

Oil & Gas Journal's Forecast and Review

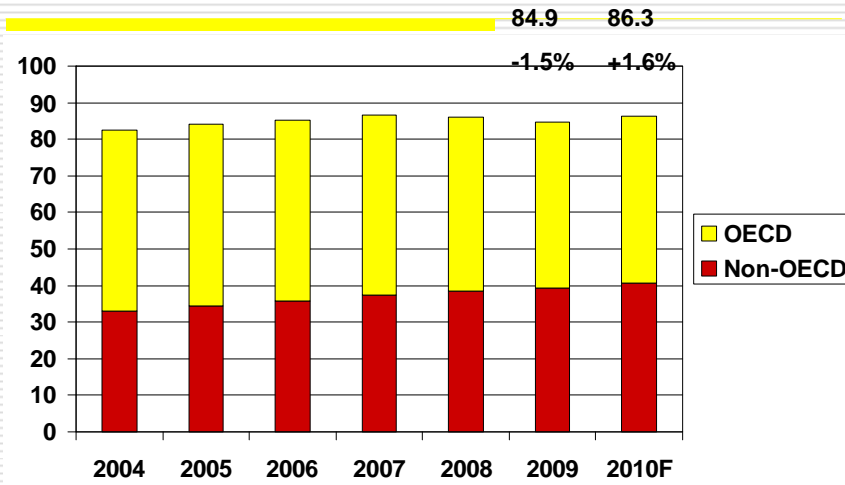
Bob Tippee, Editor, Oil & Gas Journal
NOMADS
Feb. 11, 2010

OGJ annual forecasts

- Forecast & Review
 - Jan. 18, 2010
- Midyear Forecast
 - July 5, 2010

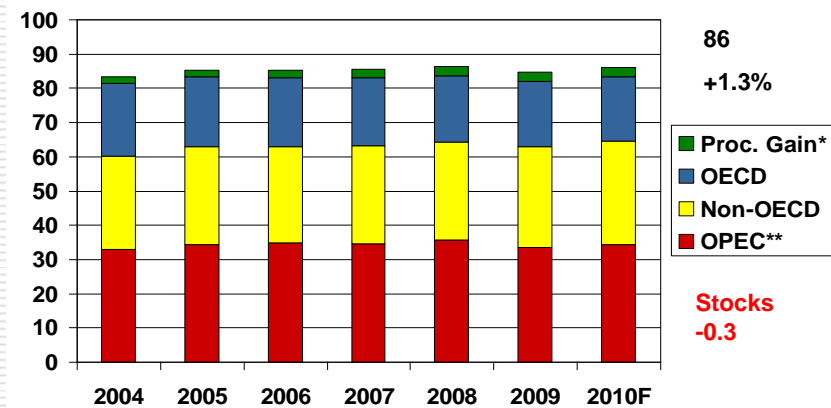
Marilyn Radler, Senior Editor – Economics
Alan Petzet, Chief Editor – Exploration

World oil demand (MMb/d)



Source: IEA except for OPEC crude beginning 4Q '09

World oil supply (MMb/d)



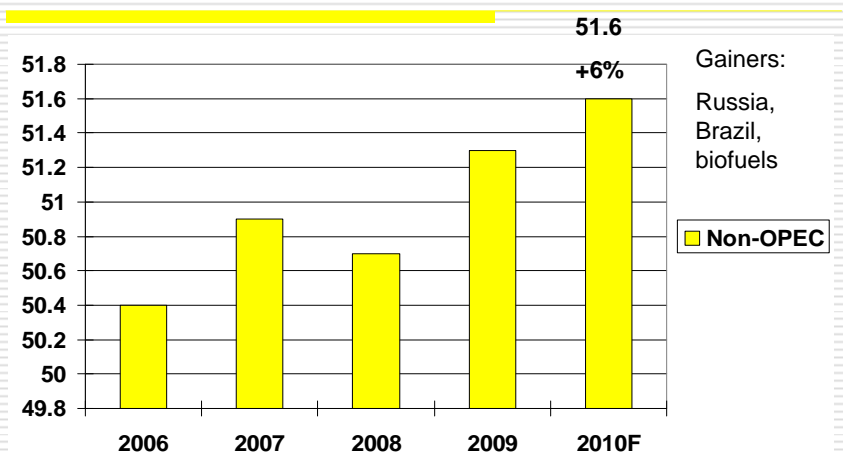
*Plus biofuels outside US, Brazil. **Current membership from 2006 forward; includes NGL. Source: IEA

Forcing balance (MMb/d)

Demand		86.3
Ex-OPEC supply	-51.6	
OPEC liquids	-5.7	
From stocks	-0.3	
OPEC crude	-28.7	0

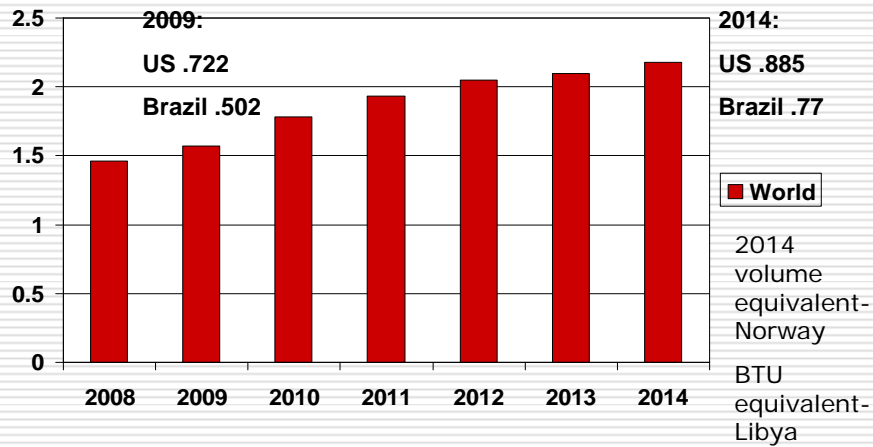
Source: IEA, OGJ calculations.

Non-OPEC supply (MMb/d)



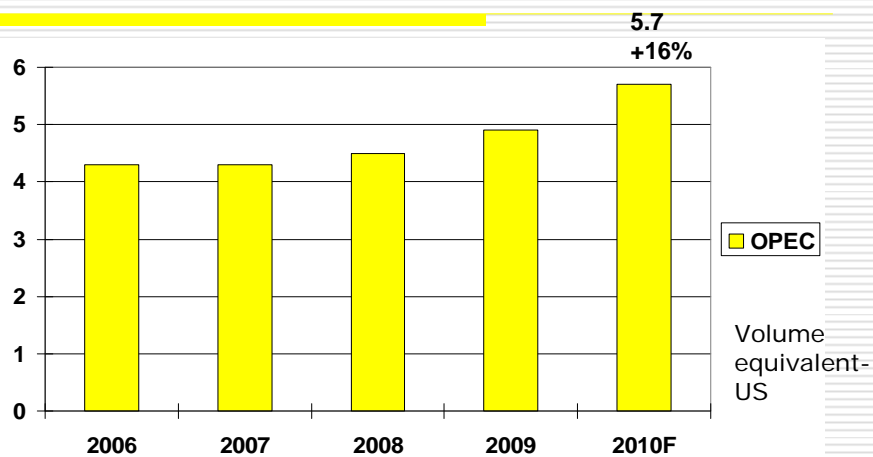
Source: IEA; OPEC membership as of Jan. 1, 2009; includes processing gains and biofuels.

World biofuel supply (MMb/d)



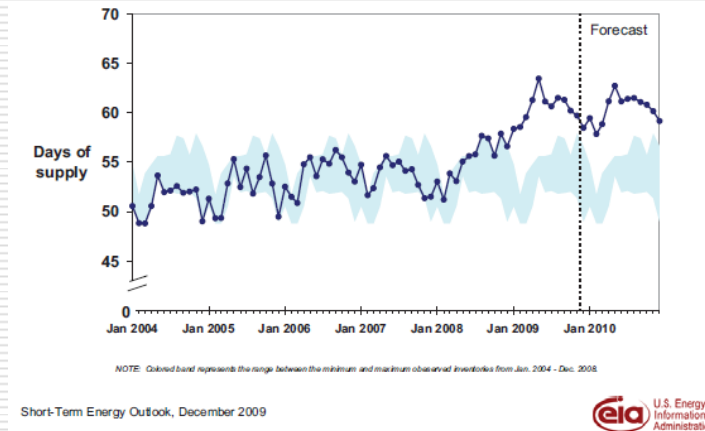
Source: IEA

OPEC NGL (MMb/d)



Source: IEA

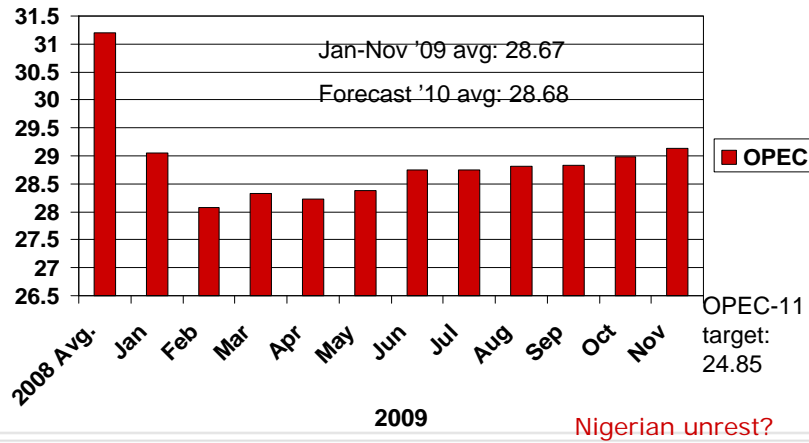
OECD stocks (days' supply; EIA)



Key OPEC numbers (MMb/d)

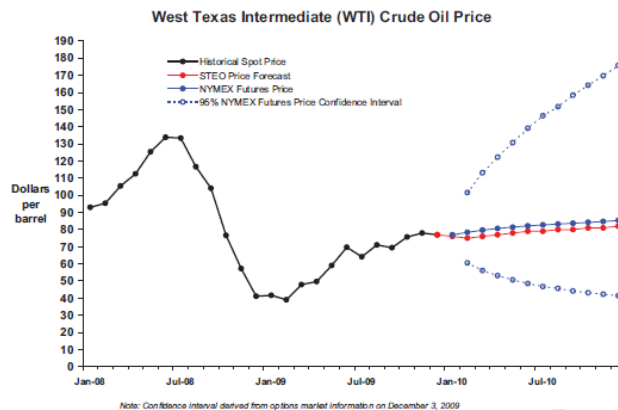
Call for crude (w/300Mbd draw)	28.7
Implied quota	24.8
Nov OPEC 11 supply	26.61
Nov total OPEC supply (w/Iraq)	29.13
Nov spare capacity	6.24

OPEC crude production (MMb/d)



Source: IEA data

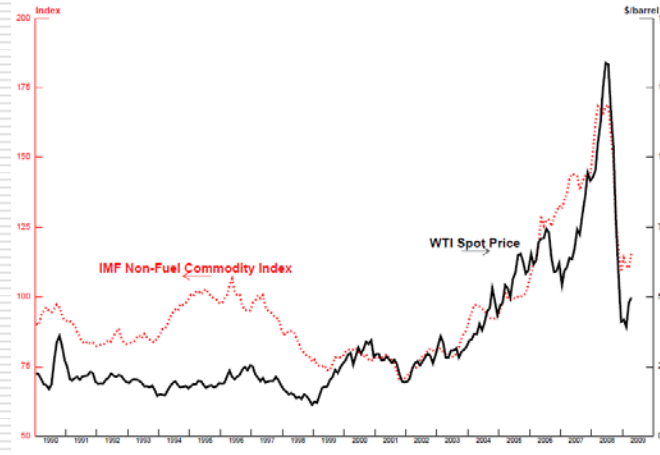
What explains the oil price?



Short-Term Energy Outlook, December 2009

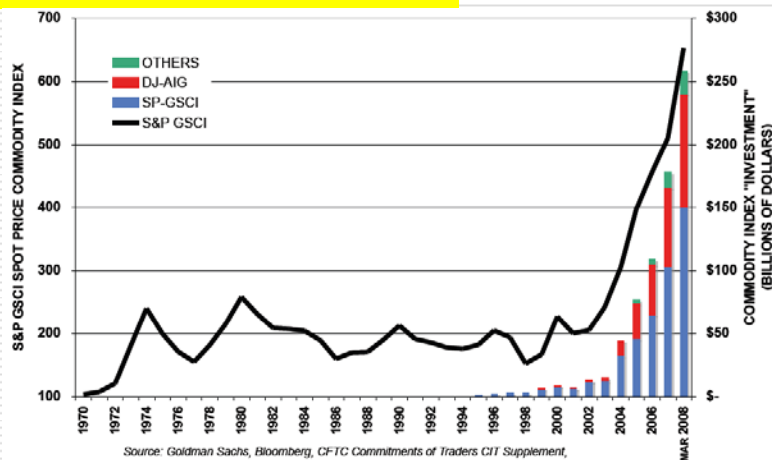


Oil aligns with other commodities



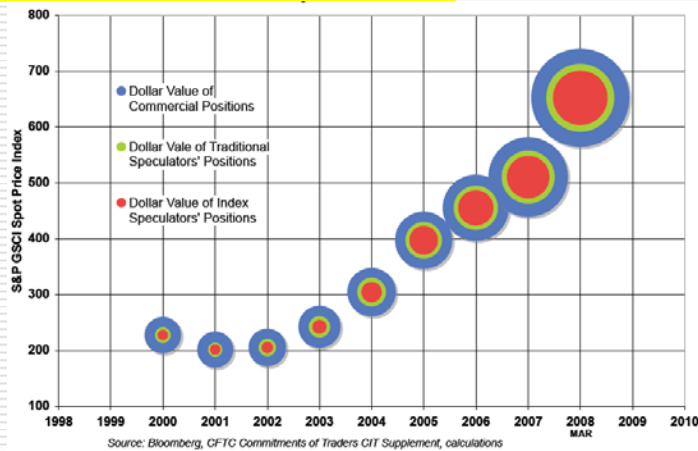
Source: Christopher Erceg, Luca Guerrieri, Steven B. Kamin, International Finance Discussion Papers No. 979, Federal Reserve Board, August 2009

Commodity activity up, prices up



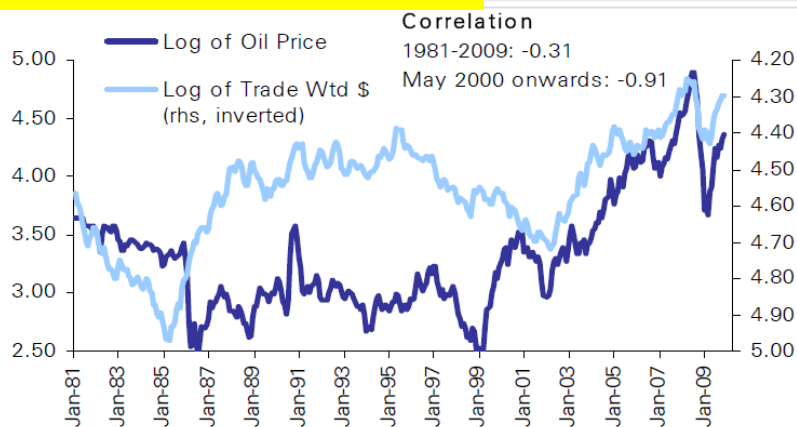
Source: Michael W. Masters, Masters Capital Management LLC, before House Committee on Homeland Security and Governmental Affairs, May 20, 2008

Speculative activity rises



Source: Michael W. Masters, Masters Capital Management LLC, before House Committee on Homeland Security and Governmental Affairs, May 20, 2008

Oil price and the dollar



Source: Deutsche Bank, "Oil and the Dollar: Why the dollar still rules," Dec. 30, 2009

Dollar carry trade

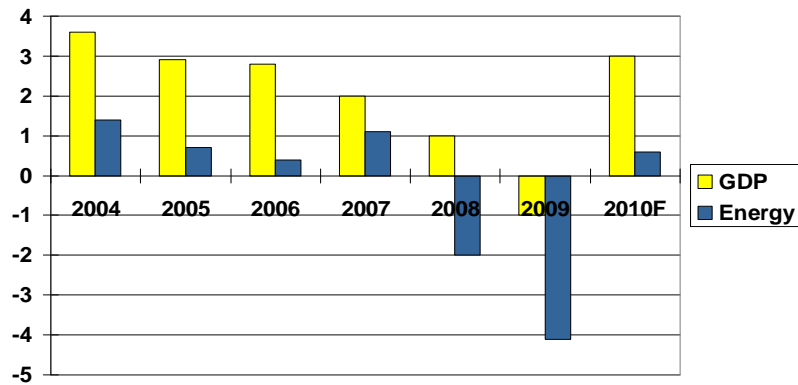
- Borrow low-value dollars at low interest rate
- Buy oil futures (appreciation)
- Leverage trade by shorting dollars

The next bubble?

Summary: international

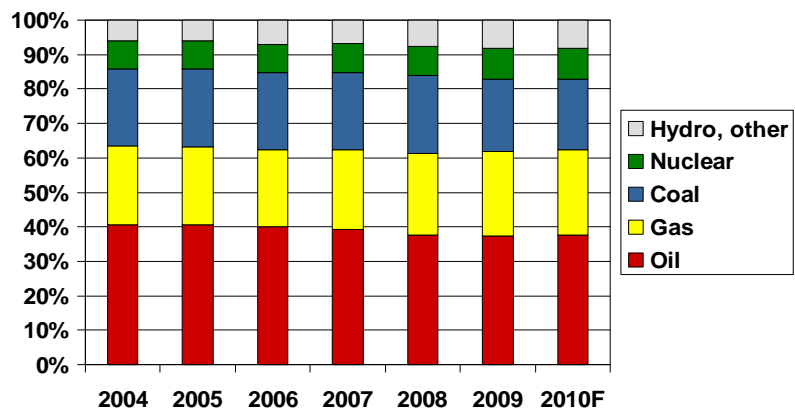
- Demand resuming growth but still weak
 - OPEC will face pressure to cut production
 - Crude price supported by nonfundamental forces
-

US GDP, energy change (%)



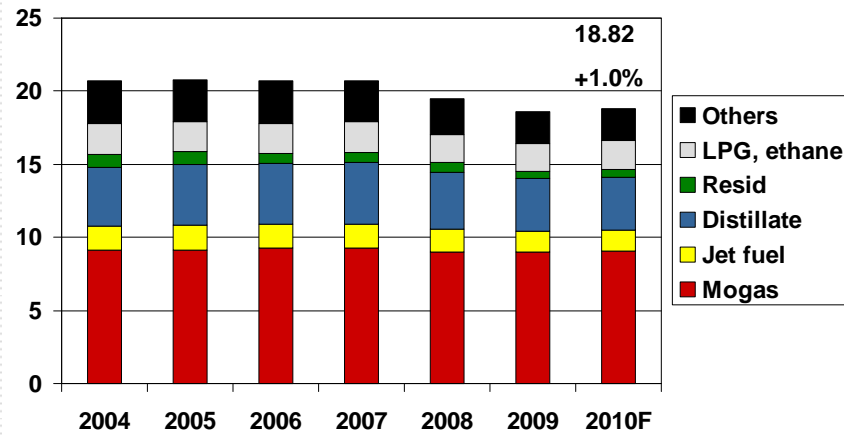
Source: US Bureau of Economic Analysis for GDP; US Energy Information Administration for Energy 2004-09

US energy shares



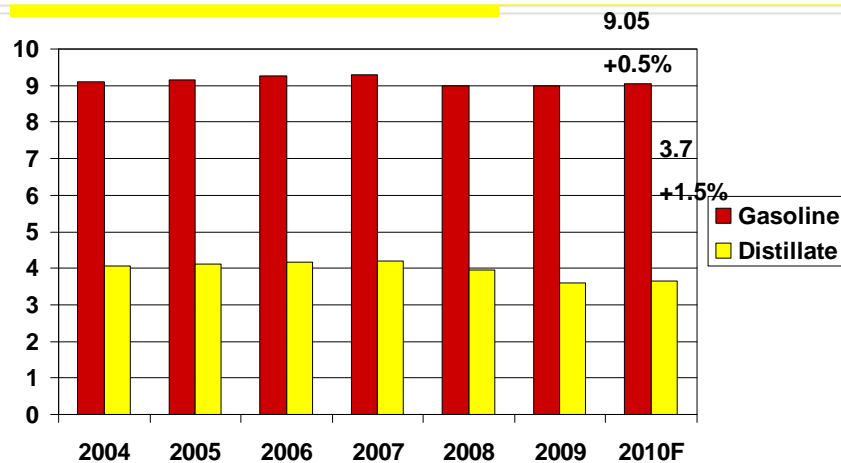
Source: EIA for 2004-09

US product demand (MMb/d)



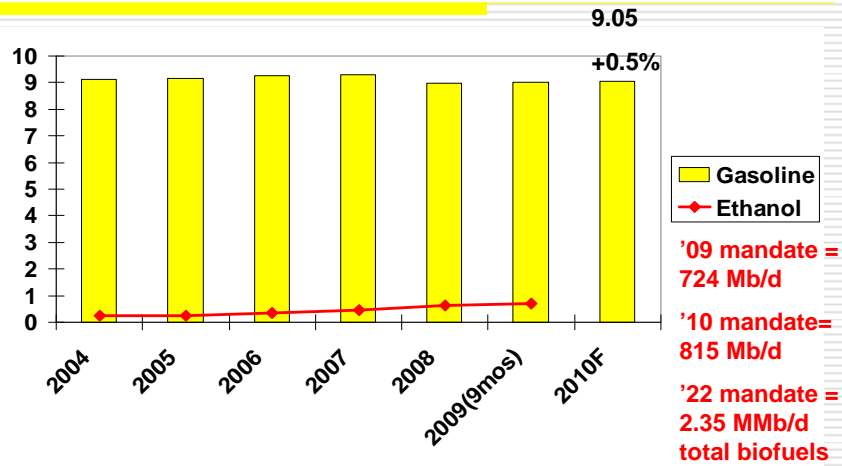
Note: Before exports (2.0 in '09). Source: EIA for 2004-09.

Gasoline, distillate demand (MMb/d)



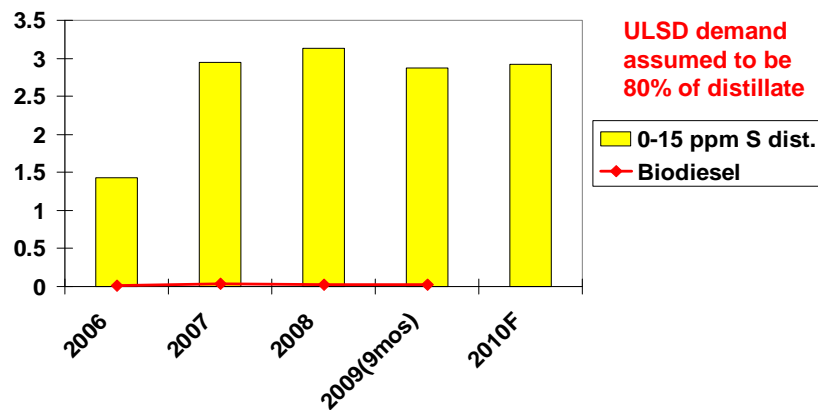
Source: EIA for 2004-09

Gasoline, ethanol use (MMb/d)



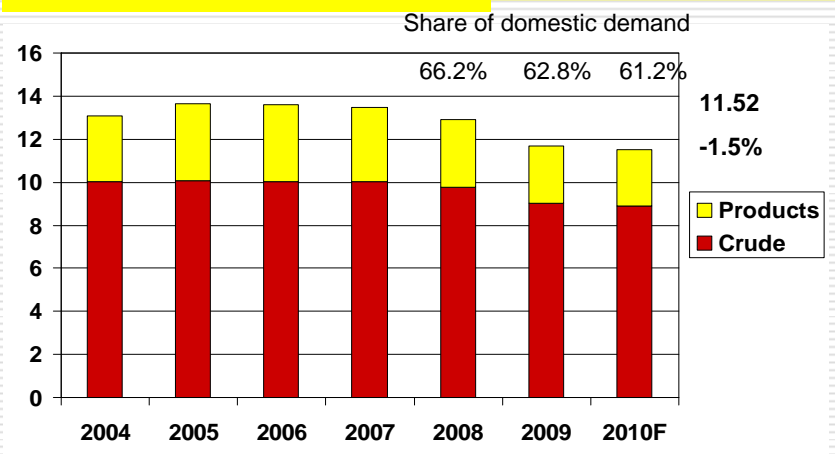
Source: EIA for 2004-09

ULSD, biodiesel use (MMb/d)



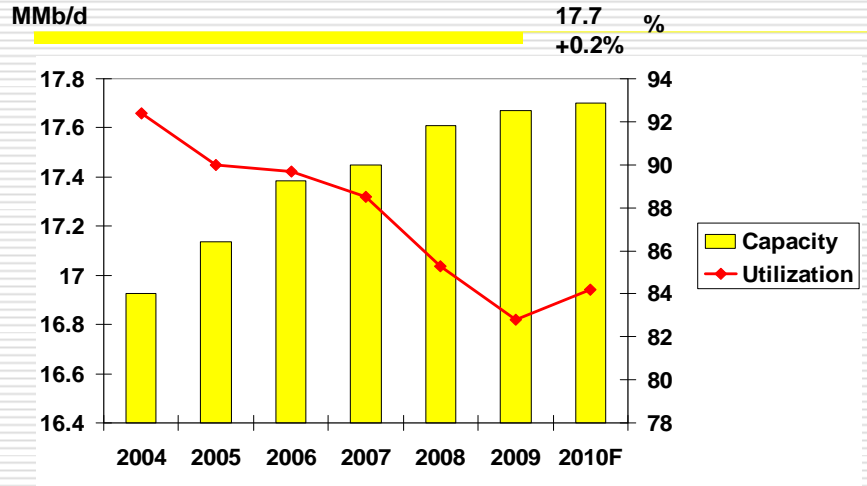
Source: EIA for 2006-09

Industry oil imports (MMb/d)



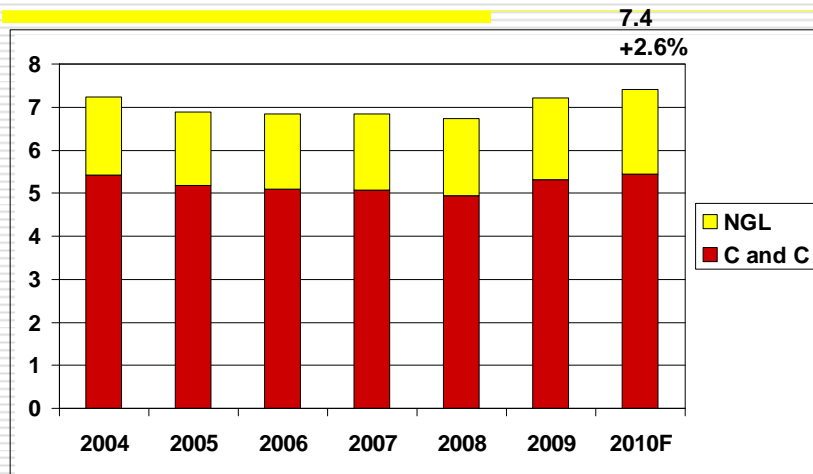
Source: EIA for 2004-09

US refining



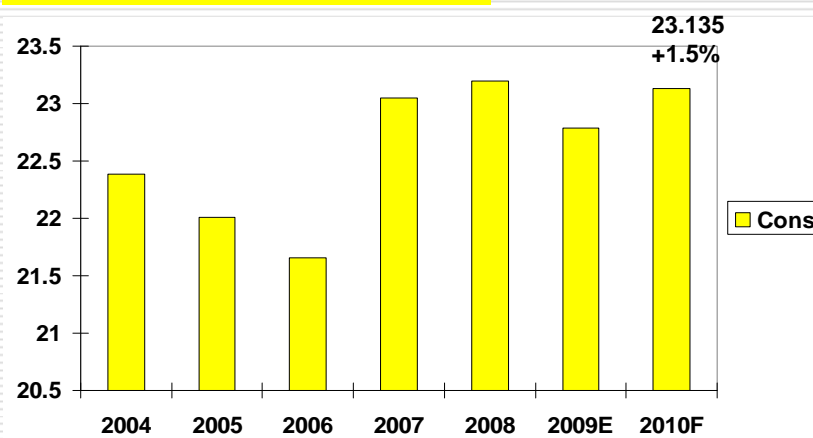
Source: EIA for 2004-09

US total liquids production (MMb/d)



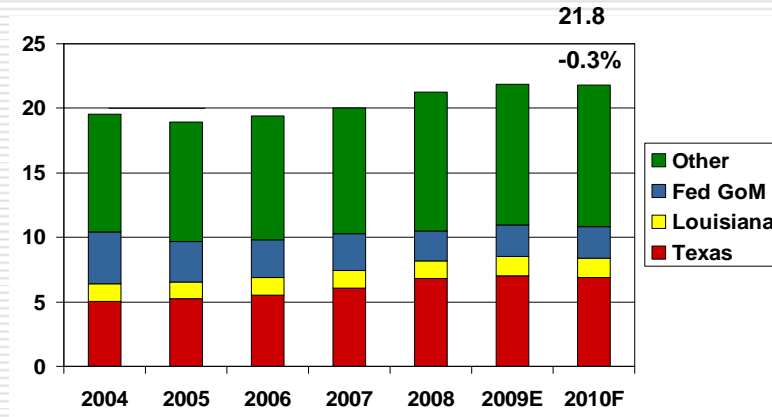
Source: EIA for 2004-09

US gas consumption (tcf)



Source: EIA for 2004-08

Marketed gas production (tcf)



Source: EIA for 2004-08

Unconventional gas (ARI)

US UNCONVENTIONAL GAS PRODUCTION

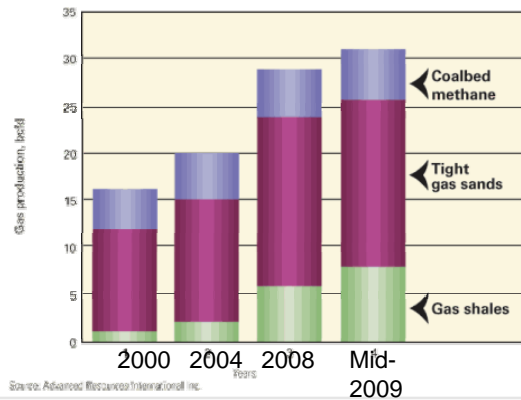
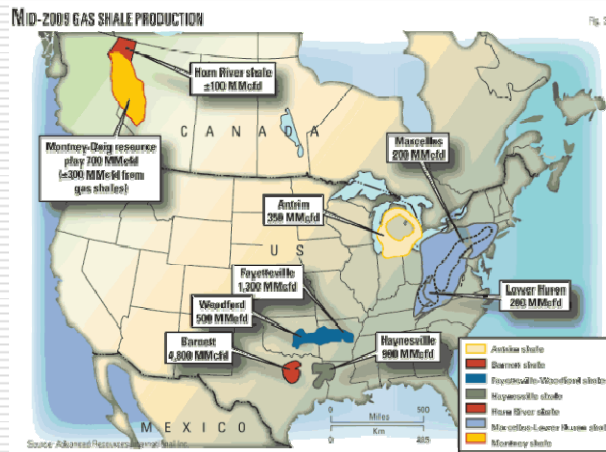


Fig. 1

Now exceeds 50% of US total gas production

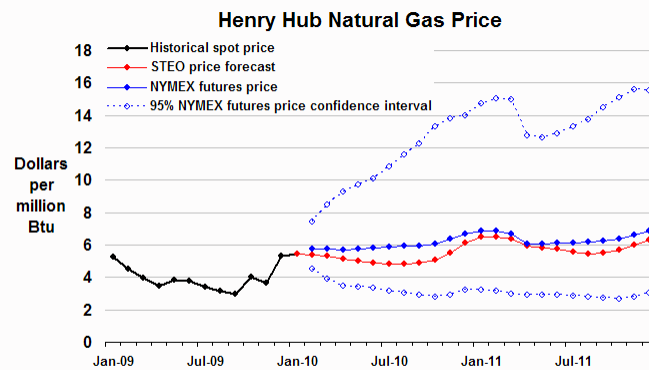
Source: Stevens, S., Kuuskraa, V., "GAS SHALE: Seven plays dominate North American activity," OGJ, Sept. 23, 2009 (years corrected).

N. American shale gas plays



Source: Stevens, S., Kuuskraa, V., "GAS SHALE: Seven plays dominate North American activity," OGJ, Sept. 23, 2009.

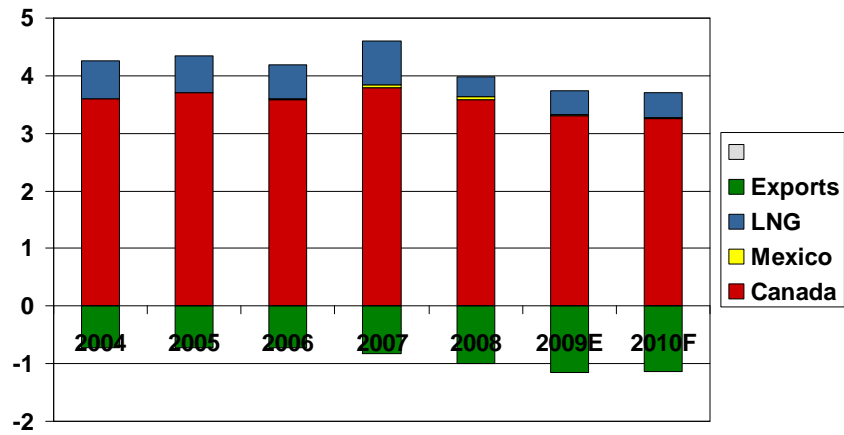
US gas prices (EIA)



Short-Term Energy Outlook, January 2010

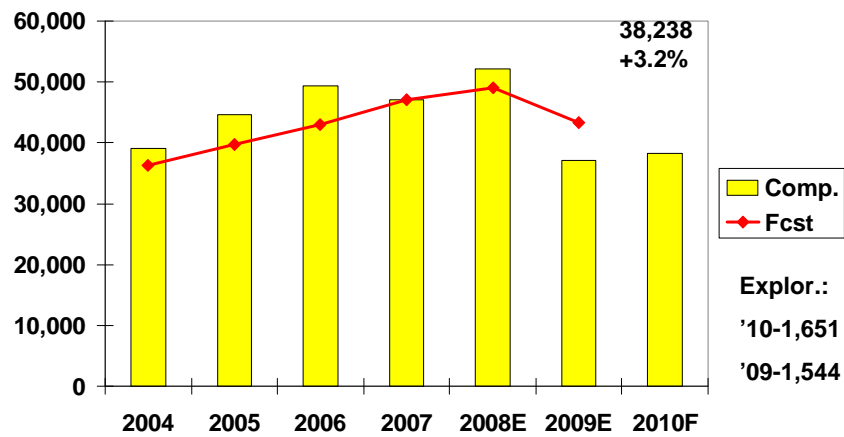


US gas imports (tcf)



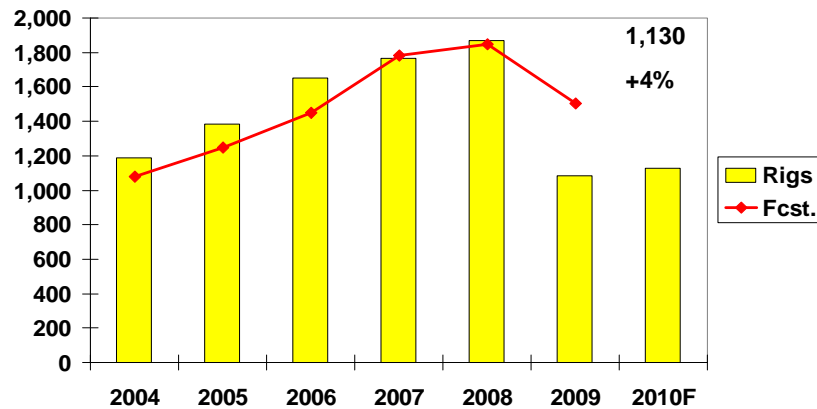
Source: EIA for 2004-08

US drilling--completions



Source: API for 2004-09

US drilling – rig count



Source: Baker Hughes for 2004-09

Budget 'loophole closers' (\$billion)

EOR credit	--
Marginal well credit	--
IDC expensing	7.84
Tertiary injectant ded.	.067
Passive loss exception	.180
Percentage depletion	10.03
Manufact. tax credit	17.31
G&G period to 7 years	1.11
Total 2011-20	36.54

Other hits (\$billion, 2011-20)

Reinstate Superfund tax	93.28*
Repeal LIFO	59.09*
Reform handling of international taxation	122.19*
Fee on nonproducing oil and gas leases	0.76

*Total; not just oil and gas.

US oil and gas politics

- Climate change
 - CAA regulation (EPA)
 - Cap-and-trade (Congress)
- Tax increases (Congress, admin.)
- Ethanol and biofuels (Congress)
 - Blend wall, ceiling hikes
 - Mandate feasibility?
- Hydraulic fracturing (Congress)

US oil and gas politics (cont.)

- Green jobs (Congress, admin.)
 - Toughened ozone standard (EPA)
 - Land access (Interior)
-

Summary: US

- Product demand growth resumes, but it's weak
 - Gasoline demand outlook flat
 - Ethanol growing, but feasibility of mandates is questionable
 - Drilling recovering, but weakly
 - Political questions loom
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