Promoting Cooperation & Transparency of Oil Data Management through JODI

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Head Data Services Department
OPEC

Stability in the oil market
Transparent oil data essential for market stability

Data management in OPEC

Joint Oil Data Initiative (JODI)
OUTLINE

- Transparent oil data essential for market stability
- Data management in OPEC
- Joint Oil Data Initiative (JODI)
Why is good data essential for oil market stability?

- Support sound decision making
- Encourage investments
- Reduce market volatility
- Facilitate improved short-term forecasts
- Ensure oil market stability
OPEC’s production decisions – significant impact on the oil market

Decisions based on

- Economic forecast
- World oil demand
- Non-OPEC supply
- Inventories
- Refinery utilization and margins
- Oil and product prices
Challenges in assessing oil data

- Unreliable - poor quality data
- Unavailability of certain data
- Revision of historical data
- Uncertainty about market outlook

TRANSPARENT OIL DATA ESSENTIAL FOR MARKET STABILITY
Market Fundamentals

TRANSPARENT OIL DATA ESSENTIAL FOR MARKET STABILITY

Expectation of fundamentals is a tool to predict inventory movements
Oil Price & Market Fundamentals

Stock Change

Market Fundamentals
(DATA)

Psychology
(Geopolitical Tension, etc.)

Price Pressure

Manipulation
(Speculators)

Expectation of inventory movements, among other factors, drives the direction of crude oil prices.
TRANSPARENT OIL DATA ESSENTIAL FOR MARKET STABILITY

WTI versus US Crude Stocks

US$/Barrel

Million Barrels

Continued revisions of historical oil demand

world oil demand in 2003: 79.2 mb/d

- OPEC
- Source 1
- Source 2
- Source 3
- Source 4
Transparent oil data essential for market stability

Data management in OPEC

Joint Oil Data Initiative (JODI)
DATA MANAGEMENT IN OPEC
Data Management an Integral Part of Research Activities in OPEC

RESEARCH DIVISION

Energy Studies Dept.

Petroleum Market Analysis Dept.

Data Services Dept. (DSD)
DATA MANAGEMENT IN OPEC

Energy Studies Dept. (ESD)

SG Research Division

Petroleum & Market Dept. (PMAD)

Public Relations & Information Dept. (PRID)

DSD
DATA MANAGEMENT IN OPEC

Data Collection → Data Processing → Data Dissemination

- Direct Communication
- Secondary Sources
- In-house Research
- Publications
- Intranet
- WEB
- JODI
OPEC Database

- Macroeconomic Components
- Reserves, Capacity
- Energy Statistics and Balances
- Oil Supply
- Oil Demand
- Refinery Operations
- Prices
- JODI
DATA MANAGEMENT IN OPEC

OPEC database

OPEC Member Countries
Non-OPEC countries:
e.g. China, Mexico etc.

Direct Sources

Secondary Sources

IEA/OECD
IMF
World Bank
Platt’s
Petroleum Argus

JODI DATABASE
OPEC’s mission is to coordinate & unify the petroleum policies of Member Countries & ensure the stabilization of oil prices in order to secure an efficient, economic & regular supply of petroleum to consumers, a steady income to producers & a fair return on capital to those investing in the petroleum industry.

**OPEC Basket Price**

**05/05/2006:** $65.06 ↓ ($1.04)

The price of OPEC basket of eleven crudes stood at 65.06 dollars a barrel on Friday 5/5/06, compared with 66.10 dollars the previous day (Revised), according to OPEC Secretariat calculations.

**SPECIAL FEATURE**

Initial data for 2006 shows the world economy continues to experience strong growth, despite disappointing GDP growth in the final quarter of last year, according to the OPEC Monthly Oil Market Report. “Consensus forecasts have been revised up and the world economy is

**LATEST PRESS RELEASES**

- Statement by OPEC Conference President
- Resolutions adopted by the 140th Meeting of the OPEC Conference

**LATEST PUBLICATIONS/REPORTS**

- OPEC Long-Term Strategy
- Monthly Oil Market Report (Apr.06)
- Market Indicators
- OPEC Bulletin (Mar-Apr. 06)
- Annual Statistical Bulletin 2004

**RECENT SPEECHES**

- Oil market stability, and its importance to...
DATA MANAGEMENT IN OPEC

OPEC webpage - www.opec.org

Reference Prices

OPEC Basket Price

The new OPEC Reference Basket (ORB) is made up of the following: Saharan Blend (Algeria), Minas (Indonesia), Iran Heavy (Islamic Republic of Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es Sider (Libya), Bonny Light (Nigeria), Qatari Marine (Qatar), Arab Light (Saudi Arabia), Murban (UAE) and BCF 17 (Venezuela).
OPEC Member Countries have embarked upon substantial investments, both upstream and downstream, to ensure that the world economy benefits from regular and secure oil supplies. Crude oil production capacity is projected to increase to around 38 mb/d by 2010.

Similarly, production capacity of NGL and other liquids will be expanded by over 2 mb/d. In addition,
OUTLINE

- Transparent oil data essential for market stability
- Data management in OPEC
- Joint Oil Data Initiative (JODI)
Consumer-producer dialogue dates back to the 1980’s

Common interest of producers and consumers
  - Stable oil market
  - Reliable and transparent oil data

JODI
Objective of JODI

JODI launched in 2001 by six organizations - OPEC, APEC, Eurostat, IEA, OLADE and UNSD

Response to a directive from Ministers at the 7th International Energy Forum (IEF) Nov. 2000, who saw the need for an initiative that would enhance “cooperation among relevant international organizations, as well as participating countries, in improving timely access to energy data”
7th IEF Meeting in Riyadh 2000

- High volatility in oil prices
- Lack of transparent reliable statistics
- Efforts to increase data transparency
- Ministers at IEF support better data

Birth of Joint Oil Data Exercise

- Raise awareness for oil data
- Transparent consumer-producer oil data
THE JOINT OIL DATA INITIATIVE (JODI)

www.jodidata.org
THE JOINT OIL DATA INITIATIVE (JODI)

Background

From JODE to JODI (permanent mechanism)

Focus on data quality

Release of JODI World database

Necessity for transparent, timely and reliable data
THE JOINT OIL DATA INITIATIVE (JODI)

Launch of JODI world database
Participating countries

Global Oil Production

90%

Global Oil Consumption

90%

92 Countries
Achievements of JODI

- Political awareness in data reliability
- Improved attitude toward data confidentiality
- Strengthened producer-consumer dialogue
- Cooperation
Cooperation

- Establishment of a joint review committee
- Broader cooperation on data issues
- Joint workshops
Data management - knowledge in JODI

- Broader data accessibility
- Enhanced awareness of statistical data
- Improved oil data quality
### Broader data accessibility

<table>
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<th>Country</th>
<th>kb</th>
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<tbody>
<tr>
<td>Algeria</td>
<td>2,859</td>
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<tr>
<td>Argentina</td>
<td>4,407</td>
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<tr>
<td>Brunei Darussalam</td>
<td>2,273</td>
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<td>Brazil</td>
<td>25,643</td>
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<td>Bulgaria</td>
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<td>Chile</td>
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<td>Chinese Taipei</td>
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<td>Costa Rica</td>
<td>464</td>
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<tr>
<td>Cyprus</td>
<td>219</td>
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<td>Ecuador</td>
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<td>El Salvador</td>
<td>705</td>
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<td>Jamaica</td>
<td>940</td>
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<tr>
<td>Kazakhstan</td>
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<td>Lithuania</td>
<td>1,986</td>
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<tr>
<td>Nicaragua</td>
<td>639</td>
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<td>Nigeria</td>
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<td>Peru</td>
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<td>Philippines</td>
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<td>Russian Federation</td>
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<tr>
<td>Saudi Arabia</td>
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<td>South Africa</td>
<td>14,134</td>
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<tr>
<td>Venezuela</td>
<td>44,910</td>
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**Reported Non-OECD crude oil stocks in 2004 = 873 mb**
Increased awareness

- Acknowledgement of IEFS role
- Participation of oil industry
- Coverage by media
- Interest in JODI world database
Increased awareness of JODI at high level meetings and in the media

- **Meeting of G8 energy ministers** *(Moscow, March 2006)*
  
  **G8 statement on energy security:**
  
  “Ministers confirm our support for appropriate international initiatives such as the Joint Oil Data Initiative aimed at greater accessibility and transparency of data…”

- **10th International Energy Forum** *(Doha, April 2006)*
  
  “Ministers reaffirmed their commitment to providing timely and accurate data to JODI and envisaged co-operation in expanding, in due course, the initiative to include data of other sources of energy that are important in the world energy mix.”

- **International oil**
Collected information

Monthly crude/product data (M-1) on

- Production
- Import
- Export
- Closing Stocks/Stocks Change
- Refinery Intake
- Refinery Output
- Demand
### JODI Questionnaire

<table>
<thead>
<tr>
<th>Country:</th>
<th>Month:</th>
<th>Unit:</th>
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#### A Simple Format (42 data points)

<table>
<thead>
<tr>
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<th>Crude Oil</th>
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<tr>
<td>Imports</td>
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<tr>
<td>Exports</td>
<td></td>
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<tr>
<td>Stocks</td>
<td>Closing</td>
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<tr>
<td></td>
<td>Change</td>
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<tr>
<td>Refinery Intake</td>
<td></td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Petroleum Products</th>
<th>LPG</th>
<th>Gasoline</th>
<th>Kerosene</th>
<th>Gas/Diesel Oil</th>
<th>Fuel Oil</th>
<th>Total Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td></td>
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<tr>
<td>Exports</td>
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<td>Stocks</td>
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<td>Change</td>
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<td>Refinery Output</td>
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<tr>
<td>Demand</td>
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</tbody>
</table>

#### Simple Definitions

- **Month -1 and Month -2**
- **Choice of units left to organisations**
Contents of JODI world database

- Monthly crude/product data (M-1)
- Production
- Closing Stocks/Stocks Change
- Demand

[www.jodidb.org](http://www.jodidb.org)
The JODI world database

Open to the public since

19 November 2005

www.jodidb.org
THE JOINT OIL DATA INITIATIVE (JODI)
THE JOINT OIL DATA INITIATIVE (JODI)

Built-in graph function
You can move dimensions
You can merge dimensions
You can access Metadata
Demand for Total Products
THE JOINT OIL DATA INITIATIVE (JODI)

Consult Metadata
Not Assessed
Reasonable levels of comparability
Future Outlook of JODI

- Continue to promote JODI
- Continue to improve the quality of JODI
  World database and its expansion
- JODI training and manual
- 6th JODI Conference - Nov06 Riyadh
CONCLUSION

- Transparency of oil data is vital for market stability
- Enhanced management of oil data at OPEC
- JODI is fundamental for cooperation between producers and consumers