

Meeting the challenge of reliable bunker prices at Rotterdam

Aracon October 2007
Amsterdam

Structure of presentation

- Overview of Argus
- Argus approach to methodology
- Advantages of volume-weighted averages
- Bringing transparency to the markets
- Disconnect between delivered bunkers and Rotterdam barge prices
- The influence of financial derivatives on prompt market assessments

What is Argus?

- Independent energy price discovery service
- Over 35 years experience in market reporting
- Launched first daily crude/europrods in 1979

What is Argus?



- **Offices in London, Singapore, Beijing, Tokyo, Dubai, Moscow, Washington, Houston, Los Angeles**
- **Founded in 1970**
- **Today over 70 publications and over 200 employees**
- **Privately held by the founder and the employees**

Argus approach to methodology

- Argus reports the standard contracts that are traded
- Reference prices are constructed in agreement with the industry and other stake holders in line with how market trades
- Price assessments reflect true market values
- Methodologies are specific to each market because each market trades within its own infrastructure constraints: terminals, storage, shipping, contractual terms
- Argus makes an independent report on reference prices based on repeatable and verifiable market information

Methodology approach to bunkers

- Delivered bunkers trade through the day and not just at 1630 London time
- Underlying Rotterdam fob barge prices must correspond with bunker prices
- Price assessments reflect result of liquid trade and not time-specific
- Market information is verifiable and as complete as possible

Rationale of internet bulletin boards

- Transparency – information available to all subscribers at exactly the same time
- Information accessible to all subscribers, in or out of the office
- Volume-weighted averages offer accurate price discovery in liquid markets
- Average evolves in “real time” allowing precise and timely hedging

Argus Fuel Oil Bulletin Board

Announcement: Please note deals not included in VWA will show up in **GREEN**
Running VWA: 368.25

18-Sep-2007 16:34:01 -- Koch sells to Petroned at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:31:10 -- update 5 - Petroned bids at \$368.00/t fob Rotterdam 25 - 29 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:31:04 -- update 7 - Petroned bids at \$368.00/t fob Rotterdam 28 Sep - 02 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:31:00 -- update 12 - Petroned bids at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:30:56 -- update 11 - Petroned bids at \$369.00/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:30:52 -- update 10 - Petroned bids at \$369.00/t fob Rotterdam 21 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:30:46 -- update 1 - Koch offers at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:29:51 -- Gunvor sells to Totsa at \$369.50/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:29:19 -- Koch offers at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:29:08 -- Gunvor sells to OW at \$369.25/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:51 -- update 4 - Petroned bids at \$368.00/t fob Rotterdam 25 - 29 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:47 -- update 6 - Petroned bids at \$368.00/t fob Rotterdam 28 Sep - 02 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:44 -- update 11 - Petroned bids at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:41 -- update 10 - Petroned bids at \$369.00/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:37 -- update 9 - Petroned bids at \$369.00/t fob Rotterdam 21 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:31 -- update 8 - OW bids at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:28 -- update 7 - OW bids at \$369.00/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:25 -- update 6 - OW bids at \$369.00/t fob Rotterdam 21 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:28:11 -- update 4 - Gunvor offers at \$369.25/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:27:28 -- update 2 - Totsa bids at \$369.25/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:27:17 -- Koch sells to Wiljo at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:27:06 -- update 3 - Petroned bids at \$368.00/t fob Rotterdam 25 - 29 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:27:00 -- update 5 - Petroned bids at \$368.00/t fob Rotterdam 28 Sep - 02 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:26:53 -- update 10 - Petroned bids at \$368.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:26:47 -- update 9 - Petroned bids at \$369.00/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:26:42 -- update 8 - Petroned bids at \$369.00/t fob Rotterdam 21 Sep - 03 Oct 2000t Fuel oil 3.5pc
 18-Sep-2007 16:26:24 -- update 3 - Gunvor offers at \$369.50/t fob Rotterdam 21 - 25 Sep 2000t Fuel oil 3.5pc
 18-Sep-2007 16:26:14 -- update 6 - Lukoil bids at \$369.00/t fob Rotterdam 29 Sep - 03 Oct 2000t Fuel oil 3.5pc [flex]

Advantages of volume-weighted averages

- Almost impossible to manipulate in liquid markets
- Rules extremely clear and easy to follow
- Less open to irrational volatility
- Level of trader investment reflected accurately

Delivered prices and fob prices

- High volatility between am and pm prices
- Difficulty of hedging in MOC market
- Difficulty of mark to market

Influence of derivatives on prompt markets

- Paper markets supposed to be governed by underlying physical price
- Markets actually see paper dictating physical price
- Bunker prices decided by whims of financial markets
- Deepest pockets determine price for small independent suppliers

Feedback

- We are responding to industry need
- We wish to reflect industry needs, not drive them
- We are prepared to be flexible within the responsibilities we have to maintain
- We encourage feedback – positive and otherwise

Conclusion

- Benchmarks too important to be disconnected from prompt physical markets
- Volume-weighted averages reflect trading patterns in physical oil markets
- Other product markets have used indices decided by volume-weighted averages without problems

Thanks for listening

Tel: +44 207 780 4253

email:

Chris.Judge@argusmediagroup.com

yahoo: arguschrisj

