

**platts**



# Indian Oil Valuation Committee

Denver, Colorado

June 18, 2012

**platts**

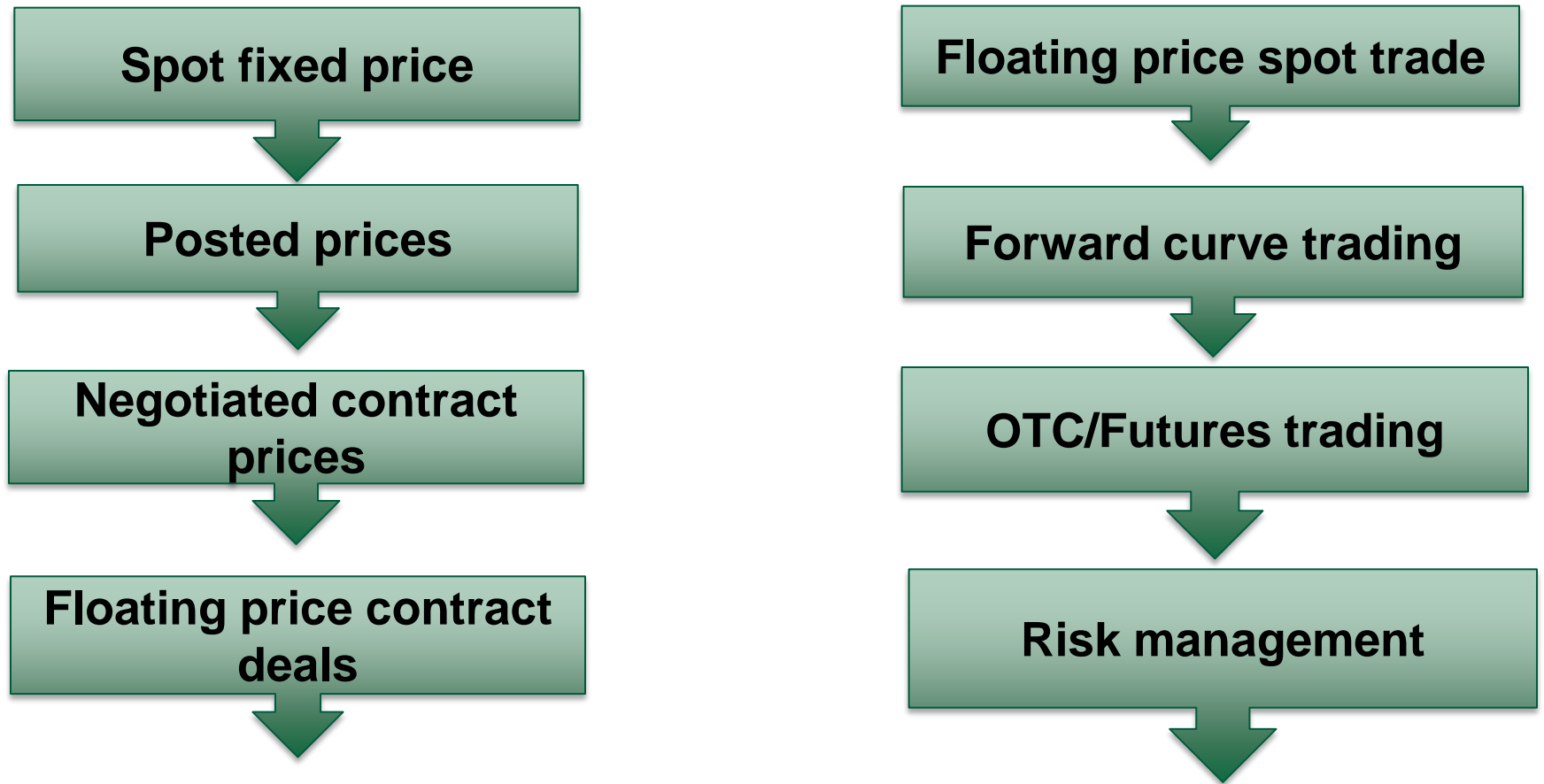


# Price Discovery

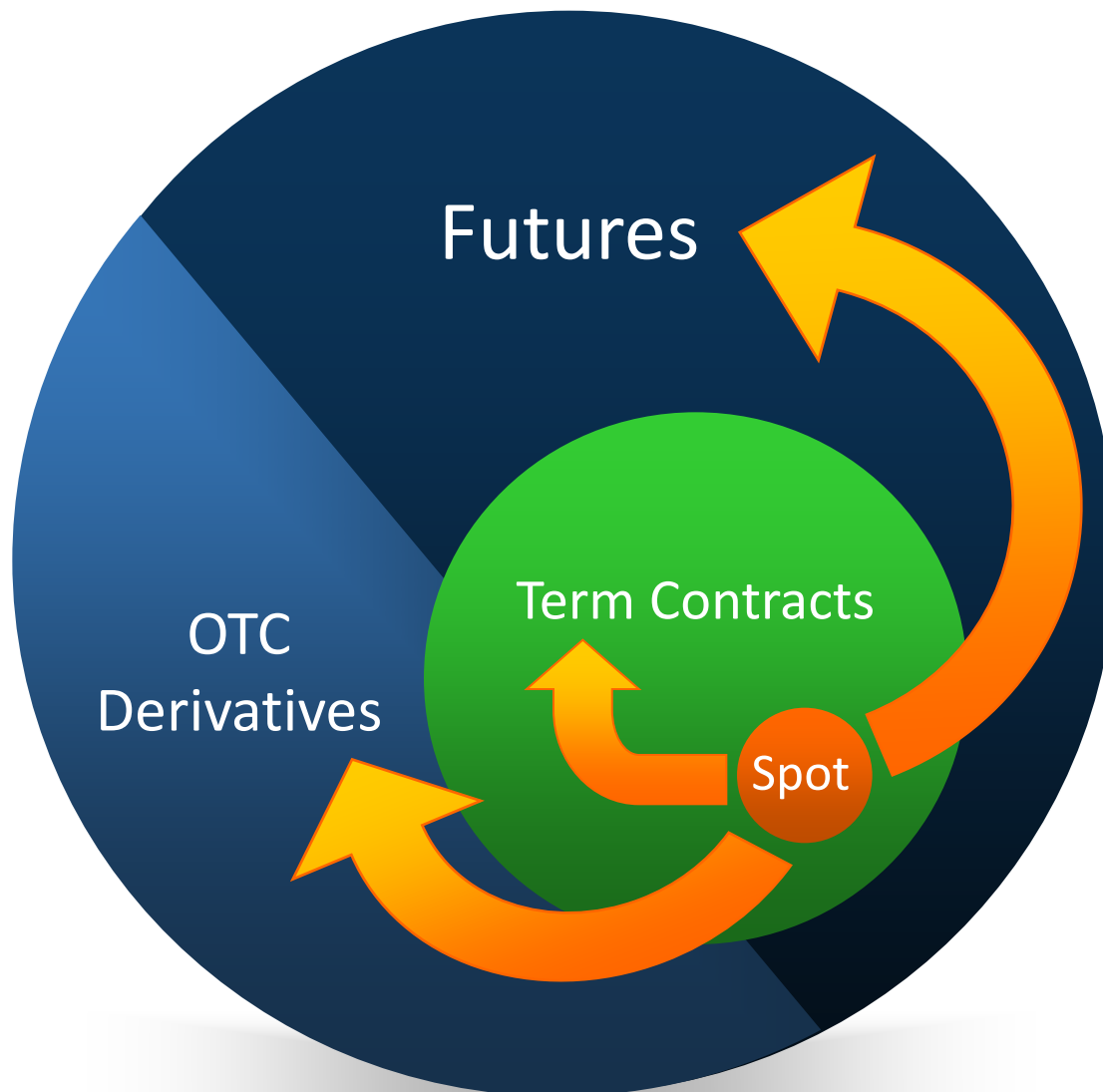
# Historical Evolution of Price Discovery

- Qualified estimates by a professional (a consultant viewpoint)
- Estimates derived from daily conversations, with no structured methodology
- Finding the lowest and the highest transaction of the day and publishing the range (or median) as 'market value'
- Weighting transactions towards the most liquidity (mode) or the end of the market day, thus ignoring time distortions
- Volume-weighting all daily transactions (mean)
- Determining price at a specific time for defined qualities, quantity, location and lifting/delivery dates (Market-On-Close: MOC)

# Evolution of oil trading

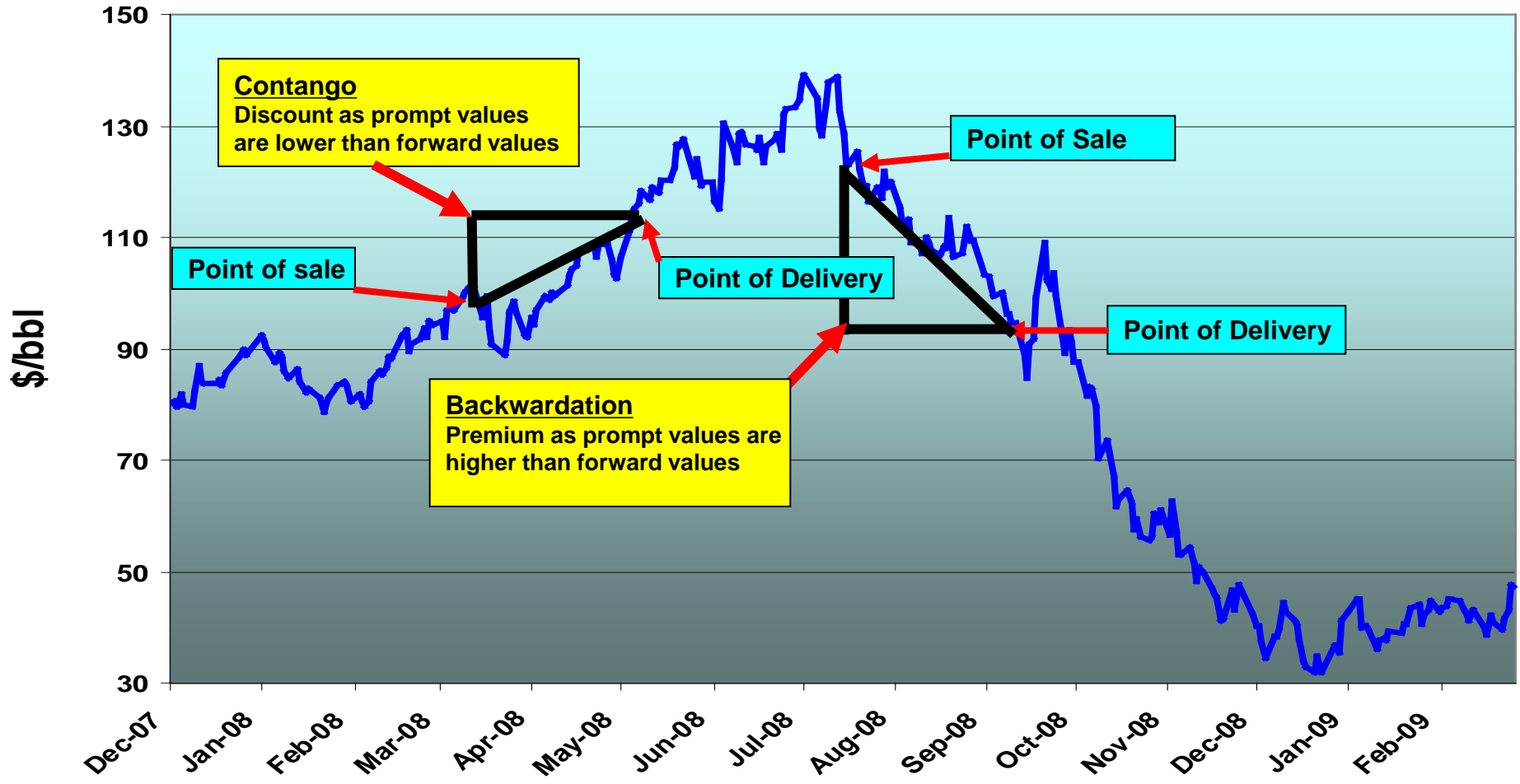


# Spot Market



- Futures settlements are often tied to spot market
- Derivatives “price out” against spot price assessments or futures settlements
- Spot market sets the direction for futures & derivatives

# Backwardation & Contango



Forward value +/- differential



Physical assessment

**platts**



# Price Discovery and Platts



# News, Pricing and Markets

Platts is a leading global provider of energy, petrochemicals and metals information, and a premier source of benchmark price assessments for those commodity markets.



**Price Reporting**



**Assessments**



**Breaking News**



**Market Reports**

# Comprehensive Coverage



Oil



Shipping



Petrochemicals



Natural  
Gas



Electric  
Power



Coal



Metals

# Platts Unique News and Analysis: Inside Markets

**Oilgram News**  
Volume 89 / Number 135 / Tuesday, July 12, 2011

## Australia sets planned carbon tax at AS\$23/mt LNG, oil refining sectors to be shielded from full impact

Sydney—The Australian government July 11 revealed the long-awaited details of its proposed carbon pollution reduction policy, pegging the price on carbon at an initial A\$23 (\$24.72)/mt from July 1, 2012, but softening the blow with concessions for LNG producers and oil refiners.

The carbon tax will rise by 2.5% a year in real terms until July 1, 2015, under the package revealed by Prime Minister Julia Gillard. The mechanism will then transition to an emissions trading scheme where the price of carbon will be determined by the market.

Around 50 businesses will be required to pay for their pollution under the carbon pricing mechanism. More than half the revenue will be used to assist households with tax cuts, increased family pay, higher pensions, benefits and so on.

The government also plans to support jobs and invest in climate change programs.

The government, it is expected, covered the carbon.

**US looks to deliver**

Washington—After signing cent largest-ever drawdown of US oil reserves, the Department of Energy is expected to deliver about the 30.64 billion barrels before an agency spokeswoman is wanted to pin up about 7 mtn the light sweet crude ahead of July. The remaining 23 million is scheduled for delivery in August.

Early deliveries hinge on oil company deals and securing water Jones Act, a maritime law that sign vessels from hauling cargo ports, DOE said.

Refiners, major producers are to pay a total of \$3.28 bln Treasury, of an average of \$30 three-ever presidentially directed the Strategic Petroleum Reserve.

In announcing the signed, it also released a list of the lowest offers came from: Boco \$31.96, Suncor Energy Markets

**Contents**

- Asia Pacific
  - Refining margins boost Exar Oil net profit 2
  - Santos to be hit hard by Australia carbon tax analysts 2
  - CNOOC cuts output at Hushuo refinery after fire 2
  - China's crude imports at eight-month low 3
- Europe, Middle East & Africa
  - Yemen oil output plunges as unrest persists 4
  - NOC to offer first crude on Iraq Mesambite Exchange 4

## Commodity Pulse

Washington—After signing cent largest-ever drawdown of US oil reserves, the Department of Energy is expected to deliver about the 30.64 billion barrels before an agency spokeswoman is wanted to pin up about 7 mtn the light sweet crude ahead of July. The remaining 23 million is scheduled for delivery in August.

Early deliveries hinge on oil company deals and securing water Jones Act, a maritime law that sign vessels from hauling cargo ports, DOE said.

Refiners, major producers are to pay a total of \$3.28 bln Treasury, of an average of \$30 three-ever presidentially directed the Strategic Petroleum Reserve.

In announcing the signed, it also released a list of the lowest offers came from: Boco \$31.96, Suncor Energy Markets

**The McGraw-Hill Companies**

The screenshot displays the Platts software interface with several windows open:

- TabView - NEWS & MOC - Worldwide Crude**: Shows a list of news headlines for crude oil markets, including items from NSEA CRUDE, CRUDE ANALYSIS, and CRUDE MARKETS.
- TabView - ADO1 INFO - US Refurb**: Displays a table of US Refurb data, including columns for Date/Time, Headline, and various market assessments.
- TabView - CRUDE OIL MARKETS**: Shows data for various crude oil grades, including columns for Date/Time, Headline, and market assessments.
- TabView - CRUDE MARKET COMMENTARY - N Sea**: Contains a list of news headlines and commentary related to the crude oil market.
- TabView - CRUDE OIL - RMB5000**: Shows a price chart for RMB5000, with a price of 109.80.
- TabView - CRUDE OIL - WTI**: Shows a list of market data for WTI, including columns for Name, Description, and LastMid.
- TabView - CRUDE OIL - WTI**: Shows a list of market data for WTI, including columns for Name, Description, and LastMid.
- TabView - CRUDE OIL - WTI**: Shows a list of market data for WTI, including columns for Name, Description, and LastMid.

Go to: <http://www.platts.com/NewsandAnalysis/Oil>

# Increased Engagement: Open Training, Forums

## June 2012

Date	Event	Location	Type	Register
7-8	Private Power in Central America, 15th Annual	Miami, Florida	Conferences	<a href="#">Register</a>
7-8	SBB Shale Play Tubulars Conference, 3rd Annual	Pittsburgh, Pennsylvania	Conferences	<a href="#">Register</a>
12	Complimentary Oil Methodology Training	London, United Kingdom	Training	<a href="#">Register</a>
12	Complimentary Oil Methodology Training	Houston, Texas	Training	<a href="#">Register</a>
12-13	Texas Power Markets Conference, 6th Annual	Houston, Texas	Conferences	<a href="#">Register</a>
13-14	SBB Training — How The Steel Market Works	Pittsburgh, Pennsylvania	Training	<a href="#">Register</a>
19	Complimentary Oil Methodology Training	Singapore	Training	<a href="#">Register</a>
21-22	Bunker & Residual Fuel Oil Conference, 9th Annual	Houston, Texas	Conferences	<a href="#">Register</a>
25	8th Oil Forum	Moscow, Russia	Forum	<a href="#">Register</a>
25	8- *****	*****	Forum	<a href="#">Register</a>
25-26	European Nuclear Power, 7th Annual	London, United Kingdom	Conferences	<a href="#">Register</a>
25-26	Utility M&A, 6th	New York, New York	Conferences	<a href="#">Register</a>
25-26	Shale Gas and Oil in Latin America	Houston, Texas	Conferences	<a href="#">Register</a>
28-29	Biofuels Conference 2012, 1st Annual	Amsterdam, The Netherlands	Conferences	<a href="#">Register</a>

## July 2012

Date	Event	Location	Type	Register
3	Complimentary Oil Methodology Training	London, United Kingdom	Training	<a href="#">Register</a>
17	Complimentary Oil Methodology Training	Singapore	Training	<a href="#">Register</a>

Go to: <http://www.platts.com/Conference>



## Platts MOC Defined

**Platts Market on Close (MOC)** is a price-discovery system designed to yield a price assessment reflective of market values at the close of the typical trading day. Systems of similar nature are very common, with variants seen in the futures markets where the energy and financial exchanges publish daily settlement prices reflective of activity at the close of markets. The MOC process is a very **structured system** for information gathering that allows transparent and fully verifiable market information to form the basis of the daily price assessment.

# The Importance of Time Sensitive Data

**Time  
stamps  
allow for  
true  
reflection of  
spreads**

Platts  
assessments  
are time  
sensitive and  
clearly time-  
stamped

## Time sensitive data

- Volatile market structure since Q4 2004
- Volatility tends to distort crude-refined product spread – which closed at different time frames
- Required need to align benchmark-crude oil-refined product assessment timelines
- Platts in the Americas end all assessments at 3:15 pm ET – according uses comparable date

# Price Discovery Process

- Transparent process
- Market makers show market directions
- The market is the testing ground
- Use of real-time technology
- End of day assessment process
- Values are based on 'Market on Close' principle
- Assessments are accountable
- Assessments reflect transactable values at 3:15pm ET/2:15 pm CT

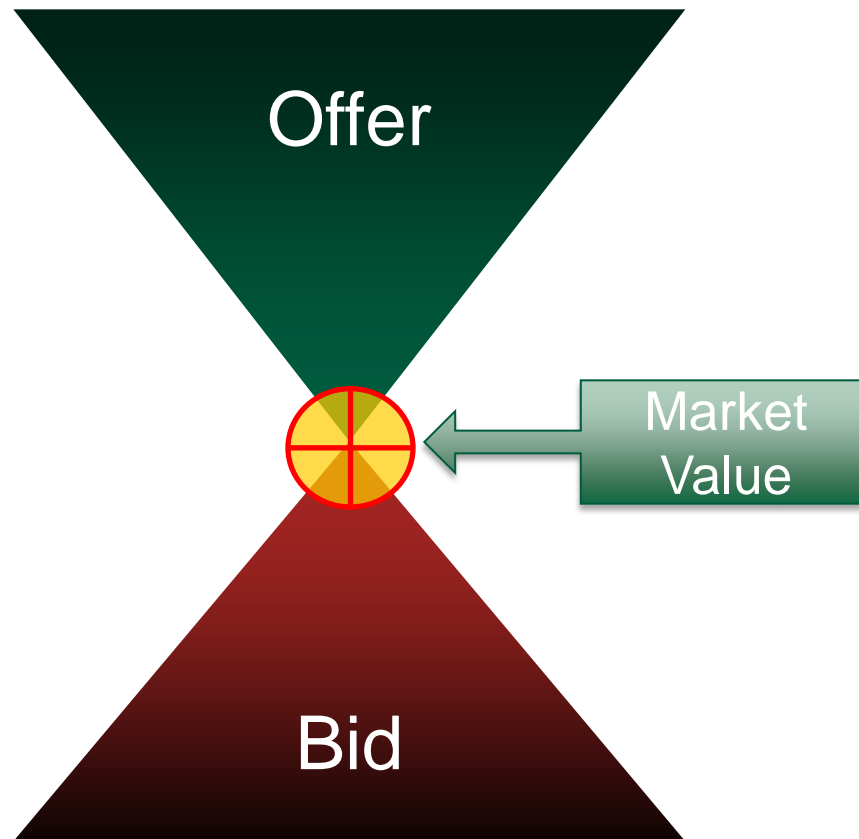


# Platts Editorial Guidelines

- All bids/offers must be available to the market
- Sufficient time to react to the bids and offers
- Transactions between affiliates not used in the assessment process
- Open to any credible participants
- Participants should be familiar with the guidelines
- Published bids and offers are 'firm'
- All trades are open for audit
- All participants must be contactable

# Assessments

Assessment should reflect market equilibrium

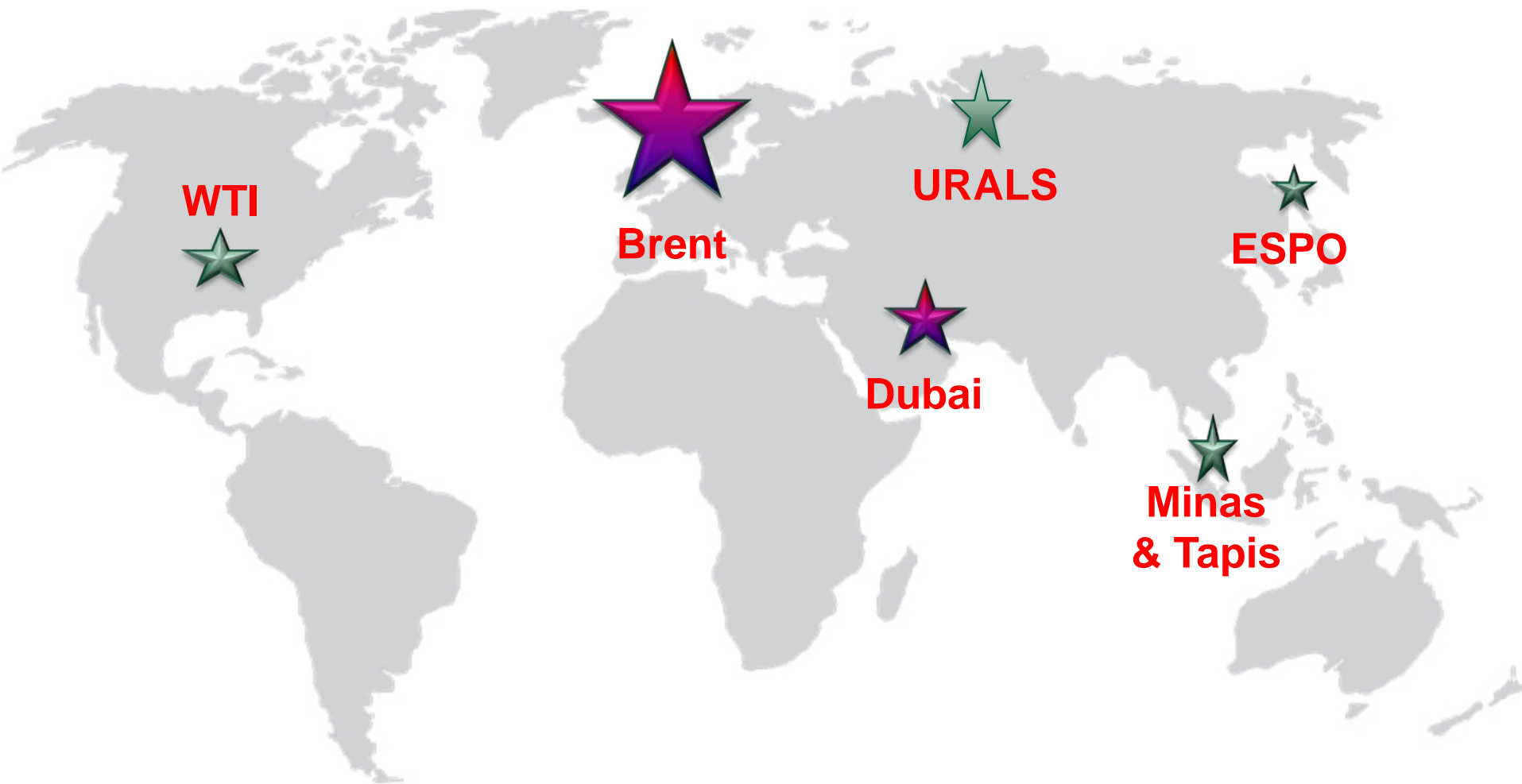


**platts**



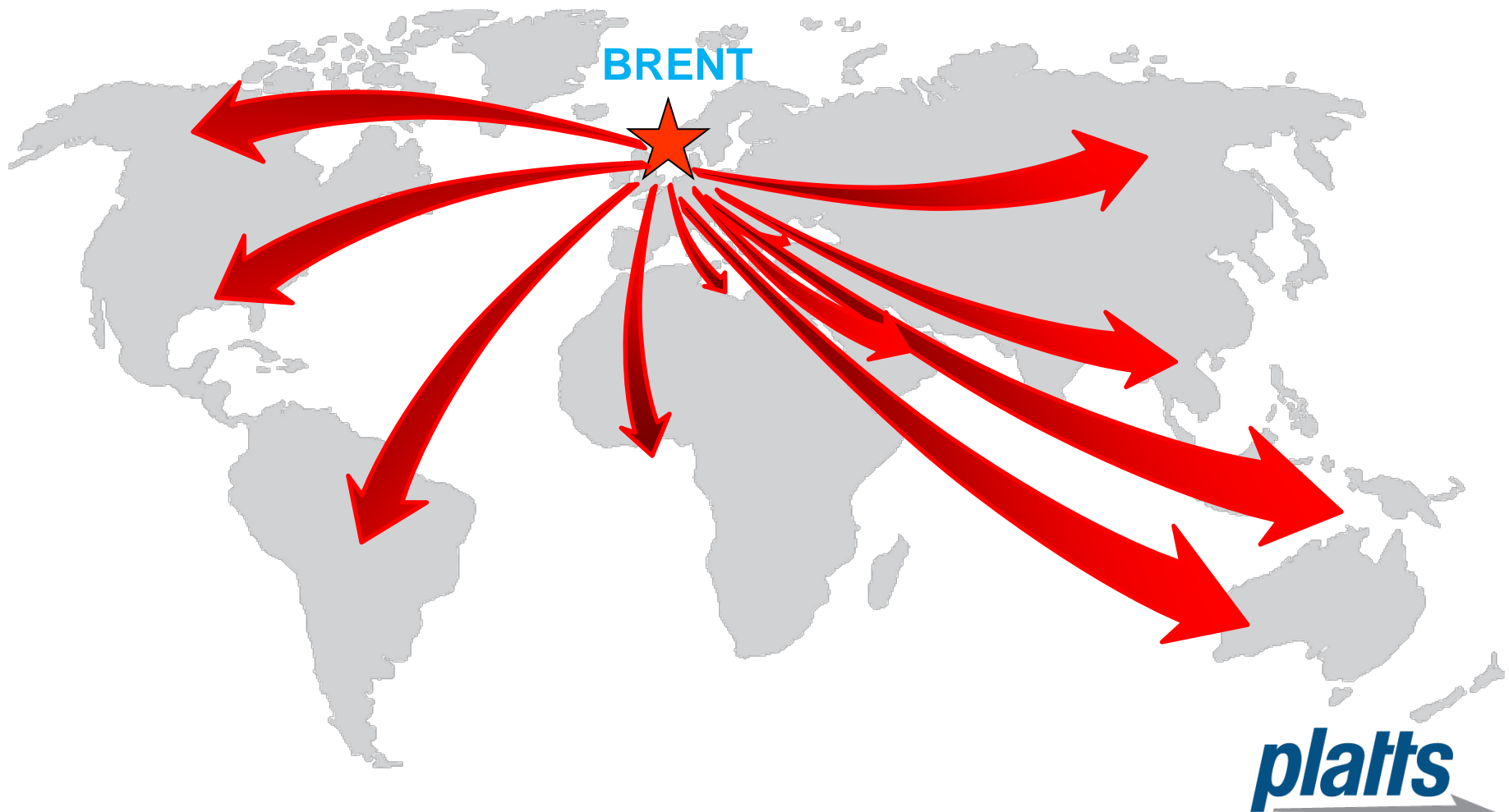
# Crude Oil Benchmarks

# Developing & Growing Global Crude Oil Benchmarks



# Dated Brent's Global Reach

Dated Brent – the current Global Benchmark for crude oil



# Why is Dated Brent – the Global Benchmark

- ✓ Convergence between market values and published values
- ✓ Reflects regional/global economics
- ✓ Benchmarks that fully reflect market value
- ✓ Multiple ownership
- ✓ Full transparency

# What makes a Global Benchmark

Adherence to international norms of trading

Chain formation – high degree of circulation

Leads to the development of a forward market

High degree of transparency

Benchmark assessment methodology is clearly defined

Benchmark assessments are open to industry scrutiny

Market acceptance

**platts**



## **Factors affecting differentials**

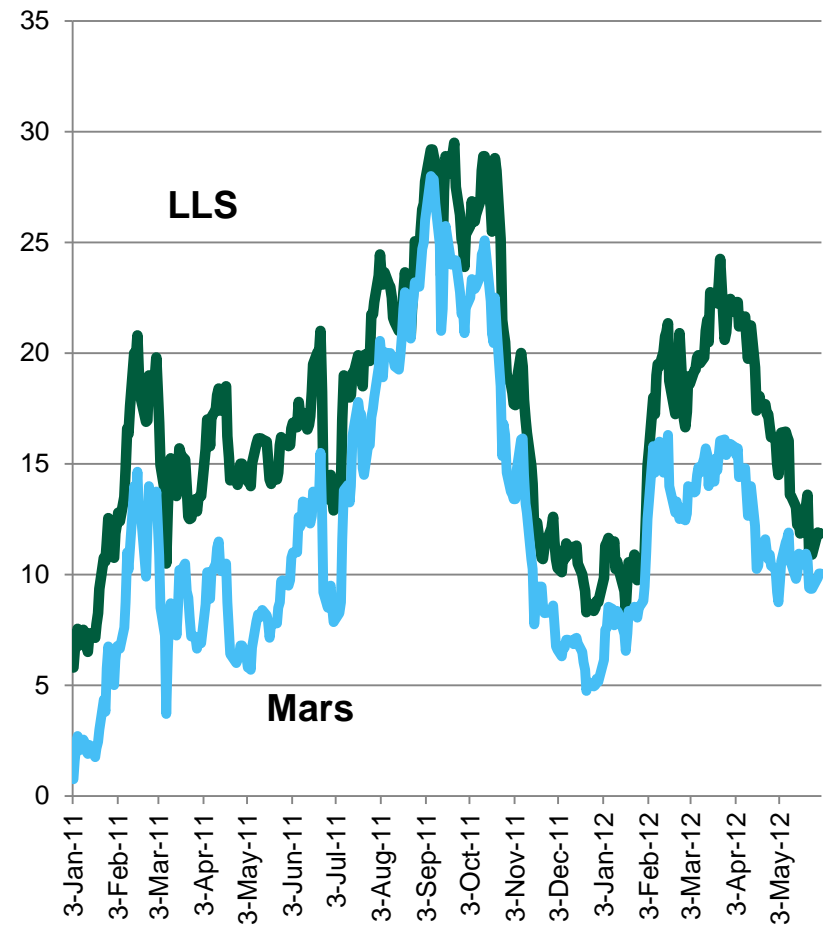


# Factors that impact market prices

- Refinery outages/re-configuration
- Refinery margins/product demand pattern
- Competing crudes' value
- Sweet-sour crude spread
- Take-away capacity
- Weather conditions
- Regulations

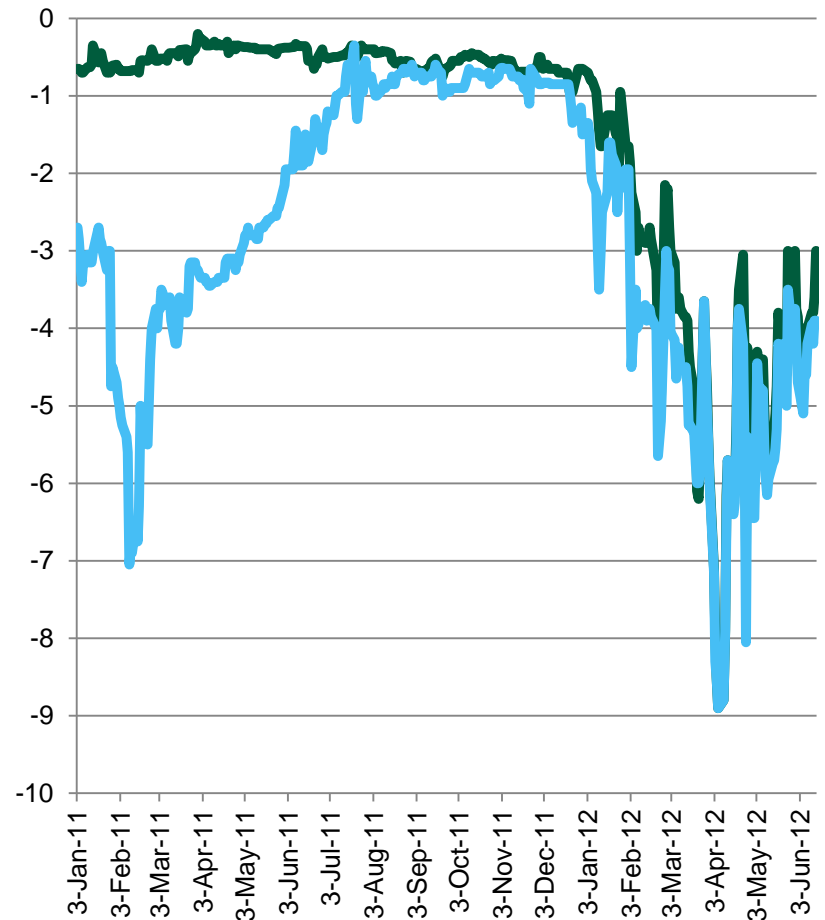
# LLS, Mars spread to WTI

- Largely a reflection of WT-Brent spread
- LLS competed with imported light sweet crudes while Mars competed with imported heavy sour crudes
- At times – fuel oil's strength helped Mars narrow the spread to LLS
- Recent narrowing due to increased Bakken and Eagle Ford Shale supply



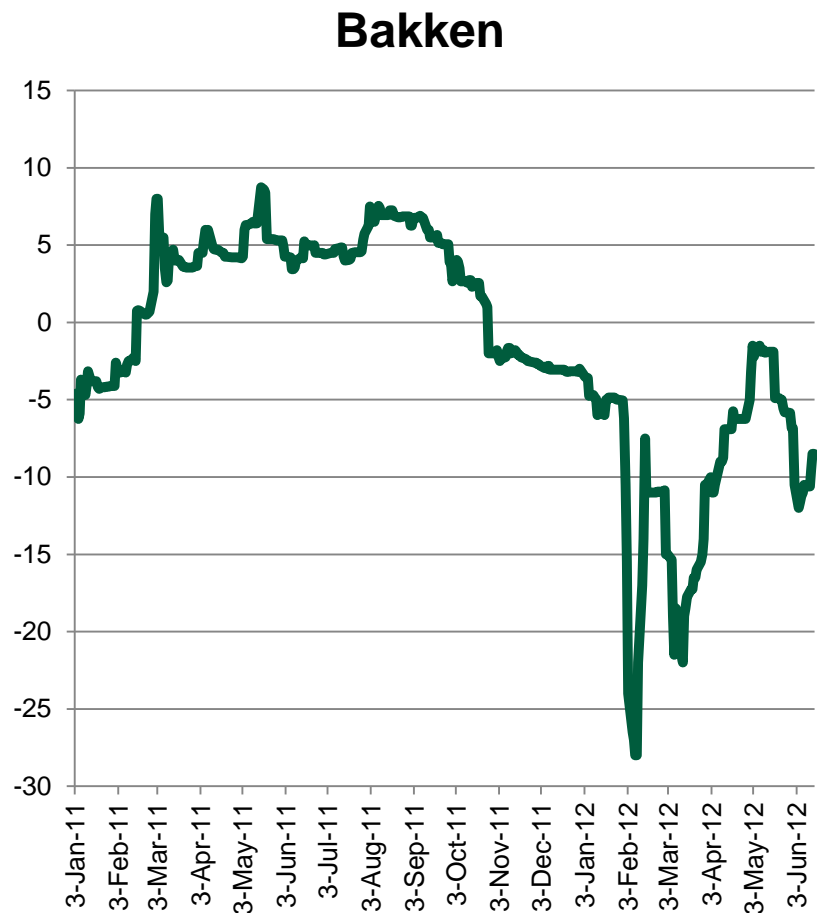
# WTI Midland & WTS spread to WTI

- **Steep discount to WTI Midland and WTS is largely due to lack of take-away capacity**
- **Discounts reflect cost of transportation**
- **These not the flavor of the major refining center**

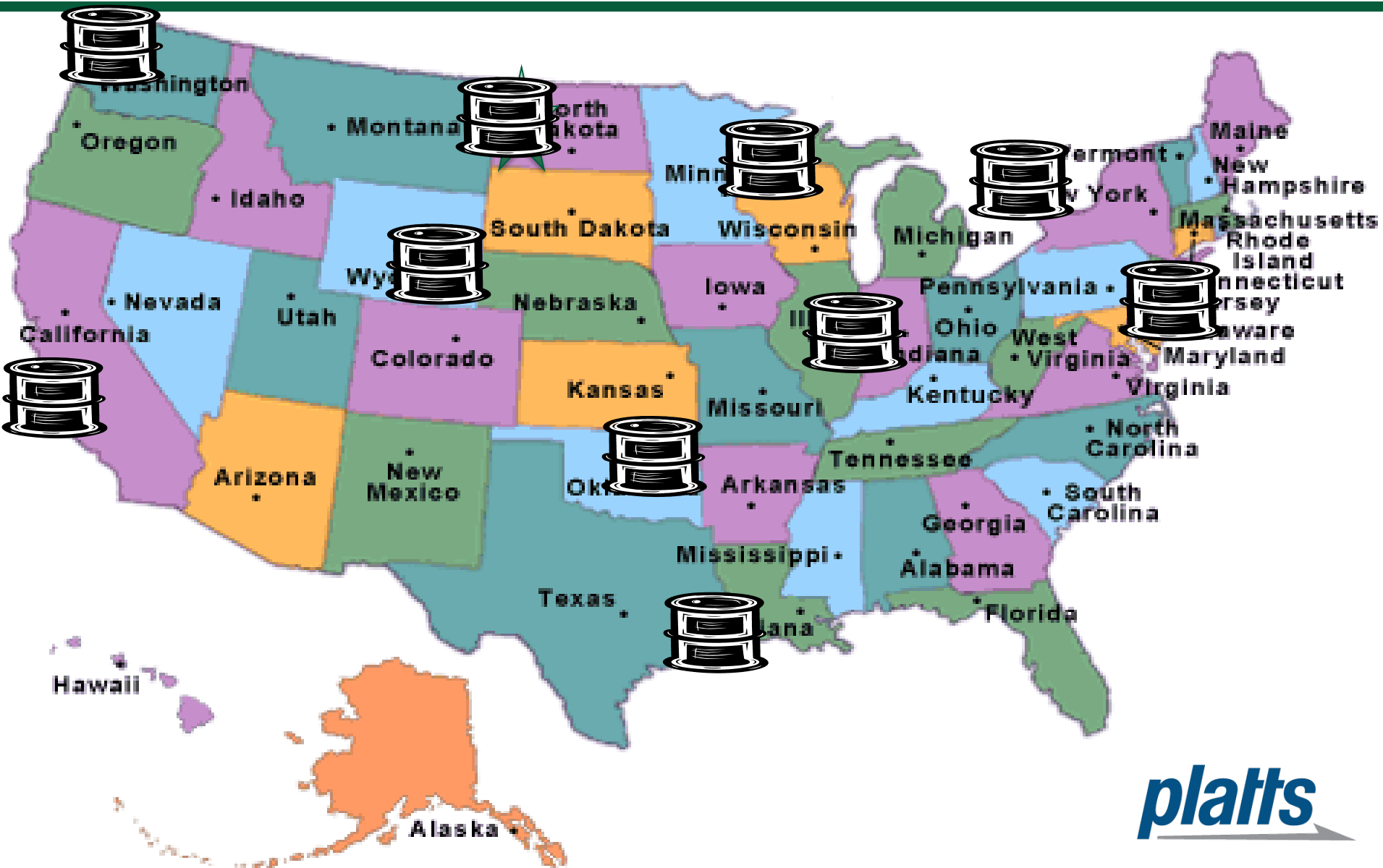


# Bakken vs CMA WTI

- **Bakken at Clearbrook suffers from a lack of effective take-away capacity**
- **Largely dependent on rail transportation**
- **Discount represents transportation costs**
- **Cut in Midwest refinery throughput saw differentials plunging earlier this year**



# Bakken . . .



# WCS differential CMA WTI

- Heavily discounted because of its lack of access to US Gulf Coast refining center
- Very high dependence on US Midwest
- Improved refining margins in Midwest helping to boost WCS differentials
- New pipeline access to Gulf Coast should have bullish impact on differentials



**platts**



# Game changers

# Seaway

- First parcel May 18 – 150 kb/d
- To hike capacity to 400 kb/d in early 2013
- Capacity to be ramped up to 850 kb/d in mid-2014
  - Will depend on Flanagan South line due in mid-2014
  - 585 kb/d initially – can be expanded to 800 kb/d
- FERC has denied Enbridge Seaway tariffs to be based on market rates



Source: Enterprise



# Keystone XL

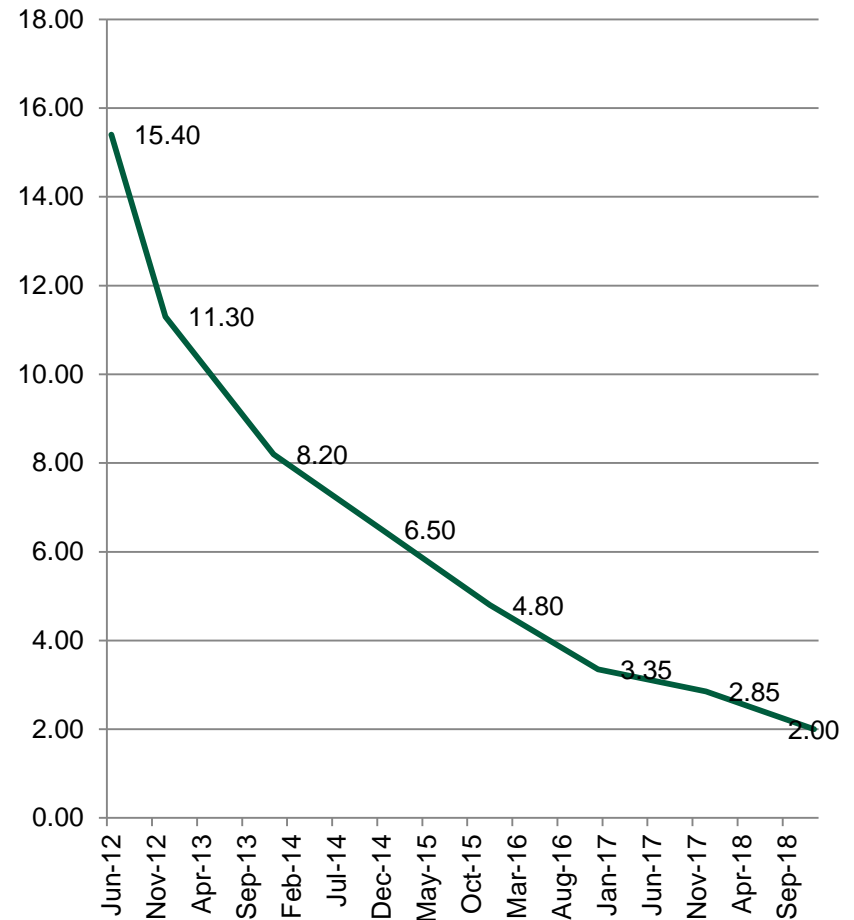
- Cushing to Nederland – 700 kb/d in 2013 – 830 kb/d in 2015
- Northern portion to have 830 kb/d – completion in 2015
- 500 kb/d of firm commitments
- Bullet line – once completed 20+ days for parcels to reach Gulf Coast



# Implications . . .

- Brent remains premium to WTI through Dec 2018
- Restrictions on exports keeping Brent at premium
- Implies the need to displace WTI with benchmark that has waterborne access
- Implies price point of Cushing needs to be changed to Gulf Coast

## Brent-WTI spread



# EC refiners face brunt of weak Atlantic Coast demand

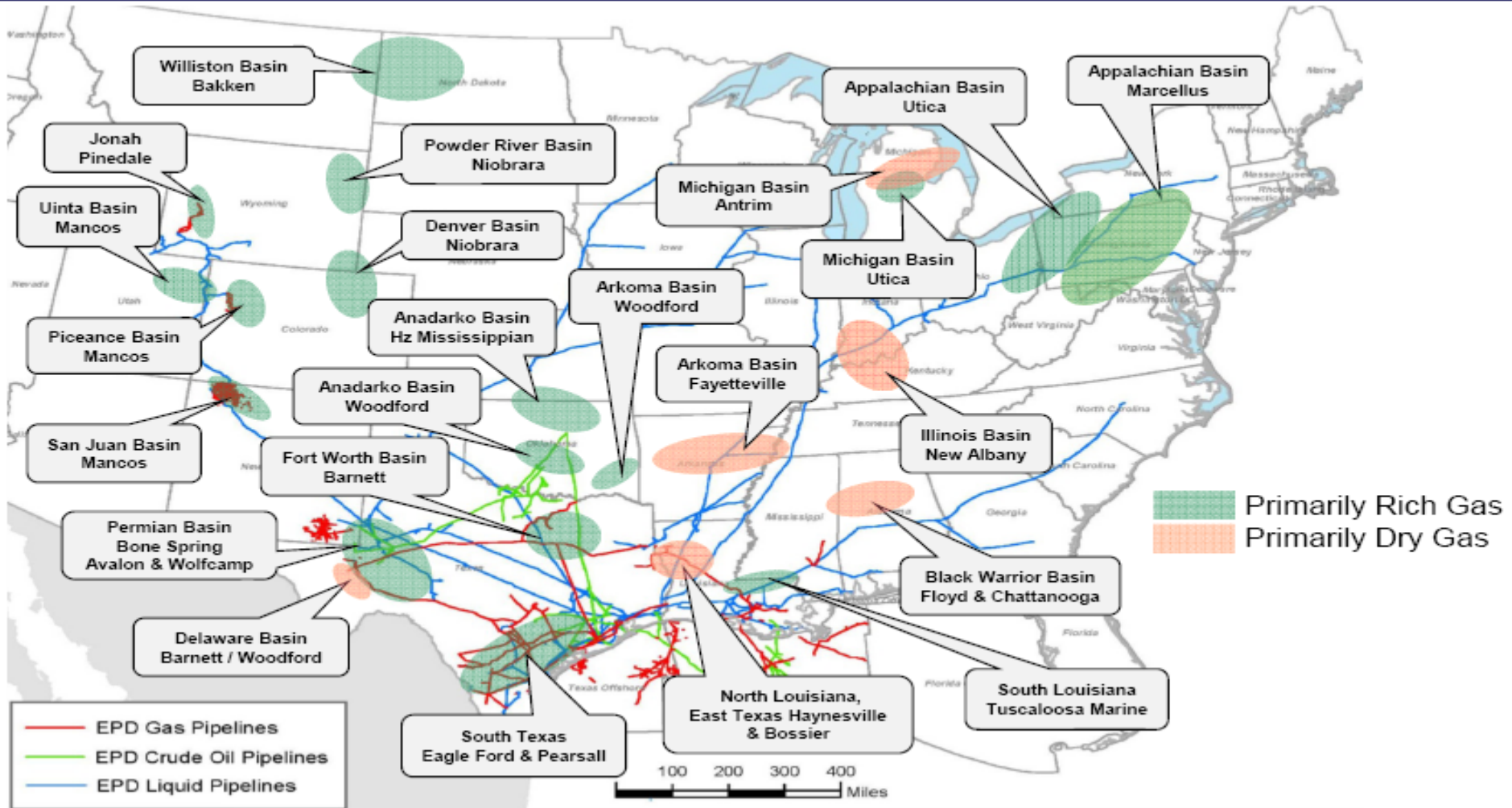
## Refineries that have been shut

Sunoco	Eagle Point	145	late 2009
Western	Yorktown	128	Sep-10
Shell	Montreal	130	Jul-11
Phillips 66	Trainer	185	Sep 2011-Sep 2012
Sunoco	Marcus Hook	175	Dec-11
Hovensa	St.Croix	350	Feb-12
Valero	Aruba	235	Mar-12
Imperial	Dartmouth	88	later 2012
Sunoco	Philadelphia	330	Aug 2012?
	<b>Total</b>	<b>1766</b>	

Weak Atlantic Coast demand & squeeze in refining margins leading to more closures

Current loss at 1.3 million b/d – could be lower when Trainer restarts but question mark over Philadelphia and Dartmouth

# Shale Map of Lower 48 states

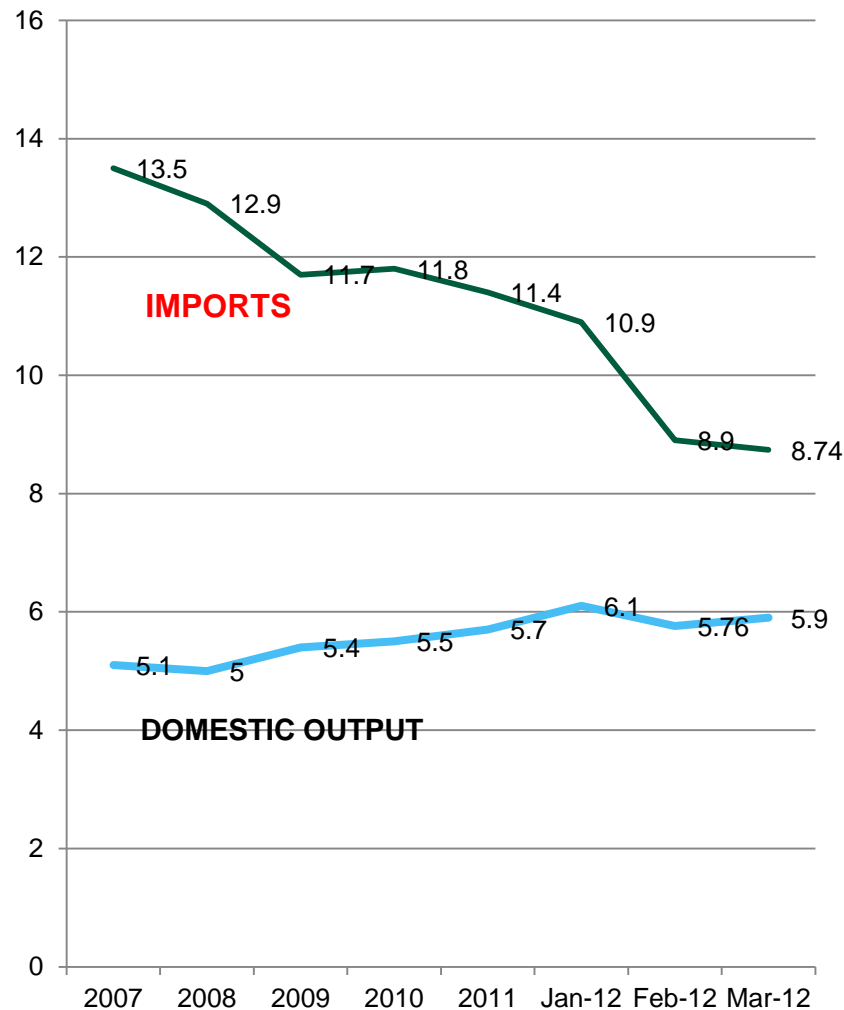


Source: Enterprise

# European Recession: Accelerate US Demand Fall

## US demand falling, exports up

- Total crude imports regularly below 9 million b/d
- Domestic output rising – narrowing the spread
- US gasoline demand below 9 million b/d
- USGC refiners ramping up capacity – building for exports – namely diesel



Source: EIA/API



# Exports . . .

- First exports would most likely be Canadian crudes
- Implies end of “cheap” Canadian crudes
- Pressure expected to mount for exports of domestic light sweet crudes from shale formations
- Some refiners have been granted export permits

Questions?



Esa Ramasamy  
Editorial Director – Americas Market Reporting  
Tel: 713 658 3292  
Cell: 281 818 3286  
Email: [esa\\_ramasamy@platts.com](mailto:esa_ramasamy@platts.com)

