

JODI's Journey: Past, Present, and Future

Session one revisits the history of JODI and identifies key actions for the future of the global energy data transparency initiative.

Key discussion points

- The 1990s: Oil volatility and the need for energy data transparency
- The evolution from JODE to JODI
- JODI's evolution since 2001: How far has the Initiative come? What are its strengths and weaknesses?
- Guidance from Ministers, leaders and other stakeholders: what requests are still outstanding?
- The JODI-Oil Extended Format: An effective tool? JODI-Gas: A successful first year?
- What is next..?

Key JODI actions

Ministers at the 7th International Energy Forum in Riyadh urged a global response to the challenge of greater transparency and producers and consumers alike responded by stepping up efforts to improve the availability and reliability of oil data.

Six international organisations - APEC, Eurostat, IEA, OLADE, OPEC and the UNSD - took up the challenge, combined their efforts, involved their Member Countries and in April 2001 launched the Joint Oil Data Exercise. The primary goal was not to build a database, but to raise awareness among oil market players about the need for more transparency in oil market data.

The assessment included the collection of monthly oil statistics from each organisation's member countries through a harmonised questionnaire on 42 key oil data points. Progress was immediate: within six months, 55 countries were participating in the exercise. Six months later, there were over 70 participating countries, representing 90% of global oil supply and demand.

At the 8th International Energy Forum in Osaka in 2002, Ministers reaffirmed their political support, and with that mandate the six organisations obtained agreement from their Member Countries to make the Exercise a permanent reporting mechanism. The Joint Oil Data Initiative was born.

As the scale of the Initiative and global interest in it continued to grow, it was clear that the information had to be made available in a compatible form: The JODI-Oil World Database was created. Participants in the 5th JODI Conference in October 2004 then strongly recommended that this joint global database should be made freely accessible to all - organisations, countries, industry, analysts and journalists.

The IEF Secretariat, which took over the co-ordination of JODI in January 2005, and its partner organisations are fully aware of the limitations of the database, but already for many countries – especially for the top 30 producers and consumers – timeliness, coverage and reliability are





assessed to be at reasonable levels.

As a result of the 6th International JODI conference (Riyadh, 2006) JODI partner organisations conducted an extended format data collection trial over two years and concluded that the extension was feasible. Following its endorsement at the 7th International JODI Conference (Quito, 2009) the seven JODI organisations implemented the extended JODI-Oil questionnaire as a permanent activity. This extended format gave a more detailed and accurate view of the supply - demand picture.

The extended JODI-Oil Database was made available to the public during the 13th International Energy Forum Ministerial in Kuwait City.

JODI-Gas

In 2008, at the 11th International Energy Forum (IEF) Ministerial and at the Jeddah and London Energy Meetings, Ministers called for greater energy data transparency, including the extension of the JODI platform to cover natural gas. The following year, the JODI Partners launched the JODI-Gas exercise, collecting production, demand, trade and storage data.

The exercise took 4 years to become a permanent initiative and another 2 years to reach 77 participating countries representing nearly 90% of the global natural gas supply and demand.

In May 2014, six years after Ministers made the call, the JODI-Gas World Database was opened to the public during the 14th International Energy Forum Ministerial in Moscow.





Recent Developments in the Energy Market and the Need for Transparency

Session two looks into the current energy market situation and investigates JODI's contribution to improved energy data transparency and the price discovery mechanism of energy commodities.

Key discussion points

- Recent trends in the oil and gas markets
- Impact of globalisation, shifting trade patterns, low prices, and high volatility
- The need for more energy data transparency
- Impact of improved data on markets, decision making, and investment

Key JODI actions

One of the key reasons for scrutinizing short-term data is to develop a better understanding of the root causes of price volatility. To help oil and gas markets actors reducing the amount of guesswork involved in supply/demand balances, JODI Oil and Gas World Databases provide the fastest available nationally sanctioned data from some 100 participating countries on a monthly basis.

Since the first launch of JODI-Oil World Database in 2005, users' confidence levels in the database have dramatically improved. Some 900 data users have now registered through the www.jodidata.org website and the launch of a new more user-friendly website at the IEF14 Ministerial led to a sharp increase in downloads.

	JODI Database Downloads	Y-o-Y Change
2011	3,272	
2012	4,992	+52%
2013	4,736	-5%
2014	21,370	+351%

Traffic to the new www.jodidata.org website and visitor interaction increased significantly in 2014. Data downloads registered a 351% increase in 2014. Referrals from entities such as JODI partners, EIA and Bloomberg increased 22% while pages viewed increased by 14% in 2014.

The JODI World Database is becoming an important data source for energy related news. Following the March 2015 data update alone, 6 different articles from major energy related news and wire agencies quoted JODI data. Given the network reach of such news and wire articles through cyber space, JODI data is now reaching greater and more diverse audiences.





Data Users: What do they think about JODI? Results from the 5th JODI User Survey

Session three reviews the results from the 5th JODI World Database User Survey and identifies both the challenges faced by JODI data users and their expectations for the future.

Key discussion points

- How do analysts and other stakeholders use JODI data, and what suggestions do they have for improvement?
- Does JODI have enough reach?
- What are the key features of the JODI Online User Forum? Who is using it and how?
- How do we encourage greater participation in the Forum?
- What more can be done to facilitate on-going communication and interaction between JODI data providers and the analyst community?
- What can be done to make the JODI database more user-friendly and accessible?
- How do the different industry sectors benefit from JODI?
- What more would they like to see from the Initiative?
- What more could industry do to help improve JODI?
 What would motivate industry to become more involved in the Initiative?

Key JODI actions

The fifth round of the JODI User Survey was conducted prior to the 12th International JODI Conference to determine how JODI and the JODI World Database are perceived by users and/or potential users? The survey which received 226 responses from 56 countries/economies (increased from 44 countries in the 4th Survey) was conducted with the following methodology and structure:

Survey methodology

- Survey questionnaire covers 40 questions
- JODI data users were directed to a dedicated online survey when they accessed the JODI Oil World Database (both downloadable and online versions)
- Survey was conducted between 10 February and 1 April

Survey structure

- User profile
- Recognition of JODI World Database
- Data use
- System aspect
- Feedback communication

In the previous Data User Survey, there were numerous suggestions to increase interaction among JODI data users, JODI Partner organisations and national administrations responsible for JODI data reporting. The 8th International JODI-Oil Conference in Beijing identified that





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feedback from JODI data users is crucial for JODI improvement. Data users, (market analysts in particular), can already post their comments on JODI data. Such feedback provides valuable direction on the need and means to improve JODI data quality, collection and submission. To enhance this feedback loop and to extend it to a broader audience the JODI organisations were asked to develop an online users' forum (already in public Beta test) to facilitate interaction among users and between users and JODI organisations

In response to such suggestions, the new JODIdata.org website that was launched prior to the 14th International Energy Forum Ministerial included a new JODI user-forum. The forum features a JODI data charting function that allows data users and suppliers to discuss various JODI-related topics including frequently asked questions, JODI World Database user support issues and JODI data quality.

The 8th JODI-Oil Conference also highlighted the importance of stock-level as a key market indicator and called on participating countries to contribute further to market transparency through submission of a complete set of data as well as all relevant qualitative information (country notes).

In order to improve the transparency of JODI World Databases, IEF and JODI Partner organisations have continuously reviewed the quality of the database's country notes. The JODI Partners have now completed a concerted effort to harmonise the format of country notes featured in JODI, which among other things will help highlight possible definitional differences in JODI data.





Data Collection: Challenges and Success Stories: Industry & Countries

Session four is dedicated to the oil and gas industries as well as national administration responsible for gathering and disseminating data relevant to JODI Questionnaires to discuss their daily challenges and solutions.

Key discussion points

- What are the key challenges faced in collecting complete, accurate and timely data on a monthly basis? How are these issues being addressed?
- What are the key lessons to be learned from successful monthly oil and gas data collection systems already in place?
- What mechanisms exist to facilitate experience-sharing between government and industry involved in data transparency initiatives? How might that communication be enhanced?
- Analysts continue to ask for better, more complete, and timelier data for JODI-Oil and JODI-Gas. What can be done to meet these requests? What are the bottlenecks? How can they be overcome, and over what timeframe?
- Encouraging wider participation in the JODI process: Where should our efforts be focused strengthening the existing core, adding more fuel-types, or increasing geographical coverage?

Key JODI actions

JODI-Oil Participation Assessment (Smiley Face Assessment) measures the commitment of countries participating in JODI. The JODI-Oil Participation Assessment^[I] covering the second semester of 2014 shows a slight improvement versus the prior period for "Sustainability" measures, while the number of economies earning a "Good" rating for "Timeliness" and "Completeness" has declined in the most recent assessment period. The JODI Partners have been redoubling efforts to engage with key stakeholders through outreach and training workshops, which helps to explain the uptick in the latest assessment period. Yet as has been the case with JODI-Oil since inception, there is no room for complacency.

Number of Countries/Economies Earning "Good" or ⁽ⁱ⁾ Ratings

	Jan-Jun 2013	Jul-Dec 2013	Jan-Jun 2014	Jul-Dec 2014
Sustainability	75	80	82	84
Timeliness	59	62	65	60
Completeness	62	66	65	63

As JODI-Oil is by nature a work in progress, there is always room for improvement. One ongoing challenge is the issue of incomplete or missing data for certain countries and economies, which limits JODI-Oil's ability to provide a fully representative summary of the market. Another challenge is improving the timeliness of JODI-Oil submissions. Some national administrations do not submit JODI-Oil questionnaires until they have data for all relevant fields, which negatively impacts their timeliness assessment. The JODI Partners are striving to encourage





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these economies to submit partial data when it becomes available, and then to subsequently submit complete questionnaires. Calls for more complete questionnaires and the submission of partial questionnaires as soon as data become available may appear contradictory, but given the way in which Timeliness is evaluated they are in fact complementary.

Adequate support for data transparency also represents a challenge, as the success of JODI requires sustained commitment at all levels: from Leaders and Ministers to statisticians who work directly with energy data. It is imperative that top-level political commitment reaches the front-line actors working to collect and analyse JODI data, as in some cases scarcity of resources place limitations on staff working with JODI and more broadly on data transparency.

A Glossary of the JODI-Oil Participation Assessment Definitions: Sustainability, Timeliness, and Completeness

Sustainability measures the number of JODI-Oil questionnaires received within a given time period (six months). Sustainability assessments for each participating country or economy are based on the number of JODI-Oil questionnaires received by the assessment period submission deadline for the reference period. A Good rating, or smiley face, is earned when a country or economy submits JODI data for all six months.

Timeliness evaluates whether or not data were submitted at or before the expected deadline. A smiley face is awarded when all six submissions were received within two months of the end of the reference month.

Completeness tracks the number of data points submitted out of the maximum of 42 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.

^[1] The most recent assessment, which covers the period from July through December 2014, is featured on the back of this document. It is also available at www.jodidata.org.





Reports by International Organisations (JODI Partners): Challenges and Opportunities

Session five focuses on the JODI Partner organisations who are in direct communication with their JODI data reporting counterparts at the national administration to examine the challenges they face and opportunities for improvements of the JODI mechanism.

Key discussion points

- What are the challenges faced by organisations in collecting monthly oil and gas data, and how are they dealing with them?
- What challenges exist concerning data processing?
- What are the recommended courses of action for improving data quality, sustainability, completeness, and timeliness? What stands in the way of progress?
- What are the primary challenges faced by JODI participants in submitting M-1 data?
- What are the obstacles to earlier release of the JODI Database?
- How might the JODI Partners be able to help?

Key JODI actions

Ahead of the 14th International Energy Forum Ministerial meeting (IEF14), a meeting of Heads of the JODI Partner Organisations on 14 May 2014 identified key guiding principles of the JODI Partners.

Reviewing progress made on developing and strengthening the Initiative since IEF13 in Kuwait, the JODI Partners recognised that the task of collecting monthly data from 90+ countries remains a time-consuming and complex endeavour. Nevertheless, they agreed that it was important to capitalise on the momentum created by JODI-Oil to help drive JODI-Gas efforts forward, so as to further enhance global energy market stability in recognition of calls from Energy Ministers around the globe.

In discussing the high levels of interest in and support for JODI expressed by various stakeholders, the possible expansion of the JODI database to cover other energy sources was raised. In this context, some of the Partners emphasised the importance of consolidating progress with JODI-Oil and JODI-Gas, while others encouraged an exploratory assessment of the potential for expansion. Partners agreed on the need to align Ministers' expectations with the realities of resource constraints facing all organisations.

The Heads of the JODI Partner organisations present expressed appreciation for the progress made by their teams and other JODI stakeholders over the last two years in making JODI-Gas a reality. They also noted that the public launch of the JODI-Gas World Database provided Ministers with a clear example of the potential for successful cooperation among International Organisations in enhancing energy data transparency.



10 Years since Dissemination of JODI Energy Data started: Is JODI Visible Enough?

Session six explores how the JODI World Database is viewed and investigates whether or not the global energy data transparency message is reaching the appropriate audience(s).

Key discussion points

- Can Leaders do more to give visibility and support to JODI?
- What can the JODI partners do more to enhance visibility?
- What is the role of JODI users in spreading the message of JODI?
- Can the media play a role in dissemination?
- Is JODI ready to take advantage of industry platforms?

Key JODI actions

During the 4th meeting of the Heads of the JODI Partner Organisations, the ways and means to improve the Initiative's visibility were extensively discussed.

Recognising ease of access to data and communication with stakeholders as being of key importance in satisfying the rising expectations for JODI, Partners deliberated the need for greater visibility and enhanced access to JODI data. On this theme, the IEF's proposal that repeated requests from specialist data providers to port JODI data through their platforms should be viewed positively was not endorsed by all of the partner organisations. Nevertheless, on the basis that JODI is a transparency initiative it was agreed that the matter was deserving of further review.

IEF modernised the JODI website incorporating the new JODI-Gas World Database. On a related note, the JODI Partners also agreed to consider ways of increasing the visibility and uptake of JODI including the simple placement of back-links to www.jodidata.org from the homepages of their own websites.

The JODI Partners have taken a number of actions to draw greater attention to JODI data, seeking to boost visibility while helping users access more quickly and efficiently the information they seek. As one example, JODI-Oil user e-mail alerts now highlight the latest data revisions, feature newly-submitting countries and economies, and more prominently publish updates to country notes. The IEF also added a new feature to the JODI website that clarifies which countries and economies have submitted data for a given month, making it easier for JODI users to track updates.





Capacity Building: The Corner-Stone of JODI

Session seven is designed to capture new challenges faced by national administrations responsible for JODI data collection, and opportunities for JODI capacity building efforts to improve to address these challenges.

Key discussion points

- Is there a gap between expectations from Ministers and Leaders and the ability of participants in the Initiative to deliver results?
- What can be done to bridge the gap? Can the industry play a role, or is this purely a government issue?
- Highlights from JODI capacity building and training workshops organised and run by the JODI Partners
- Are these training workshops yielding tangible improvements in data submissions?
- Virtual training and online tools are used extensively in corporate environments. To what extent could such systems be utilised to improve the capacity of JODI statisticians worldwide?

Key JODI actions

The most recent G20 Energy Sustainability Working Group meeting in Antalya discussed a way forward for "improving and strengthening of JODI, expanding it with new countries and carrying on training/capacity building programmes".

The format and content of JODI Regional Training Workshops has evolved since the first event was organised in 2006, as early groundwork has enabled increasingly richer exchanges between statisticians and the JODI Partners. Initial JODI regional workshops were generally structured along the lines of classroom training sessions, focused on promoting JODI awareness and ensuring fundamental capacity building. More recent workshops have progressively involved more sophisticated discussions about fine-tuning data collection techniques and clarifying any data discrepancies. These deeper dialogues strengthen communication and improve the exchange of knowledge at key points along the JODI data supply chain, ultimately resulting in a more robust JODI database.

The Eighth JODI Regional Training Workshop (Kuala Lumpur, October 2013), was the first ever to contain a module on JODI-Gas. Since then, IEF and JODI Partners have held the Ninth workshop in Baku which focussed on Central Asian countries, the Tenth workshop in Doha focussed on Sub-Sahara African countries, and the Eleventh workshop in Vienna with a focus on West European countries. Throughout these workshops, the programme has progressively evolved with new experience including presentation by JODI data users to help statisticians understanding how JODI users leverage the database, intensive hands-on exercises to complete the JODI questionnaires and key oil and gas facility visits to gain a better appreciation of where the JODI data comes from.

These capacity building efforts have delivered concrete outcomes. In 2014 alone, JODI added 7 new participating countries: Armenia, Belarus, Gambia, Grenada, the Former Yugoslav Rep. of Macedonia, Niger, and Tajikistan.





What can JODI-Gas learn from JODI-Oil?

Session eight compares experiences gained from the JODI-Oil journey to that of JODI-Gas to identify shortcuts for further enhancement of JODI-Gas.

Key discussion points

- Where does JODI-Gas stand one year after its launch?
- What lessons regarding its expected evolution can JODI-Gas learn from the more mature JODI-Oil?
- What are users of JODI-Gas telling us?

Key actions taken

On 16 May 2014, the JODI Partners publically launched the JODI-Gas World Database during a special plenary session of the 14th IEF Ministerial meeting in Moscow. At the time of its public launch the JODI-Gas World Database covered 77 participating countries representing nearly 90% of the global natural gas supply and demand. The road towards the Moscow launch of JODI-Gas began with calls in 2008 from IEF Ministers for the extension of the JODI-Oil platform to cover natural gas. The launch of JODI-Gas, which involves the monthly coordination of hundreds of stakeholders along the global energy data supply chain, represents yet another concrete outcome of the producer-consumer dialogue.

In Moscow, the Heads of JODI Partner Organisations met prior to the launch to take stock of their shared progress, to discuss numerous aspects of JODI-Oil and JODI-Gas that require ongoing attention, and to prepare for the launch of the JODI-Gas World Database. For the occasion, the IEF led the development of a new JODI website that features information on oil, gas and overall energy data transparency. The new website allows visitors to easily access both the JODI-Oil and JODI-Gas databases, JODI manuals and other resources, further reinforcing the transparency that underpins all aspects of the Initiative.

The success of JODI-Oil and JODI-Gas is primarily a function of the cooperation of oil and gas companies, participating countries, and the JODI Partners, who all work together to enhance energy data transparency - with the ultimate goal of promoting energy security for producers, consumers and transit states alike.

