

# A Brief Introduction to JODI & the JODI-Oil Data Collection

# Outline

- Background & Main Objectives
- Questionnaires
- Available data & Umbrella Definitions
- The JODI Oil Database
- Abbreviations & Acronyms
- JODI Oil Data Performance Assessment

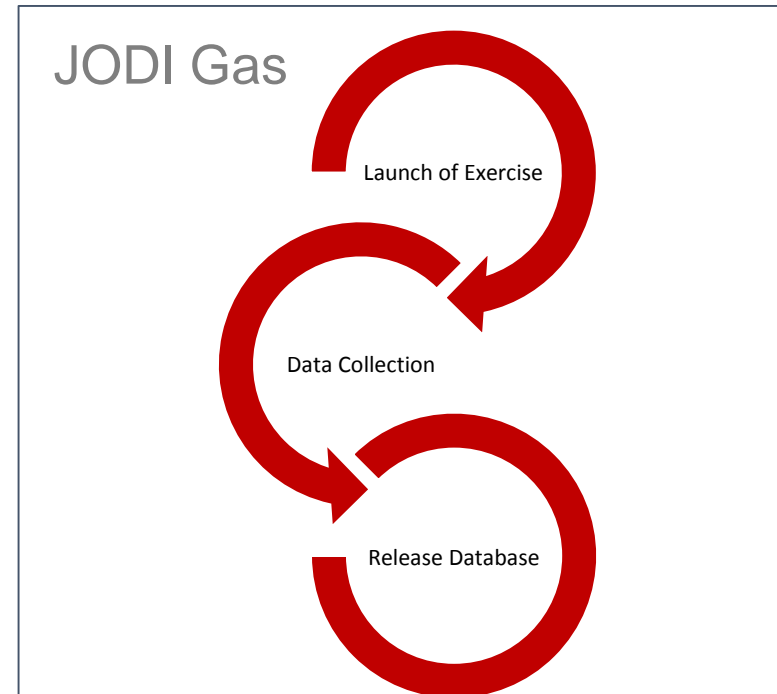
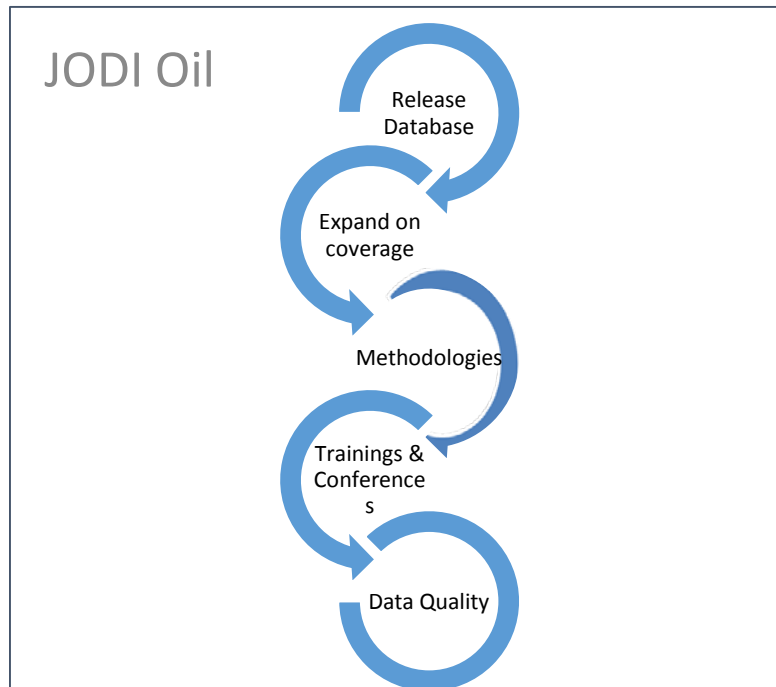
# Background on the Joint Organisations Data Initiative (JODI)

- The Joint Organisations Data Initiative (JODI) is a concrete outcome of the producer-consumer dialogue. In 2001, six pioneering organisations (APEC, Eurostat, IEA, OLADE, OPEC and UNSD) answered the call by Energy Ministers at the 7th IEF Ministerial in 2000 in Riyadh to address the issue of the lack of data transparency in oil markets, seen as a cause of excessive price fluctuations, and established the Joint Oil Data Exercise (JODE).
- The Initiative was established as a permanent mechanism in 2003 and JODI, the "Joint Oil Data Initiative" was born. Following endorsement by Ministers, the IEF Secretariat assumed the role and responsibility as the co-ordinator of Jodi in January 2005.
- The JODI Oil Database was publicly released in 2005 and has been enhanced with additional data in 2009.
- The JODI partners' successful establishment of oil data provision architecture inspired IEF Ministers to call for an extension of the Initiative to cover natural gas (JODI-Gas).
- To accommodate progress on these new challenges beyond oil data transparency, the seven Jodi partner organisations have now re-branded Jodi as the Joint Organisations Data Initiative (JODI).
- The JODI Gas Database was publicly released in 2014.



# JODI Main Objectives

- The JODI provides a reliable, freely accessible and comprehensive database of energy statistics unlike any other in the world. Through the use of official national data, which can be difficult if not impossible to access through alternative avenues, JODI offers a fair assessment of global oil consumption and production on a monthly basis.
- Data uncertainty can be detrimental to fair market operations. By improving data transparency, undue price volatility can be moderated, increasing investor confidence and contributing to greater stability in energy markets worldwide.
- JODI, as databases and broader collaborative, is instrumental to the pursuit of complete energy data transparency.

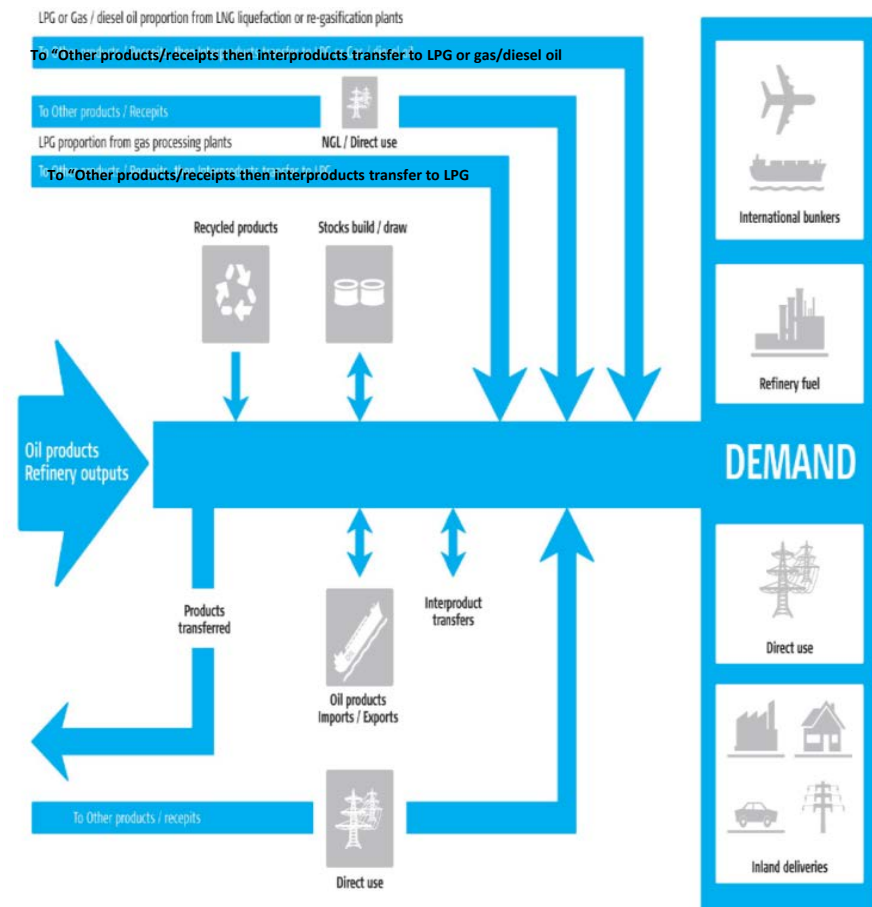
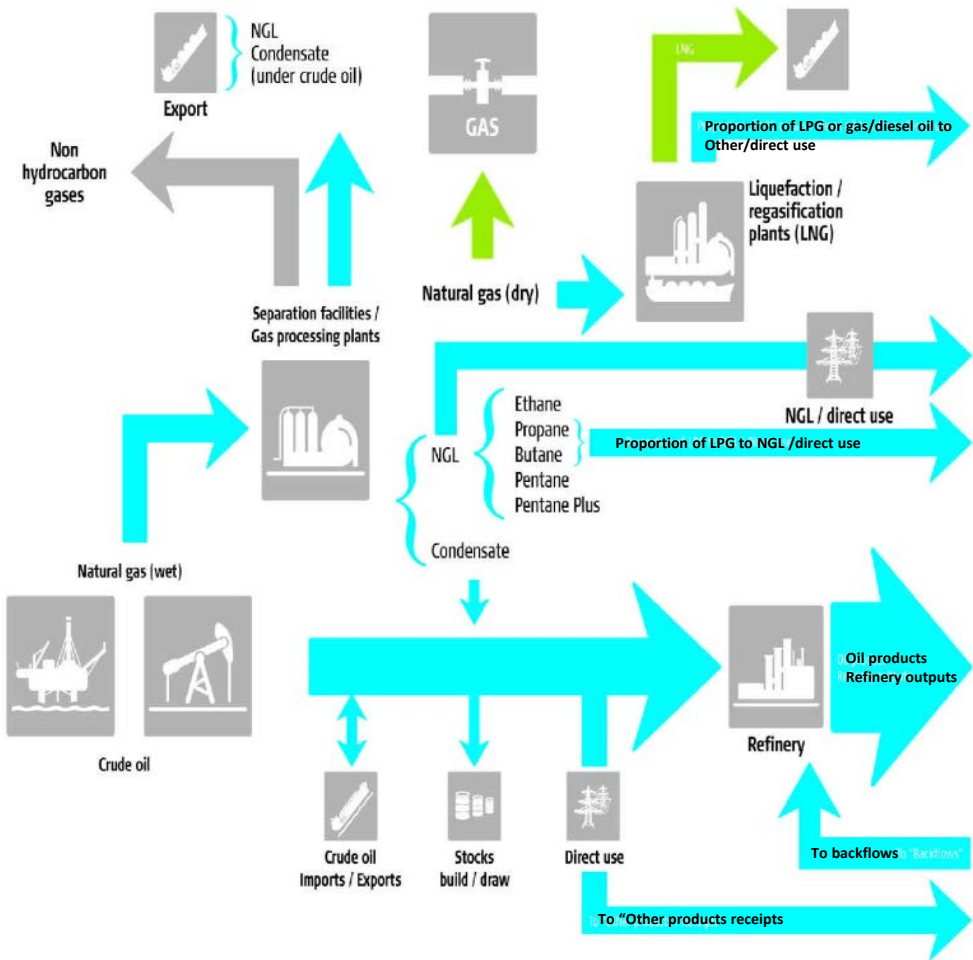


# JODI Oil Questionnaires & Submission

- Deadline for submission is the 25th of each month.
- Countries submit their data to the organisation(s) they belong to in the unit of their choice (barrels, tons or litres). Information about definitions of flows/products is available on the JODI website. The JODI Manuals can be downloaded from the JODI website and provides additional information about the methodology and definitions used in JODI.
- The extended JODI-Oil questionnaire
- After a two year trial period, the seven JODI partner organisations implemented an extended JODI Oil questionnaire following endorsement by the 7th International JODI-Oil Conference in Quito. This extended format gives a more complete picture of the market and allows for a more accurate supply / demand assessment.

		Crude Oil		Petroleum Products					
				LPG	Gasoline	Kerosene	Gas/Diesel Oil	Fuel Oil	Total Oil
Production			Refinery Output						
Imports			Imports						
Exports			Exports						
Stocks	Closing		Stocks	Closing					
	Change			Change					
Refinery Intake			Demand						

# The Extended JODI Oil Questionnaire



# The Extended JODI Oil Questionnaire

	Crude Oil	NGL	Other	Total (1)+(2)+(3)		Petroleum Products								
						LPG	Naphtha	Gasoline	Total Kerosene	<i>Of which: Jet Kerosene</i>	Gas/ Diesel Oil	Fuel Oil	Other Products	Total Products (5)+(6)+(7) +(8)+(10) +(11)+(12)
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
+ Production					+ Refinery Output									
+ From Other sources					+ Receipts									
+ Imports					+ Imports									
- Exports					- Exports									
Products Transferred + /Backflows					- Products Transferred									
- Direct Use					+ Interproduct Transfers									
- Stock Change					- Stock Change									
- Statistical Difference					- Statistical Difference									
= Refinery Intake					= Demand									
Closing stocks					Closing stocks									

 additional cells

# Available Data in the JODI Oil Database & Umbrella Definitions

## Flows

- **Production**  
Marketed production, after removal of impurities but including quantities consumed by the producer in the production process.
- **From Other Sources**  
Inputs of additives, biofuels and other hydrocarbons that are produced from non-oil sources such as: coal, natural gas or renewables.
- **Imports/Exports**  
Goods having physically crossed the international boundaries, excluding transit trade, international marine and aviation bunkers.
- **Products Transferred/Backflows**  
Sum of Products transferred and Backflows from the petrochemical industry.
- **Stock Changes**  
Closing minus opening level. Positive number corresponds to stock build, negative number corresponds to stock draw.
- **Statistical Difference**  
Differences between observed supply flows and Refinery intake or Demand.
- **Refinery Intake**  
Observed refinery throughputs.



# Available Data in the JODI Oil Database & Umbrella Definitions

## Flows (2)

- **Refinery Output**  
Gross output (including refinery fuel).
- **Receipts**  
Primary product receipts (quantities of oil used directly without processing in a refinery) + recycled products. Receipts for Other oil products include direct use of crude oil and NGL.
- **Products transferred**  
Imported petroleum products which are reclassified as feedstocks for further processing in the refinery, without delivery to final consumers.
- **Interproduct transfers**  
Reclassification of products, because their specification has changed, or because they are blended into another product: a negative indicates a product that will be reclassified, a positive shows a reclassified product. Interproduct transfers for Other oil products includes interproduct transfers of Crude oil and NGL.
- **Demand**  
Deliveries or sales to the inland market (domestic consumption) plus Refinery Fuel plus International Marine and Aviation Bunkers. Demand for Other oil products includes direct use of Crude oil, NGL, and Other.

# Available Data in the JODI Oil Database & Umbrella Definitions

## Products

- **Crude Oil**  
Including lease condensate - excluding NGL.
- **NGL**  
Liquid or liquefied hydrocarbons recovered from gas separation plants and gas processing facilities.
- **Other**  
Refinery feedstocks + additives/oxygenates + other hydrocarbons.
- **Total**  
Sum of categories (1) to (3) Total = Crude oil + NGL + Other.
- **LPG**  
Comprises propane and butane.
- **Naphtha**  
Comprises naphtha used as feedstocks for producing high octane gasoline and also as feedstock for the chemical/petrochemical industries.
- **Motor and aviation gasoline**  
Comprises motor gasoline and aviation gasoline.

# Available Data in the JODI Oil Database & Umbrella Definitions

## Products (2)

- **Kerosenes:**  
Comprises kerosene type jet fuel and other kerosene.
- **of which: Kerosene type jet fuel:**  
Aviation fuel used for aviation turbine power units. This amount is a subset of the amount reported under Kerosenes.
- **Gas/diesel oil:**  
For automotive and other purposes.
- **Fuel oil:**  
Heavy residual oil / boiler oil, including bunker oil.
- **Other oil products:**  
Refinery gas, ethane, petroleum coke, lubricants, white spirit & SPB, bitumen, paraffin waxes and other oil products.
- **Total oil products:**  
Sum of categories (5) to (12) excluding (9). Demand for Total products includes direct use of Crude oil, NGL and Other

# The JODI Oil Database

[www.jodidata.org](http://www.jodidata.org)

First Time Users of Jodi Database - Windows Internet Explorer  
http://www.jodidata.org/database/first-time-users.aspx

File Edit View Favorites Tools Help

First Time Users of Jodi Database

- When browsing data on-line, users can choose from a tabular report or a variety of chart types; produce customized report by selecting items, sorting, nesting and dragging-and-dropping; display descriptive metadata; and save data to .xls, .csv, and several other formats;
- Please look at the on-line 'Help' for further information.
- **To access download files**, click on '*Download Latest data file*' from the home page. Files are available in three (3) different formats: .txt, .csv and .ivt (Beyond 20/20);
- The .ivt format requires the installation on your computer of the Beyond 20/20 Browser available for free on this page (see below);
- Beyond 20/20 Browsers have become the world's standard for viewing multi-dimensional data:
  - Easy of use, speed and performance;
  - High-impact visualization and charting;
  - Allow users to export data to the format of their choice
- Please look at the 'QuickStart' document below for further information.

**To read .ivt (Beyond 20/20) format file**  
Download, for free, the Beyond 20/20 Browser below and follow the steps laid out in the 'Installation Quick Guide'.

- [Beyond 20/20 Browser](#) (this Beyond 20/20 Browser is to view JODI data only)
- [Quick Installation Guide \(PDF\)](#)

A 'QuickStart' guide to Beyond 20/20 is also available.

- [Quick Start \(PDF\)](#)
- [Initiation Rapide \(PDF\)](#)
- [Guia Abreviada \(PDF\)](#)

**In-house JODI Training Workshop**  
10 - 11 Dec 2009, Sandton, South Africa

**Update on JODI to APEC-ASEAN Joint Workshop on Energy Statistics**  
30 Nov - 04 Dec 2009, Kuala Lumpur, Malaysia

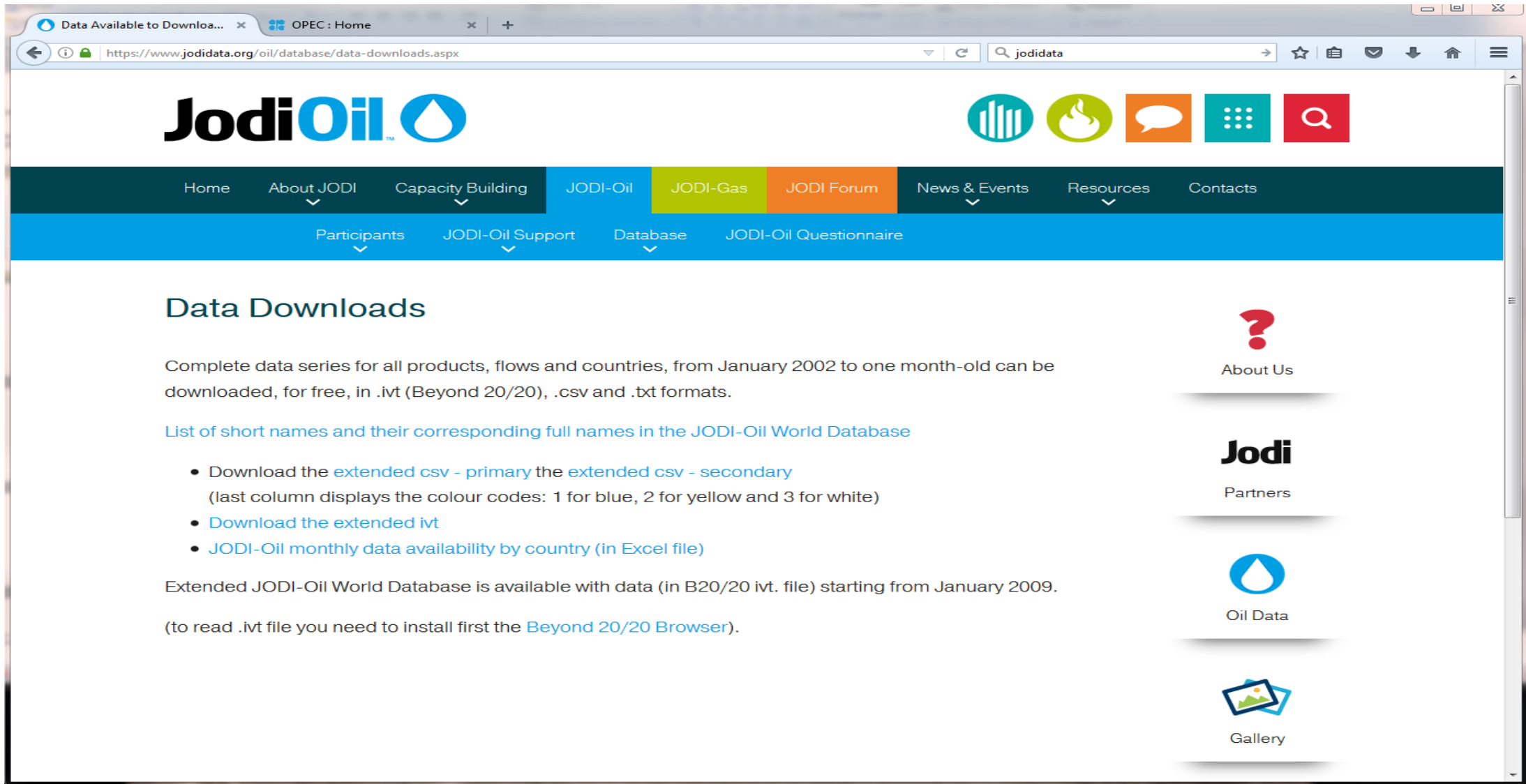
**7th International JODI Conference**  
04 - 05 Jun 2009, Quito, Ecuador

Download the **Latest Jodi Newsletter...**

**JodiOil**

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# The JODI Oil Database



The screenshot shows a web browser window with the URL <https://www.jodidata.org/oil/database/data-downloads.aspx>. The page features the JodiOil logo and a navigation menu with options like Home, About JODI, Capacity Building, JODI-Oil, JODI-Gas, JODI Forum, News & Events, Resources, and Contacts. The 'Data Downloads' section is highlighted, providing information on data availability and download options.

## Data Downloads

Complete data series for all products, flows and countries, from January 2002 to one month-old can be downloaded, for free, in .ivt (Beyond 20/20), .csv and .txt formats.

[List of short names and their corresponding full names in the JODI-Oil World Database](#)

- Download the [extended csv - primary](#) the [extended csv - secondary](#) (last column displays the colour codes: 1 for blue, 2 for yellow and 3 for white)
- [Download the extended ivt](#)
- [JODI-Oil monthly data availability by country \(in Excel file\)](#)

Extended JODI-Oil World Database is available with data (in B20/20 ivt. file) starting from January 2009.

(to read .ivt file you need to install first the [Beyond 20/20 Browser](#)).

Navigation links on the right side of the page include: About Us, Jodi Partners, Oil Data, and Gallery.

# The JODI Oil Database

Beyond 20/20 Professional Browser - [Joint Oil Data Initiative (all data)]

Unit: Thousand Barrels per day (kb/d) BALANCE: Production/Refinery output

Country	TIME	Dec2008	Jan2009	Feb2009	Mar2009	Apr2009	May2009	Jun2009	Jul2009	Aug2009	Sep2009	Oct2009	Nov2009	Dec2009	Jan2010
Algeria	(1)	1,273	1,293	1,222	1,192	1,197	1,219	1,212	1,207	1,235	1,200	1,227	1,222	1,203	1,237
Angola	(3)	1,934	1,767	1,662	1,646	1,660	1,681	1,717	1,786	1,792	1,788	1,824	1,758	1,760	1,749
Argentina	(1)	628	618	634	631	628	623	608	589	535	610	619	598	0	0
Australia	(1)	499	472	477	466	444	392	444	468	443	468	445	445	438	0
Austria	(1)	17	17	18	18	18	19	19	17	18	18	17	16	16	17
Azerbaijan	(3)	845	863	933	1,002	1,059	1,076	1,081	1,050	1,024	1,060	1,056	1,010	956	961
Bahrain	(3)	32	33	229	35	33	33	32	32	32	33	31	31	31	30
Barbados	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Belgium	(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bolivia	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	(2)	1,746	1,897	1,915	1,951	1,949	1,963	1,925	1,926	1,967	1,996	1,997	1,994	0	0
Brunei Darussalam	(3)	161	161	158	153	137	135	143	159	144	142	163	176	181	0
Bulgaria	(1)	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Canada	(1)	2,205	2,184	2,255	2,171	2,150	2,018	2,072	2,129	1,906	1,765	1,860	1,903	1,896	1,960
Chile	(1)	3	2	3	3	3	3	3	3	3	0	0	0	0	0
China	(1)	3,709	3,766	3,743	3,736	3,805	3,786	3,834	3,812	3,854	3,837	3,838	3,823	3,793	3,983
Chinese Taipei	(2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colombia	(1)	594	617	646	645	649	653	661	657	668	680	706	725	734	0
Costa Rica	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Croatia	(3)	17	16	16	16	16	16	16	16	16	14	15	15	15	15
Cuba	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyprus	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Czech Republic	(1)	5	4	4	4	4	5	5	5	4	4	4	4	4	4
Denmark	(1)	276	287	282	272	274	258	263	265	253	278	251	228	226	259
Dominican Republic	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	(3)	485	481	477	478	474	470	465	464	457	454	455	457	451	450
Egypt (Arab Rep.)	(3)	667	667	683	679	686	672	657	656	670	672	663	652	648	657
El Salvador	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estonia	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finland	(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	(1)	19	17	20	18	18	18	19	18	18	18	18	18	18	17
Gabon	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Germany	(1)	62	58	58	61	56	49	55	55	53	53	50	56	51	52
Greece	(1)	1	1	1	1	0	0	0	0	2	2	2	2	2	2
Grenada	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guatemala	(1)	14	14	14	14	14	13	14	14	14	0	0	0	0	0
Guyana	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haiti	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hong Kong China	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hungary	(1)	15	16	16	16	17	16	15	16	15	16	16	16	16	15
Iceland	(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	(3)	690	638	680	686	677	668	682	670	666	687	685	693	697	700
Indonesia	(1)	839	929	1,071	928	969	908	979	916	937	946	948	948	958	944
Iran (Islamic Rep.)	(1)	3,865	3,586	3,581	3,479	3,571	3,580	3,550	3,530	3,520	3,535	3,543	3,550	3,560	0

For Help, press F1

109/109 Algeria ENG

Download & install the B2020 browser from the JODI website

# Abbreviations & Acronyms in JODI

- APEC.....Asia Pacific Economic Cooperation
- API gravity.....American Petroleum Institute gravity
- ARA.....Amsterdam - Rotterdam - Antwerp
- b/d.....barrels perday
- bbl.....barrel
- bcm.....billion cubic meters
- BFOE.....Barrel of Fuel Oil Equivalent
- BTU/lb.....British Thermal Unit per pound
- CFBP.....Comité Français du Butane et du Propane
- cSt.....centistoke
- EBV.....German Oil Storage Association
- Eurostat.....Statistical Office of the European Communities
- Gcal.....Giga calories
- GWh.....Giga Watt hour
- IATA.....International Air Transport Association
- IEA.....International Energy Agency

# Abbreviations & Acronyms in JODI

- IEF.....International Energy Forum
- J.....Joule
- JODI.....Joint Organisations Data Initiative
- kg/l.....kilogrammes per litre
- kg/m<sup>3</sup>.....kilogrammes per cubic meter
- LNG.....Liquefied Natural Gas
- LPG.....Liquefied Petroleum Gas
- M-1.....Read as M minus one: the month previous to the current month
- M-2.....Read as M minus two: two months previous to the current month
- MOS.....Monthly Oil Statistics
- Mtoe.....Million tonnes of oil equivalent
- NATO.....North Atlantic Treaty Organisation
- NGL.....Natural Gas Liquids
- NPD.....Norwegian Petroleum Directorate
- OLADE.....Latin-American Energy Organisation
- OPEC.....Organisation of Petroleum Exporting Countries
- RON.....Research Octane Number



# Abbreviations & Acronyms in JODI

- SBP.....Industrial Spirit
- SEATO.....South East Asia Treaty Organisation
- SI Units.....Système International d'Unités
- SPR.....Strategic Petroleum Reserve
- TJ.....Tera Joule
- toe.....tonnes of oil equivalent
- UFIP.....Union Française des Industries Pétrolières
- ULCC.....Ultra Large Crude Carrier
- UNSD.....United Nations Statistics Division

# JODI-Oil Data Performance Assessments; Level of Confidence

## The assessment was carried out on different levels:

- Comparability of the JODI data with other sources: monthly data from national and secondary sources has been assessed.
- JODI data have also been compared with annual data (when available) in order to check whether the levels and trend over the years could be confirmed.
- When no other sources were available for comparison with the JODI data, internal consistency and balance check have been carried out.
- ✓ Examples of internal consistency checks: the sum of all the reported products with reported figure for Total Products is compared. When both, closing and stock changes data have been submitted, the consistency of the reported changes with the calculated ones is compared.
- ✓ Example of balance check: the JODI Questionnaire does not collect full balance information, however some basic checks for reasonableness can be carried out e.g.  $\text{supply} + \text{import} - \text{export} + \text{stock change}$  should have a relation with demand.

## Colour Coding

**Blue:** A blue background indicates that results of the assessment show reasonable levels of comparability

**Yellow:** A yellow background indicates that the metadata should be consulted

**White:** A white background indicates that data has not been assessed

# JODI-Oil Data Performance Assessments

## Sustainability

Sustainability measures the number of [JODI-Oil questionnaires](#) received from each participating country or economy over the assessment period (six months) and within the agreed submission deadlines.

A Good rating (smiley face), is earned when a country or economy submits JODI questionnaire responses for all six months in the period.

"good" if the 6 questionnaires have been submitted 😊

"fair" if 4 or 5 questionnaires have been submitted 😐

"less reliable" when less than 4 questionnaires have been submitted ☹️

# JODI-Oil Data Performance Assessments

## Timeliness

Timeliness evaluates whether or not data has been received within two months of the end of each reference month in accordance with the data submission deadlines established by the JODI Partner Organisations. A smiley face is awarded if all six submissions within a given assessment period were received by the agreed deadlines.

"good" when all 6 submissions during the assessment period have been received within two months of the end of the reference month relevant to each submission 😊

"fair" when 4 or 5 submissions have been received on time 😐

"less reliable" when less than 4 submissions have been received on time ☹️

# JODI-Oil Data Performance Assessments

## Completeness

Completeness tracks the number of data points submitted out of the maximum in the [JODI Questionnaire](#). To earn a smiley face, each country or economy must submit more than 90% of its data related to production, demand and stock changes.

"good" when more than 90% of the data are given for production, stock change/closing and demand 😊

"fair" when between 60% and 90% of the data are given 😐

"less reliable" when less than 60% of the data are given 😞

Thank You