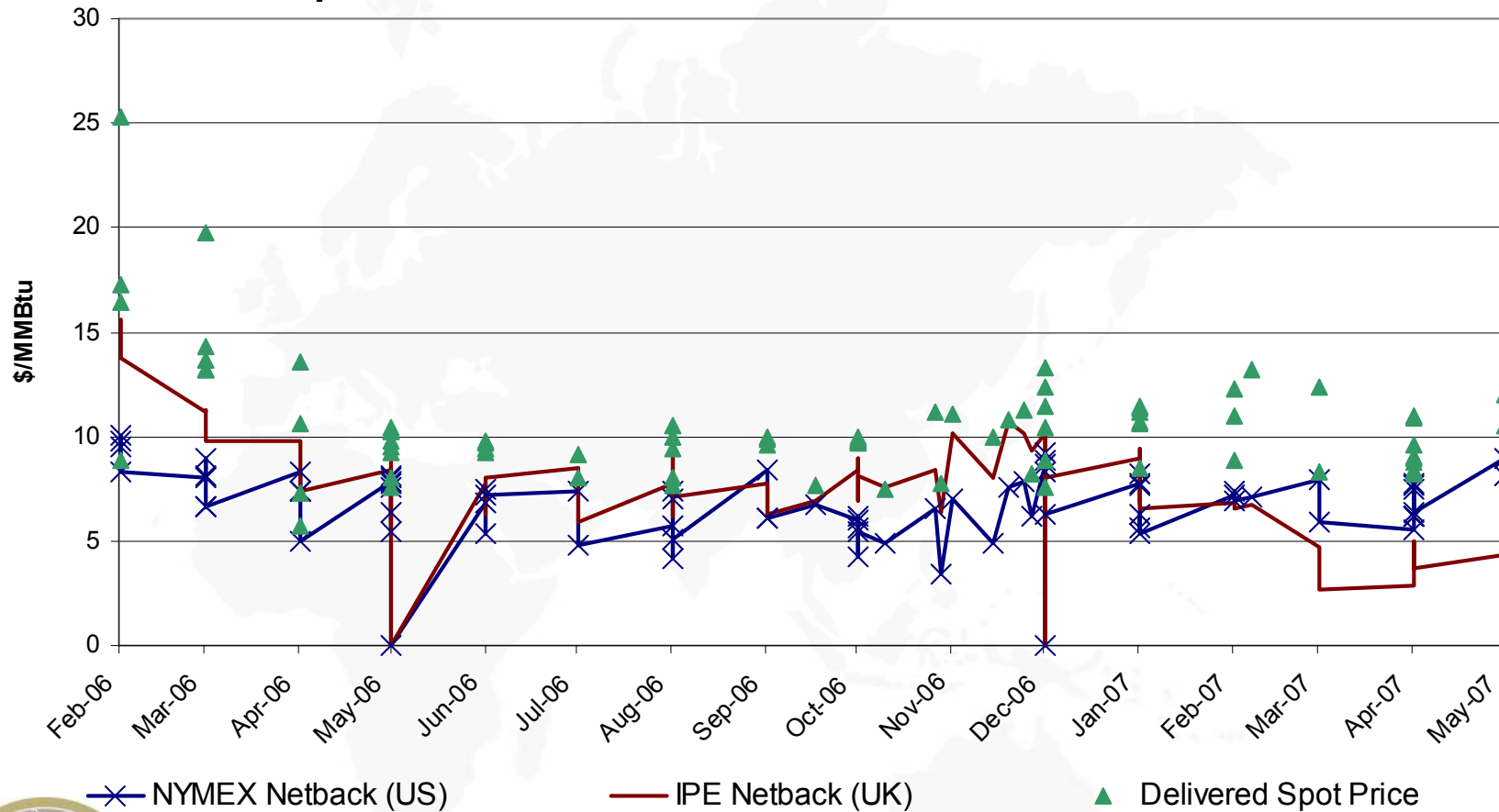
Origin of Spot Volumes Delivered to Asia (mt)



- ✓ 1/3 of the spot cargoes delivered to Asia in 2006 came from the West.
- ✓ Nearly 2 mt of Western LNG delivered to Asia in 1H2007.

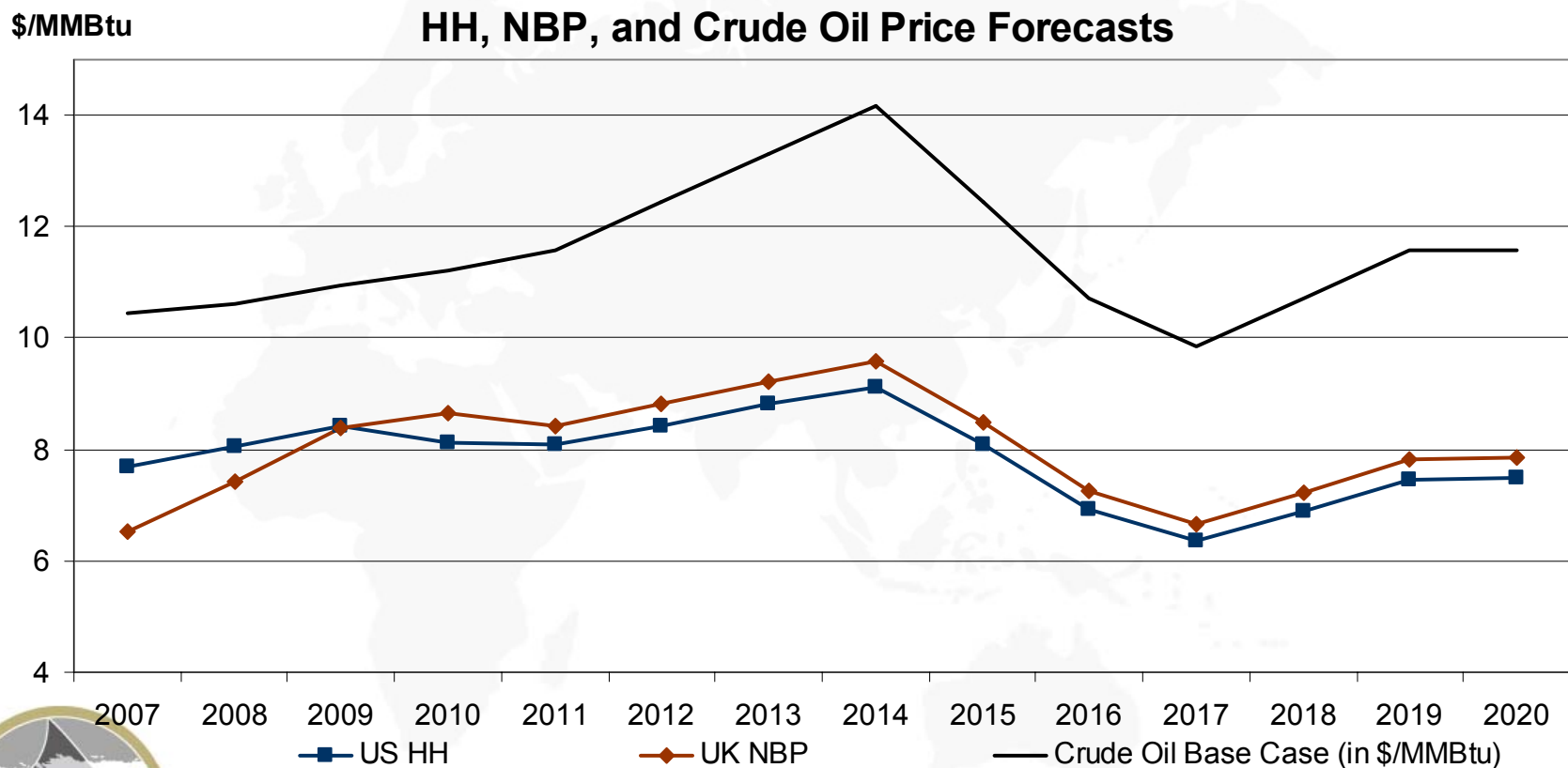
Globalization of Spot LNG Prices?

Spot Prices Delivered to Asia and US/UK Netbacks



Henry Hub and NBP (whichever is highest) are used as **a floor.**

Crude Oil Indexed Price Formulas will Probably Drive Higher Returns than HH/NBP



* Forecasts in \$2007.

Concluding Remarks

- ✓ Japan, Korea, and Taiwan are hooked on gas.
- ✓ Crude oil indexed price formulas are likely to drive higher returns for LNG sellers than HH/NBP.
- ✓ With global LNG tightness, will American West Coast terminals see any LNG imports?
- ✓ Increased price affordability in China and India => Potential tremendous impacts on the world LNG trade.
- ✓ Impacts on pipeline projects?
- ✓ For lack of supply, many receiving terminal projects will be abandoned or delayed.



Asia Pacific/Atlantic Basin Interplay

✓ LNG Supply:

- ✓ Increasing global competition for LNG supply. Long-term contracts to Asia from Algeria or Egypt in the near future?
- ✓ Further development of spot trading.
- ✓ Increasing flexibility in destination.

✓ LNG Pricing:

- ✓ Spot prices are becoming global. HH/NBP are used as a floor.
- ✓ Impact of volume diversions eastwards on HH/NBP?
- ✓ HH linkage appearing in Asia in the near future?



Thank you

