Platts Oil Benchmarks & Price Assessment Methodology

October 4, 2012 - London
Agenda

- Introduction and the role of benchmarks
- Platts price discovery process
- Global commodity markets outlook
- Platts MOC liquidity: stats review
- Q and A throughout
Introducing Platts…

Platts is a specialist energy market news and price publisher founded by Warren Platt over 100 years ago.
Offering Comprehensive Coverage

- Oil
- Natural Gas
- Electric Power
- Coal
- Shipping
- Petrochemicals
- Metals
Extensive Global Reach

Offices in five continents
> 1000 staff around the world
Why Platts?

Impartial, reliable and expert

• Completely independent
• Processes are open and transparent
• Inhouse insight from over 250 market specialists covering the supply chain

• Platts prices used as benchmarks for contract settlement: *Dated Brent, Dubai/Oman, Diesel 10 ppm, Fuel oil 3.5%, Naphtha*

• News and commentaries used to make informed business decisions
Platts’ Focus, Impact and Relevance

- Platts benchmarks are used to price term contracts
- Futures settlements are often tied to spot market Platts covers
- Derivatives “price out” against Platts spot price assessments or futures settlements
Benchmark Pricing: What the Market Expects

- Convergence between market values and published values
- Benchmarks that fully reflect market value
- Responsible behaviour
- Full transparency
Characteristics of a Good 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
Where Do You Find Platts Benchmarks?

- More than 100 key benchmarks published daily
- Used in settlement of $billions of oil commerce daily
- Available in print, in real-time online through Platts Global Alert and as market data
Platts Price Discovery Process

- Transparent process
- The market is the testing ground
- Use of real-time technology
- End of day assessment window
- Values are based on ‘Market-on-Close’ principle
- Assessments reflect transactable values at 1630*

*Depends on location
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 timestamped
Despite shaking off Tuesday night’s release of API stock data, which showed a build in crude stocks, and good performance of Asian and US financial markets, crude futures were unable to hold on to gains in European morning trading → sell off on the back of profit taking.

15:30 London time: Release of US Energy Information Administration weekly petroleum stock data: Crude prices rally on a 5.058 mil barrel draw in crude stocks, mitigating builds in mogas and distillates stocks

US open at 14:00 London time: Weaker open as equity markets soften and sentiment turned bearish following API numbers: Cushing stocks continued to build, crude inventories increased despite expectations of a draw.
Platts Market-on-Close: General 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 participants must be contactable
0900 - 1545 – Physical cargo bid/offers submitted

1545/1600 – Physical barge bid/offers accepted

1625 - 1628 – Final changes to physical bid/offers can be made

1630 – Market-on-Close
All bid/offers expire
Platts MOC: Example Swaps Market Timeline (EMEA)

0900 - 1615 – Physical bid/offers submitted

1615 – No more new derivative/swaps spreads (time spreads, quality spreads, etc.) bids/offers

1630 – Market-on-Close
All bid/offers expire
Platts MOC: Example eWindow Market Timeline (EMEA)

0900 - 1605 – Physical barge bid/offers submitted

1615 – No more new derivative/swaps spreads (time spreads, quality spreads, etc.)

1620 – No more new outright swaps bid/offers

1630 – Market-on-Close
All bid/offers expire
Platts Market-on-Close: Guiding Concepts

- Outright prices take precedence over floating prices
- Accounts for transactions concluded throughout the MOC process plus the backwardation or contango structure
- Deals subject to several tests including repeatability with MOC extended to test a traded bid or offer
Market-on-Close Assessment Process

Offers

Bids

Cut-off for new bids/offers

Market-on-Close
Incrementability

• Bids/offers should move in incremental small steps

• Typically 15cts/bbl or $1/mt per minute for physical fuel oil, distillate cargoes and feed stocks

• Changes typically every 20 seconds for eWindow traded instruments such as crude, naphtha, most swaps

• Systems in place to handle extreme volatility
Gapping

• Discouraged and typically not used for assessments

• Price makers should bid/offer at reasonable market levels
Repeatability

- Following the trade, market maker can bid/offer on. Intention should be communicated immediately

- Price taker does not have option to bid/offer on

- Bids/offers can be withdrawn at any time, assuming no prior interest has been expressed
The Window Makes the Market Transparent
<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Headline</th>
</tr>
</thead>
<tbody>
<tr>
<td>21/07/2010 06:43</td>
<td>5--Euro Product 37: BIODIESEL: PME August loading bid pegged at a premium of $245</td>
</tr>
<tr>
<td>21/07/2010 06:43</td>
<td>5--Euro Product 36: BIODIESEL: RME Q4+Q1 loading offer heard at a premium of $385</td>
</tr>
<tr>
<td>21/07/2010 06:24</td>
<td>5--Euro Product 35: BIODIESEL: RME August loading bid heard at a premium of $345</td>
</tr>
<tr>
<td>21/07/2010 06:24</td>
<td>5--Euro Product 34: BIODIESEL: FAME 0 August loading bid heard at a premium of $2</td>
</tr>
<tr>
<td>21/07/2010 06:24</td>
<td>5--Euro Product 33: BIODIESEL: SME propmt loading bid heard at a premium of $265</td>
</tr>
<tr>
<td>21/07/2010 06:24</td>
<td>5--Euro Product 32: BIODIESEL: FAME 0 August loading range heard at a premium of $2</td>
</tr>
<tr>
<td>21/07/2010 05:58</td>
<td>5--Euro Product 31: ~~~Platts FO 1% NWE FOB Cargo swap Jul-Aug heard bid at $0.25</td>
</tr>
<tr>
<td>21/07/2010 05:36</td>
<td>5--Euro Product 30: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:36</td>
<td>5--Euro Product 29: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:36</td>
<td>5--Euro Product 28: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:36</td>
<td>5--Euro Product 27: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:35</td>
<td>5--Euro Product 26: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:35</td>
<td>5--Euro Product 25: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:35</td>
<td>5--Euro Product 24: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:35</td>
<td>5--Euro Product 23: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:35</td>
<td>5--Euro Product 22: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 21: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 20: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 19: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 18: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 17: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:34</td>
<td>5--Euro Product 16: ~~~Platts FO 1% NWE FOB Cargo swap vs 3.5% Rdam FOB Barges Fue</td>
</tr>
<tr>
<td>21/07/2010 05:33</td>
<td>5--Euro Product 15: ~~~Platts FO 1% NWE FOB Cargo swap Sep-Oct heard offered at $-1</td>
</tr>
<tr>
<td>21/07/2010 05:33</td>
<td>5--Euro Product 14: ~~~Platts FO 1% NWE FOB Cargo swap Aug-Sep heard offered at $-</td>
</tr>
<tr>
<td>21/07/2010 05:33</td>
<td>5--Euro Product 13: ~~~Platts FO 1% NWE FOB Cargo swap Aug-Sep heard bid at $-1/mt</td>
</tr>
<tr>
<td>21/07/2010 05:32</td>
<td>5--Euro Product 12: ~~~Platts FO 1% NWE FOB Cargo swap Aug-Sep heard at $-0.75/mt</td>
</tr>
<tr>
<td>21/07/2010 05:32</td>
<td>5--Euro Product 11: ~~~Platts FO 1% NWE FOB Cargo swap Jul-Aug heard bid at $0/mt</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 10: ~~~Platts FO 3.5% MED FOB cargo/3.5% Rdam Barges Aug heard off</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 9: ~~~Platts FO 3.5% Rdam Barges swaps Oct-Nov heard bid at $-2.7</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 8: ~~~Platts FO 3.5% Rdam Barges swaps Sep-Oct hear offered at $-1</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 7: ~~~Platts FO 3.5% Rdam Barges swaps Sep-Oct heard bid at $-2.25</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 6: ~~~Platts FO 3.5% Rdam Barges swaps Aug-Sep heard bid at $0</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 5: ~~~Platts FO 3.5% Rdam Barges swaps Aug-Sep heard bid at $-0.5</td>
</tr>
<tr>
<td>21/07/2010 05:31</td>
<td>5--Euro Product 4: ~~~Platts FO 3.5% Rdam Barges swaps Aug-Sep heard at $-0.25/mt</td>
</tr>
<tr>
<td>21/07/2010 05:30</td>
<td>5--Euro Product 3: ~~~Platts FO 3.5% Rdam Barges swaps Jul-Aug heard offered at $1</td>
</tr>
<tr>
<td>21/07/2010 05:30</td>
<td>5--Euro Product 2: ~~~Platts FO 3.5% Rdam Barges swaps Jul-Aug heard bid at $-0.2</td>
</tr>
</tbody>
</table>
### Platts eWindow

IntercontinentalExchange® (ICE) - plattsview1 @ Platts (View Only)

<table>
<thead>
<tr>
<th>Product</th>
<th>Hub</th>
<th>Strip</th>
<th>+ - Sell</th>
<th>Buyer</th>
<th>Qty</th>
<th>Bid</th>
<th>Offer</th>
<th>Qty</th>
<th>Seller</th>
<th>Buy</th>
<th>Last</th>
<th>Mkt. State</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platts Brent</td>
<td>CFB</td>
<td>Jul 12-Jul 16 (Sep)</td>
<td></td>
<td>MS</td>
<td>100</td>
<td>-0.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final</td>
<td></td>
</tr>
<tr>
<td>Platts Brent</td>
<td>CFD</td>
<td>Jul 19-Jul 23 (Sep)</td>
<td></td>
<td>KOCHSARL, PYMOIL</td>
<td>100</td>
<td>-0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final</td>
<td></td>
</tr>
<tr>
<td>Platts Cash BF6E Partial</td>
<td>Aug 10</td>
<td></td>
<td></td>
<td>COP</td>
<td>100</td>
<td>-0.55</td>
<td>-0.60</td>
<td>100</td>
<td>PHIBRO</td>
<td>BU</td>
<td></td>
<td>Final</td>
<td></td>
</tr>
<tr>
<td>Platts FO 1% Brg</td>
<td>FE</td>
<td>Aug 10</td>
<td>+</td>
<td>TOSAVECBE</td>
<td>1444.00</td>
<td>447.00</td>
<td>1 PETROBRAS &lt;P&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pricing</td>
<td>+</td>
</tr>
<tr>
<td>Platts FO 1% Brg</td>
<td>MW</td>
<td></td>
<td>+</td>
<td>CHEMURBB</td>
<td>2440.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pricing</td>
<td></td>
</tr>
<tr>
<td>Platts FO 1% Brg</td>
<td>BE</td>
<td></td>
<td>+</td>
<td>MERCUASI</td>
<td>2442.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pricing</td>
<td></td>
</tr>
<tr>
<td>Platts FO 3.5% Brg</td>
<td>FE</td>
<td></td>
<td>+</td>
<td>CARGILL</td>
<td>2442.00</td>
<td>4110.00</td>
<td>2 LITASCO</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 3.5% Brg</td>
<td>MW</td>
<td></td>
<td>+</td>
<td>KOCHSARL</td>
<td>2442.00</td>
<td>4010.00</td>
<td>2 LITASCO</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 3.5% Brg</td>
<td>BE</td>
<td></td>
<td>+</td>
<td>KOCHSARL</td>
<td>2442.00</td>
<td>4010.00</td>
<td>2 LITASCO</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 1% NWE FO6E Carb Fuel Oil Swap vs 3.5% Rdam FO6E Jun. Bal Month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23.00</td>
<td>5 MERCURISAI</td>
<td>Pricing</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 1% NWE FO6E Carb Fuel Oil Swap vs 3.5% Rdam FO6E Jun. Bal Month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.00</td>
<td>5 MERCURISAI</td>
<td>Pricing</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 1% NWE FO6E Carb Fuel Oil Swap vs 3.5% Rdam FO6E Jun. Bal Month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.00</td>
<td>5 MERCURISAI</td>
<td>Pricing</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO 3.5% Rdam FO6E Carb Fuel Oil Swap</td>
<td>Aug 10</td>
<td></td>
<td></td>
<td>HETCO</td>
<td>5</td>
<td>25.00</td>
<td>25.25</td>
<td>10</td>
<td>BP</td>
<td>25.25</td>
<td>Pricing</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Platts FO 3.5% Rdam FO6E Carb Fuel Oil Swap</td>
<td>Jul 16</td>
<td></td>
<td></td>
<td></td>
<td>416.00</td>
<td>5 KOCHSARL</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO Spr 1% NWE FO6E Carb swap</td>
<td>Bal Month, Jul 16</td>
<td></td>
<td></td>
<td></td>
<td>-0.50</td>
<td>5 BP</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts FO Spr 1% NWE FO6E Carb swap</td>
<td>Jul 16, Aug 10</td>
<td></td>
<td></td>
<td></td>
<td>-0.50</td>
<td>5 BP</td>
<td>Pricing</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts Gasoline NWE BTO SB EFO</td>
<td>FE</td>
<td></td>
<td></td>
<td>VOS</td>
<td>1561.00</td>
<td>406.00</td>
<td>1 NICH</td>
<td>Pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platts Gasoline NWE BTO SB EFO</td>
<td>MW</td>
<td></td>
<td></td>
<td>VOS</td>
<td>1561.00</td>
<td>406.00</td>
<td>1 NICH</td>
<td>Pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Platts FO 3.5% Brg FE, BPBV lowers offer $418.00 for 2 1/2 1524.329 GMT
--- Platts FO 1% NWE FO6E Carb: BP offer EU qualified iso campo for NWE, 25-30 Jul buyer's option loading 09-1
Platts MTBE NWE BTO FE, ARGOS lowers offer $761.00 for 1 1/2 2237.772 GMT
Platts Cash BF6E Partial Aug 10, BP lowers offer $77.67 for 100 18228.33 GMT
Platts Gasoline NWE BTO SB EFO FE, TRAFV-SPECTRON lowers offer $985.00 for 1 18228.645 GMT
Platts FO 3.5% Brg FE, VERBEKE raises bid $406.75 for 2 18228.458 GMT
Platts FO 3.5% Brg BE, LITASCO lowers offer $410.50 for 2 18228.537 GMT
Platts FO 3.5% Brg BE, MERCURISAI lowers offer $411.00 for 10 18228.596 GMT
Platts Gasoline NWE BTO SB EFO FE, TRAFV-SPECTRON lowers bid $823.00 for 1 18228.599 GMT
Platts MTBE NWE BTO FE, GUIVORBE lowers offer $778.00 for 1 18228.542 GMT
Platts Cash BF6E Partial Sep 10, MERCURISAI lowers bid $74.52 for 100 18228.214 GMT
Platts FO 3.5% Brg FE, CARGILL raises bid $497.50 for 2 18228.565 GMT
Platts FO 3.5% Brg MW, LITASCO lowers offer $410.00 for 2 18228.124 GMT
Platts Cash BF6E Partial Sep 10, MERCURISAI raises bid $74.52 for 100 18228.12 GMT
Platts FO 1% NWE FO6E Carb Fuel Oil Swap vs 3.5% Rdam FO6E Brgs Fuel Oil Swap (High/Low) - Jul 16, 1
Platts FO 3.5% Brg FE, LITASCO lowers offer $410.00 for 2 18228.13 GMT
Platts MOC: more than 280 participants

A H Meyer & CE AG
A.P. Moller - Maersk AS
Abengoa Bioenergy
Addax
ADM International Sarl
Aegian Petroleum
AIC Limited
Alicos SA
Amerex Petroleum
AOI
AOI Trading AG
Apache North Sea Ltd
Apex Oil Company, Inc.
Arcadis
Archer Daniels Midland
Argos
Aspen Oil (Broking) Ltd.
Associated Bunkeroil
Astra Oil
Atlantic
Australia and IZ Banking
Mabanaft
Bakri Trading
Banca MI S.p.A.
Banco Santander, S.A.
Barclays Bank plc
BASF Intertrade AG
BB Energy
Belgische Olie Maatschappij
Belgomin NV
BGC Radix Energy L.P.
BioUrja Trading, LLC
Blue Ocean Associates Ltd
BP Paribas
BP
Briggoil
Buckeye Energy Partners
Bunge
C Companies Pte Ltd
Cargill
Center Oil Company
Cepsa International BV
Chemoil Corporation
Chemoil Energy Limited
Chevron
CheminorPhillips Chemical Co
Chimbosco Pan Nation
China Aviation Oil
China National United Oil Corp
China Oil
Chinaoil
CHS Inc.
CIMA Green, LLC
Citgo Petroleum
CIT
CMT Fund XXVI Ltd
Colonial Oil Industries, Inc.
Commerzbank AG
Conoco Phillips
Consort Bunkers Pte. Ltd.
Cosmo Oil Co., Ltd.
Credit Agricole
Credit Suisse
Crop Energies GmbH
Czarnikow Group Ltd
Daelim Corporation
Daxin Petroleum Pte Ltd
DCP HGL Services, LLC
Deutsche Bank AG
DH Fuel Company mbH
Dow
DS Mineralsol GmbH
Dufour Petroleum LP
EcoEnergy Inc.
Eminent Energy Limited
Emirates National Oil Co
Enel
Eni
Eni S.p.A.
Enterprise Products Ops
EP Energy Trading SE
ERG SpA
Essar Oil UK Ltd
Ets Storem & Cie
ExxonMobil
FAL Oil
Fina Oil
Fitz Meyer AG
Fokker
Ford
Galaxy
Gavilon, LLC
Gazprom
Gazpromneft Trading
George E. Warren Corp.
Giga Petroleum
Glencore
Global Companiees LLC
Global Energy Resources
Global Trans Petrochem
GP&G Inc. dba Center Oil
Gracewood International
Great Island dba Gulf Oil
Green Energy Fuels Ltd
GS Caltex Singapore
GT Commodities
Gulf Oil
Gulfstream Trading Ltd.
Gunvor
Hanwha International
Harvest Energy Ltd.
Hawkneye Gold, LLC
Hess
Hi Leong Trading
Holt Global Trading
ICAP Energy Pte Limited
Idemitsu Kosan Co., Ltd
Independent Petroleum
Ineos
Interchem
IPI Ltd
Island Bunker Oils Ltd.
J Athon
J.P. Morgan
JB Commodities AG
John W. Stone Oil Dist.
Kanematsu Corp.
Kangqi
Kastra Group
Kempler & Co., Inc.
Kerrox Oil Pte Ltd
KG Geohol
KLM Royal Dutch Airlines
Koch
Kotmar Americas Inc.
Kuo Oil (S) Pte Ltd.
Lansing Trading Group
Lantmannan Agroethnic
LG International Corp.
Lia Oil SA
Licorne Petroleum
Litasco SA
Louis Dreyfus
Lukoil
Lyondell Chemical
Macquarie Bank
Mansfield Oil Company
Marathon
Marubeni
Matsue
MatrixBrat
MC Energy, Inc.
Merchant Commodity
Mercuria
Merrill Lynch
Metroplex Energy Inc.
Mioco, Inc.
Mitsubishi
Mitsui
Mocoh SA - Geneva
Morgan Stanley
Motor Oil (Hellas)
Murex Ltd
Musset Corp.
Nakagawa Bussan
Natixis
Neste Oil
Nexen Energy Marketing
NIC Holding Corp.
NIOC Bunkering B.V.
Nittan Capital
Noble
Nomura International plc
North European Oil Trade
North Sea Group
NuStar Marketing LLC
O.W.
OceanConnect
Oel-Pool AG
Oil Search Limited
Olichart International BV
Olieshandel Klaas de Boer
Omneo Trading AG
OMV Trading Services Ltd.
ONEOK Hydrocarbon LP
Opel Trade
P.M.I.
Paz Ashdod Refinery Ltd
Pertamina
Petrao Oil Company Ltd.
Petroleum Ltd Bermuda
Petrop China
Petro Summit Pte. Ltd
Petro-Diamond
Petrobras
Petrocom Energy Group
Petrodrom-EKO Domanski
Petrofina SA
Petroleum Traders Corp
Petronas Trading Corp
Petrovije BV
PetroSeraya Pte. Ltd
Petroleum Trading Sdn
Philbro
PKL Orlen S.A.
Plains Marketing LP
Preem AB
PTT International Trading
PV M Oil Associates
Raizen Trading LLP
Raystar Corporation
Reliance
Repsol
RILUSA, Inc.
Rixo International Trading
Rotterdam Marine Fuels
Rubicon
RWE
S-Oil Corp
S.E.T. Select Energy
SABIC Petrochemical BV
Sahara Energy
Saicat Energy SA
Santos Ltd.
Saras SpA
SARP Oil Afrique
SEB Merchant Banking
Shell
Siarade Co.Ltd
Singapore Petroleum
Sinochem
Sinopec
Skolkovo Energy LLP
Skocar Trading S.A.
Societe Generale
Spreague Energy Corp.
Standard Bank Plc
Standard Chartered Bank
Statoil ASA
Strong Petrochemical
Sveden Geneva SA
Sumitomo Corporation
Sunoco, Inc.
Talmay Trading
Tauber Oil Company
Tenergy Trading SA
The Falzon Group
Total Oil Trading SA
Toyota Tsusho Petroleum
Tradition Financial Services
Trangas
Tramoco Gas International
Transocean Oil Services
Turkish Petroleum
Unepc
Unioil
Volkswagen Energy
Van Raak Distrubition BV
Vattenfall Energy Trading
Vanguard
Vector Energy AG
Vebeke Bunkerring NV
Versol AG
Vermont Marine Bunkering
VERTICAL North America
Vesivo Oil Pte Ltd.
Villa Oil SL
Vinnarum International
Vitol
Waxiog Resources
Wells Fargo Commodities
Westport Petroleum, Inc.
Wijol IV
Winfrey Oil Trading
Woodside Petroleum
World Fuel Services
Global commodity markets outlook
Platts MOC liquidity
Oil hit a historical high July 2008 at $146.00. Current prices around $110/bbl

Natural gas has been hovering around a 10 year low

Iron ore reached a peak in February 2011 of $193/mt and is currently near 105/mt

Copper hit a peak of $10,147/mt in February 2011, currently at $8,130.25/mt

Thermal coal peaked at $211/mt in July 2008, currently at near $85/mt

China’s oil demand is down year on year.
Global economic outlook gloomy, Asia shows unexpected weakness

- European economies contracting
- US and other central banks printing money. Financial misallocation continuing, with disposable income dropping
- Global trade is shrinking with wisps of protectionism. More importantly, Asian intra-trade shrinking too
- India’s industrial output barely grew in July at 0.1% y-o-y after a contraction in June
- China is likely to miss a 7.5% growth in 2012, as European crisis affects Asian economy. Some sectors are contracting
- China’s export growth in July at meager 1% and 2.7% in August y-o-y
- China’s imports dropped 2.6% in August y-o-y
- August Chinese oil demand contracted 1.5% y-o-y
- Economists downgrade Singapore GDP’s expected growth in 2012 to just 2.4% following negative second quarter
Global woes and market changes affecting trade

- Global economic issues are directly impacting demand for commodities at a time that many new production facilities are starting or getting ready to start output.
- Physical trade in primary commodities and finished goods are showing signs of strain.
- Shipping rates are weak and many shipping companies are incurring losses.
- Combination of economic contraction and regulation are resulting in less trade in key markets.
- Expected impact on bank participation.
Trading activity declining

- The London Stock Exchange’s daily average volumes **fell 20%** in April-May 2012 y-o-y

- ICAP’s revenue **fell 14%** in April-May 2012 versus last year
Liquidity at ICE and CME falling

- CME’s August 2012 total volumes **down 40% y-o-y**

- ICE’s August 2012 total volumes **down 18% y-o-y**
Fed announces further Quantitative Easing

Fed will purchase additional agency mortgage-backed securities at a pace of $40 bln a month. Total Fed’s holdings of long-term securities will increase by $85 bln a month.

“Exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015”

Chinese government will invest $150 bln into infrastructure projects

Japan announces a $128 bln monetary easing. UK is also considering a similar step
Gold and agriculturals at high levels
IODEX CFR CHINA 62% Fe $/DMt

Source: Platts
Platts MOC Global liquidity

Trades by BBLs - Global - By Region Sep 2011 - Sep 2012

Region
- USA
- Europe
- Asia

MONTH YEAR
- Sep2011
- Oct2011
- Nov2011
- Dec2011
- Jan2012
- Feb2012
- Mar2012
- Apr2012
- May2012
- Jun2012
- Jul2012
- Aug2012
- Sep2012

MIL BBLs
Platts MOC: Physical vs Paper

The chart illustrates the number of trades for physical and paper instruments from September 2011 to September 2012. Physical instruments show a trend with peaks in March and May 2012, while paper instruments are consistently higher in most months with a peak in July 2012.
Total MOC trades: Participant kind

Total trades by player type

Participant Kind
- Bank/Financial
- Independent/Trader
- Major/Regional Major
CIF NWE naphtha cargo MOC

Trades by BBLs - EU Naphtha Physical - Sep 2011 - Sep 2012

MIL BBLs

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 2011</td>
<td>1.11</td>
</tr>
<tr>
<td>Oct 2011</td>
<td>1.89</td>
</tr>
<tr>
<td>Nov 2011</td>
<td>0.56</td>
</tr>
<tr>
<td>Dec 2011</td>
<td>0.78</td>
</tr>
<tr>
<td>Jan 2012</td>
<td>0.78</td>
</tr>
<tr>
<td>Feb 2012</td>
<td>3.11</td>
</tr>
<tr>
<td>Mar 2012</td>
<td>1.45</td>
</tr>
<tr>
<td>Apr 2012</td>
<td>1.34</td>
</tr>
<tr>
<td>May 2012</td>
<td>2.56</td>
</tr>
<tr>
<td>Jun 2012</td>
<td>2.56</td>
</tr>
<tr>
<td>Jul 2012</td>
<td>2.11</td>
</tr>
<tr>
<td>Aug 2012</td>
<td>3.78</td>
</tr>
<tr>
<td>Sep 2012</td>
<td>4.00</td>
</tr>
<tr>
<td>Sep 2012</td>
<td>6.01</td>
</tr>
</tbody>
</table>
Most active companies in European MOC

Top 15 Entity - EU - By Market - Sep 2012

Parent Entity

Market
- EU Naphtha Swap
- EU Naphtha Physical
- EU MTBE
- EU MidDist Swap
- EU Gasoline Barge
- EU FO Swap
- EU FO Barge
- EU FO (PVO)
- EU Brent CFD
- EU BFOE

Parent Entity
Questions?