Shifting Global Gas Dynamics and its Impact on North America

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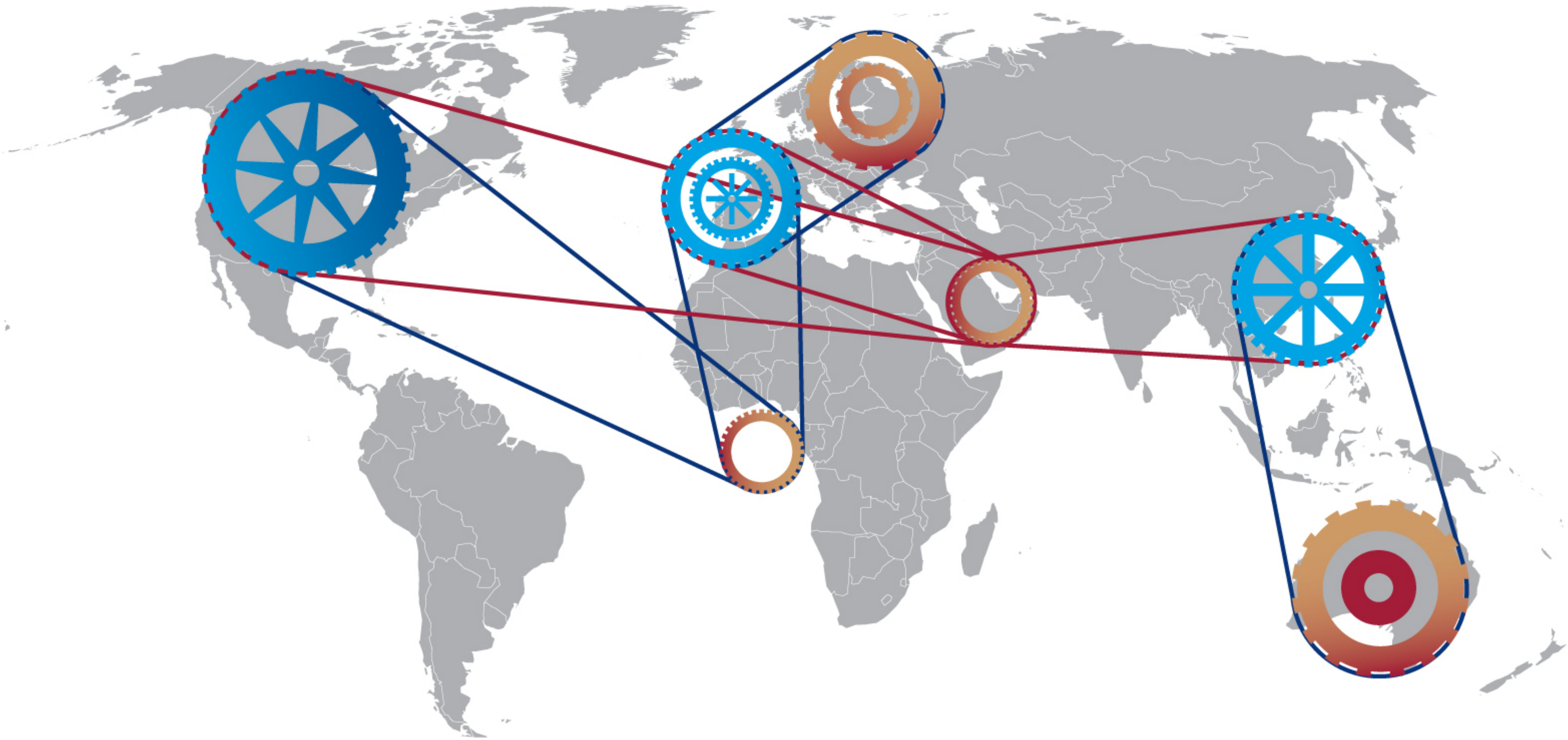
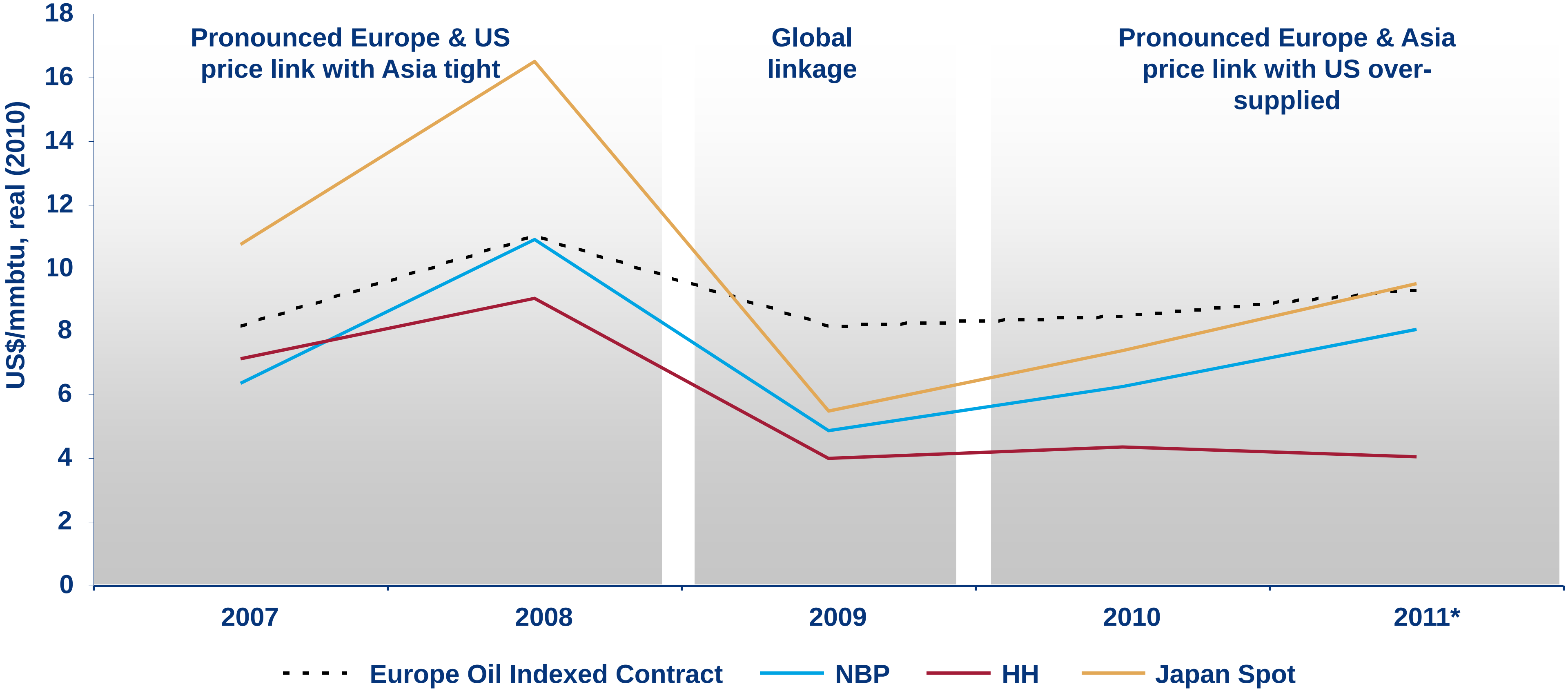
Market inter-dependencies determine global gas dynamics



Source: Wood Mackenzie Global Gas Service

These inter-dependencies have changed with regional fundamentals and will continue to shift, with implications for spot prices and term prices

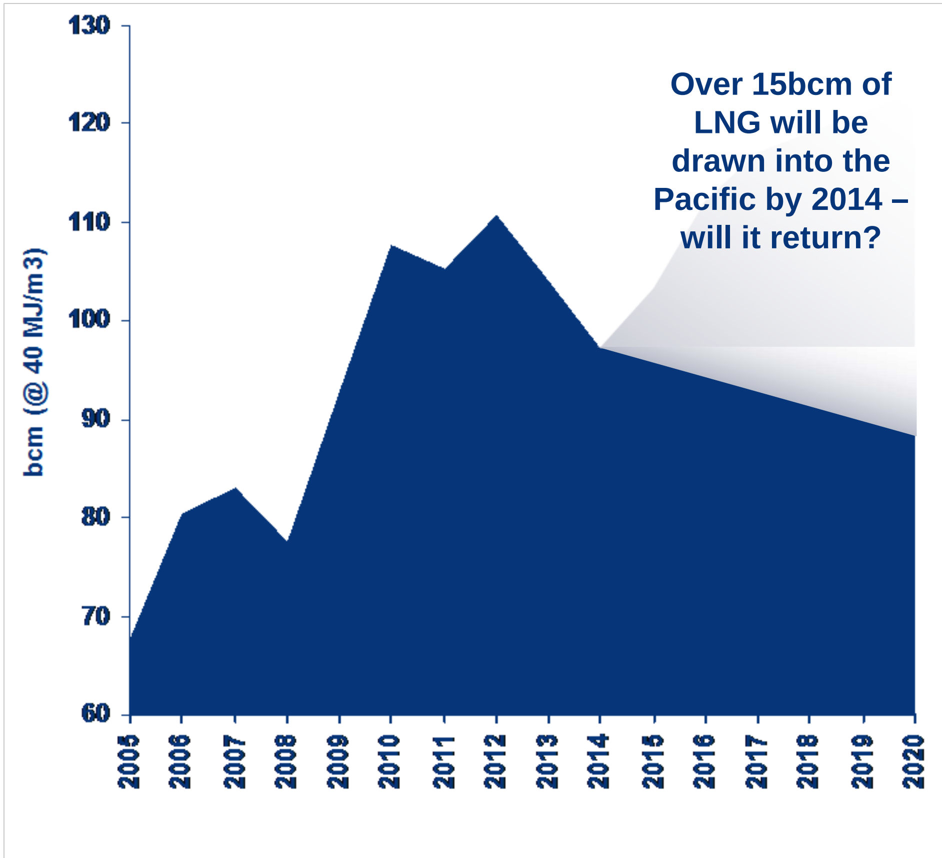
Global Spot Prices & European Contract Price



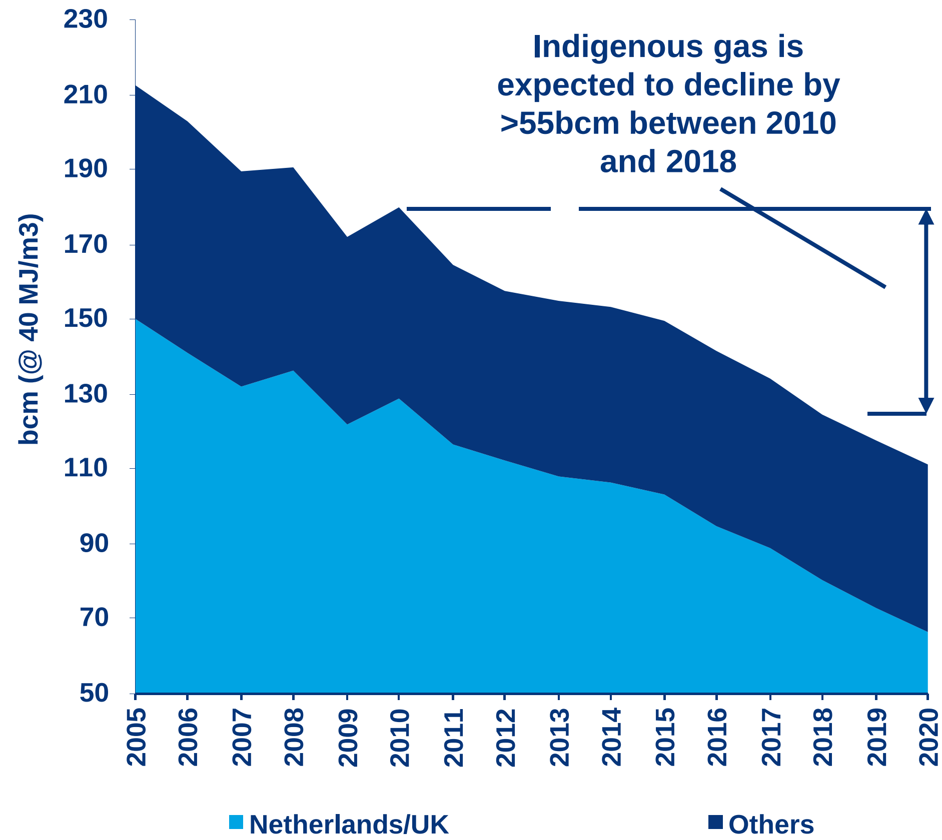
Source: Datastream, Heren, Wood Mackenzie Global Gas Service estimate & 2011 forecast

Europe – Asian demand will draw the current glut of LNG from the Atlantic and existing European indigenous supply will continue to decline

LNG Available To Atlantic



Existing Indigenous European* Gas



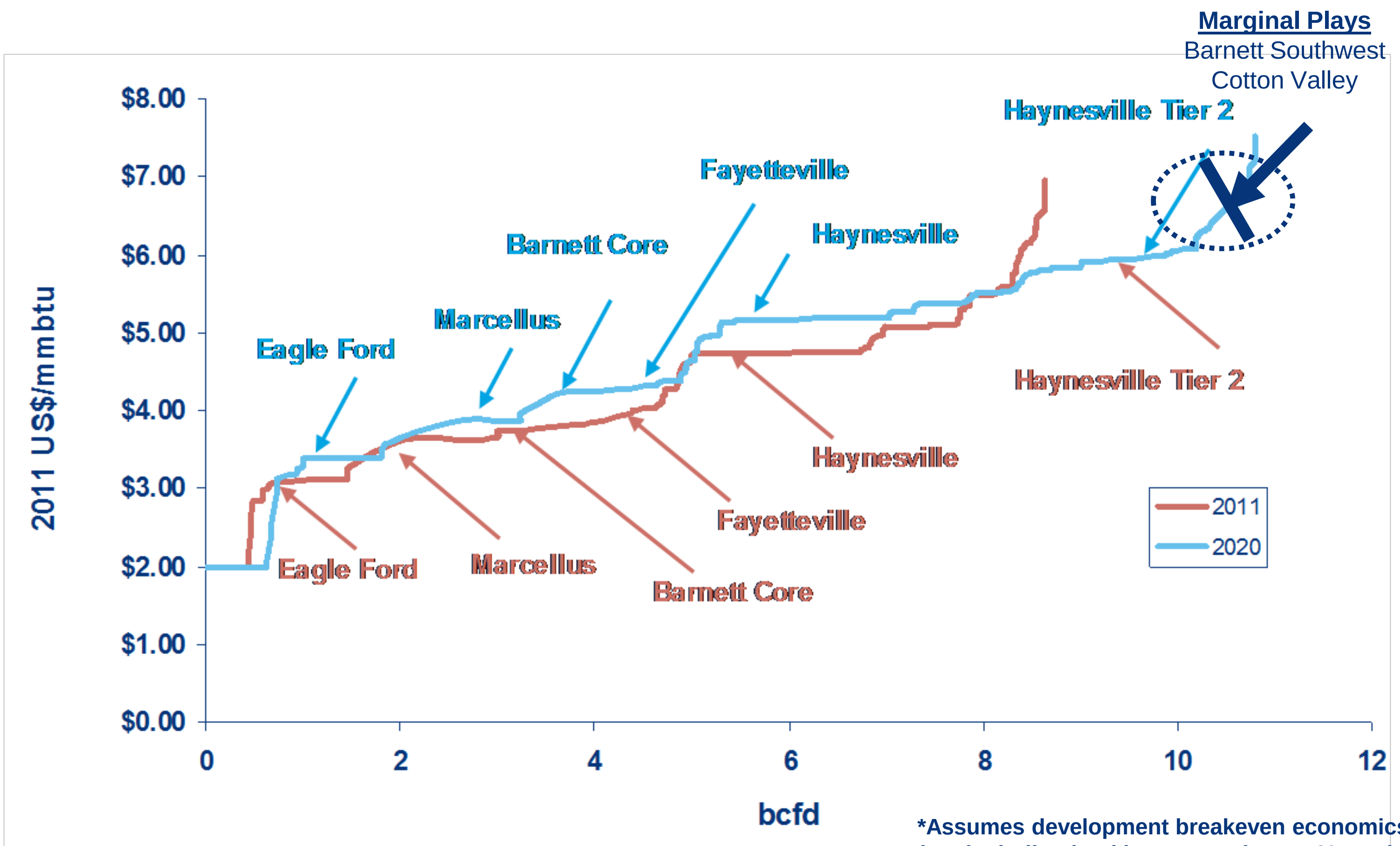
Source: Wood Mackenzie Global Gas Service H2'10

** Excludes Norway*

Drilling programs didn't cover short-term costs

- New-drill contribution up to 10.8 bcfd from 8.6 bcfd in 2011
- Overall cost increase

US New Drill Natural Gas Supply Stack*



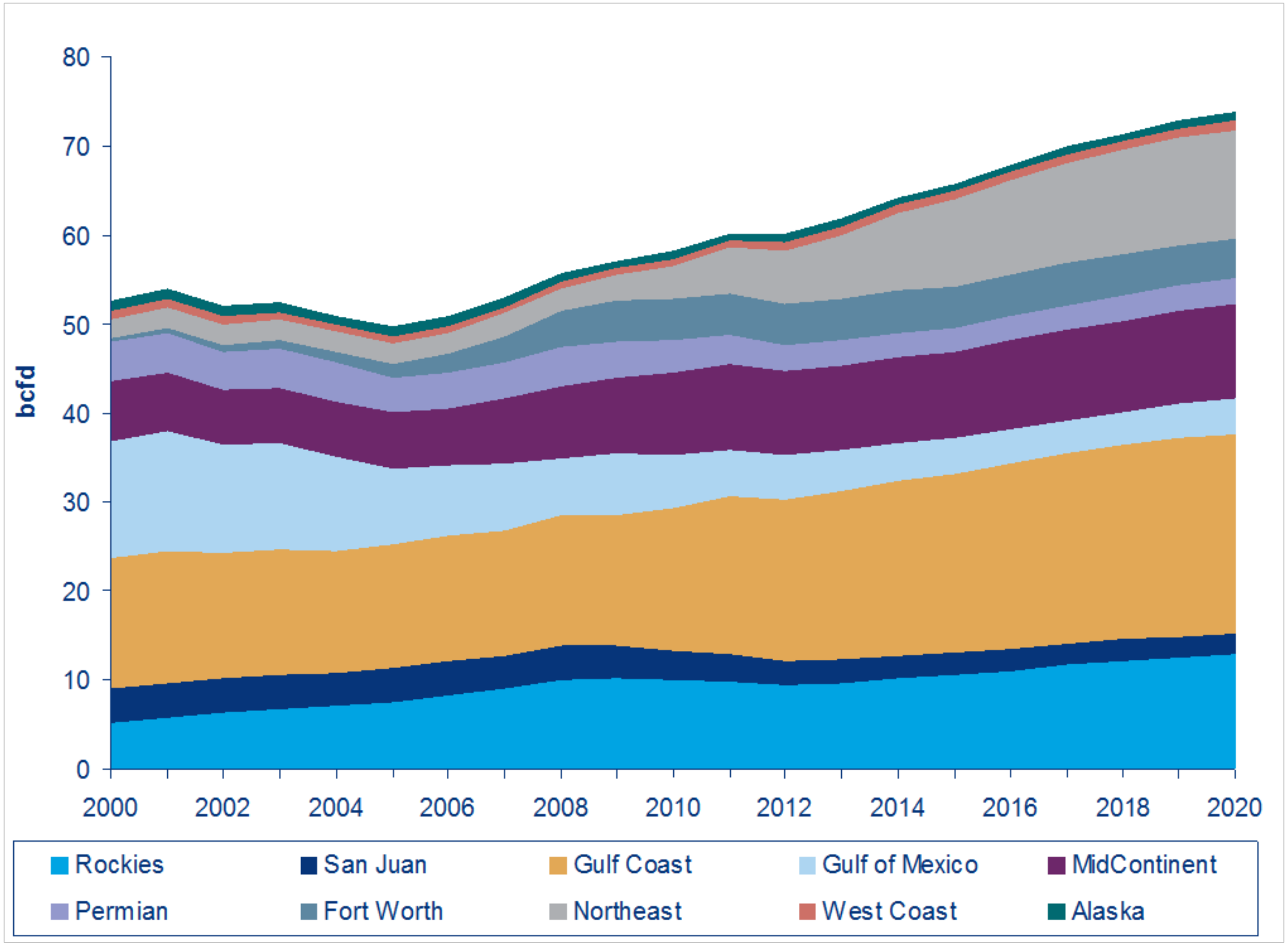
*Assumes development breakeven economics (not including land lease costs) at a 10% real IRR adjusted to a Henry Hub- equivalent price

Source: Wood Mackenzie

North American supplies—temporary slowing, midterm market pulls capital back to gas

- For now, lack of demand side strength keeps supply growth on hold
- Uncertainty with entry of new players and capital
- Resurgence in drilling and supply as market recovery drives an uptick in investment
- US gas production climbs by 12 bcfd between 2013 and 2020

US Gas Production



Source: Wood Mackenzie

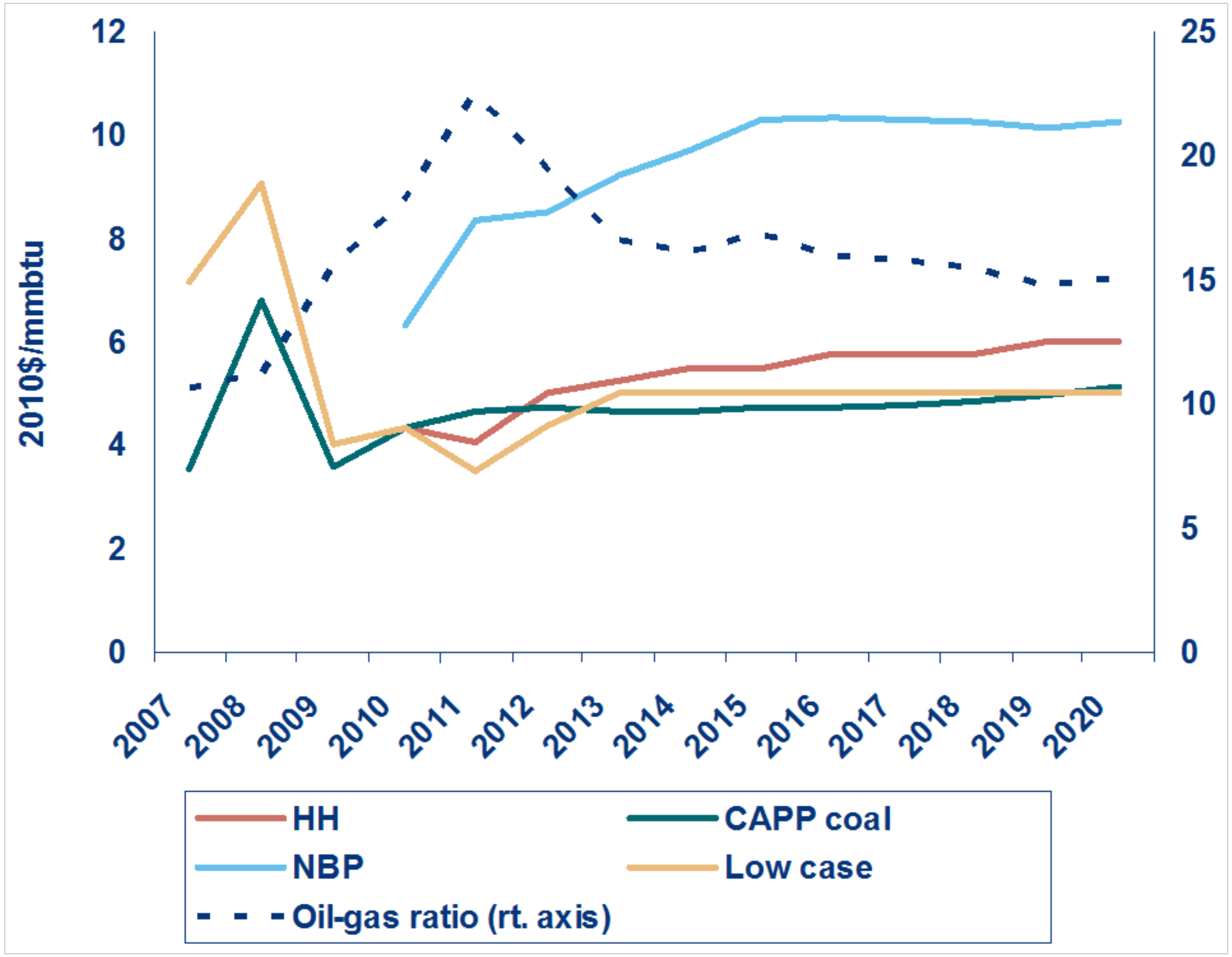
North America – abundant shale gas reserves are likely to result in future gas prices established by gas competition and coal displacement, not by oil product pricing

Mid-term uncertainties

- Coal retirements
- Global markets
- Demand risks
- Drilling
    - Pace of tech. change
    - Haynesville
    - JVs
    - Liquids

	Real (2010$)	Nominal
2010	4.39	4.39
2011	4.50	4.56
2012	5.10	5.33
2013	5.25	5.70
2014	5.50	6.28
2015	5.50	6.41
2016	5.75	6.83
2017	5.75	6.97
2018	5.75	7.11
2019	6.00	7.56
2020	6.00	7.71

Price outlook

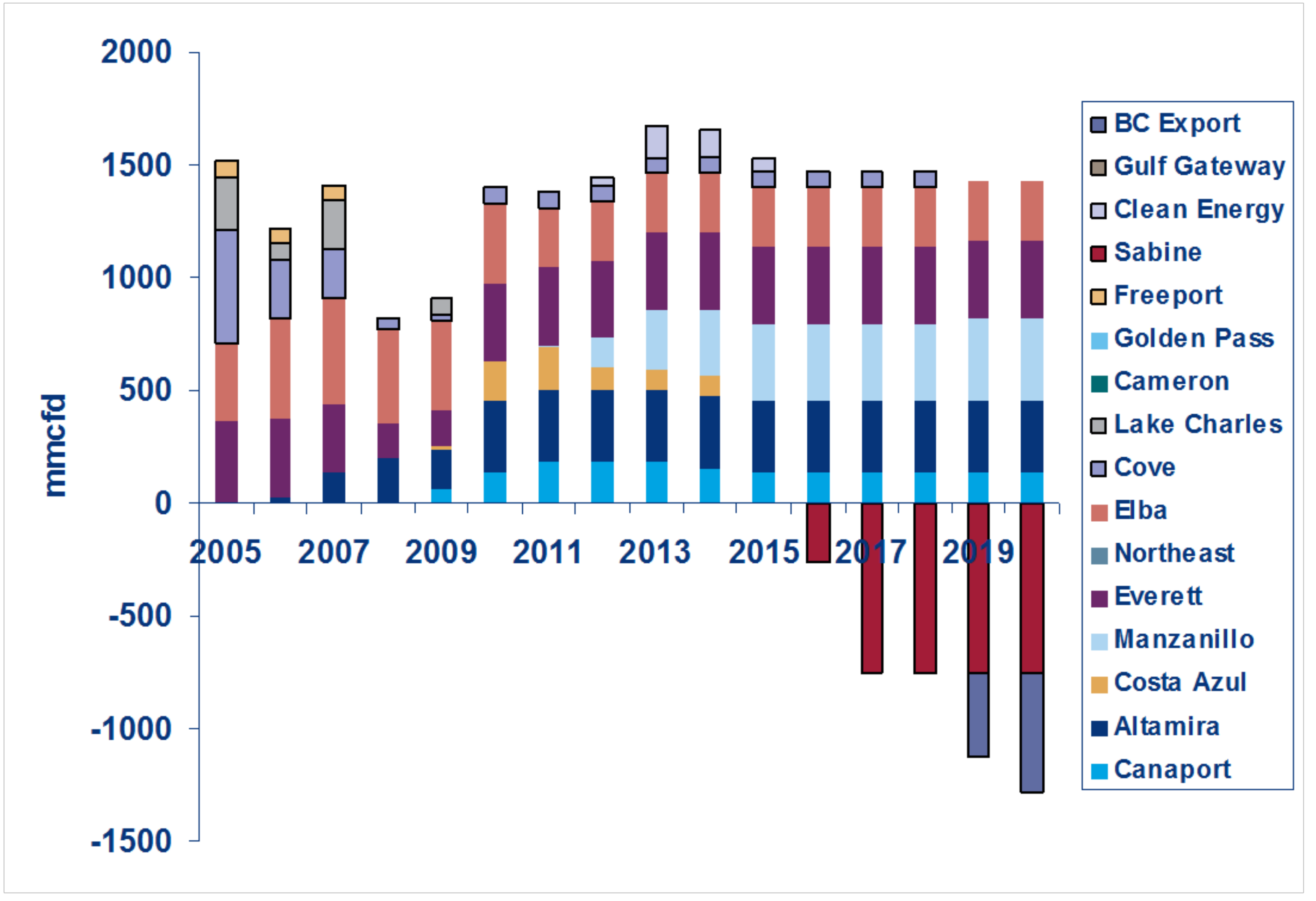


Source: Wood Mackenzie Coal Markets Service, NAGS, EGAPS, and Macro Oils

LNG flows only into niche markets, North American LNG exports commence in 2016

- Regional markets with limited storage or pipeline access constraints continue to import LNG
- Inflexible contract terms result in some cargo flow into the Gulf Coast
- NA LNG export projects by 2016
  - Australian cost pressures
  - Strong Pacific Basin LNG demand
  - Asian resource positions

North American LNG trade



Source: Wood Mackenzie

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