



## **The IEA / IEF / OPEC areas for cooperation**

### **Report for the 13<sup>th</sup> IEF Ministerial**

**Kuwait, 12-14 March 2012**

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## Background

The 12th International Energy Forum (Cancun, March 2010)<sup>1</sup> has demonstrated how important the global energy dialogue is in identifying cooperative approaches to global challenges, narrowing the differences among producing and consuming countries, both developed and developing, increasing awareness of their common interest in promoting transparency, stability and predictability of energy markets and energy-related policies, including through the exchange of views on energy, technology, environmental issues, economic growth and development.

In this connection, the 12<sup>th</sup> IEF welcomed the positive approach and constructive efforts of the Secretariats of the International Energy Agency (IEA), the International Energy Forum (IEF) and the Organization of the Petroleum Exporting Countries (OPEC) to identify specific areas of cooperation to better understand energy market functioning, and to share insights and exchange views about energy market trends and outlooks, and invited them to ensure rapid implementation of their agreement.

The joint IEA-IEF-OPEC programme is now well on track and has already delivered many useful results. This report presents the ongoing implementation of IEA/IEF/OPEC areas of cooperation and progress made since Cancun.

### 1. Shared analysis of energy market trends and outlook

The IEA and OPEC regularly publish energy and oil outlooks covering the short-, medium- and long-term. In addition, on the occasion of the International Energy Forum, each organization usually contributes by submitting a focused energy analysis and outlook to be presented to Energy Ministers. Short- to long-term energy outlooks are also published by other government, consultancy, banking and academic institutions. The Joint Communiqué of the Jeddah Energy Meeting, issued by the host country Saudi Arabia and the Secretariats of IEA, IEF and OPEC, called for shared analyses of oil market trends and outlooks.

The IEA, IEF and OPEC held two Symposiums on Energy Outlooks in Riyadh on 24 January 2011 and on the 23-24 January 2012.

The IEA-IEF-OPEC Symposiums on Energy Outlooks offered a platform for sharing insights and exchanging views about energy market trends and short-, medium- and long-term energy outlooks, including analysis of market behaviour and discussion of the key drivers of the energy scene along with the associated uncertainties. The two meetings provided a diversity of well-informed views from distinguished experts. Participants discussed energy market trends (energy supply, demand and prices) and associated drivers that influence these trends (environmental policies, economic

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<sup>1</sup> <http://www.ief.org/Events/Documents/CANCUN%20MINISTERIAL%20DECLARATION.pdf>

conditions, technological development, etc.). The full report of each of these events is provided separately.

The Symposiums noted that under all scenarios global primary energy demand continues to grow, as economies expand, the global population grows and living standards across the world improve. There was a consensus that oil will continue to be the single largest constituent of primary energy demand throughout most of the projection period, and that oil resources, both conventional and non-conventional, are sufficient to meet future demand. However, its share in the global energy mix will fall. They also noted the considerable uncertainties concerning how future demand will evolve, in particular with regard to energy and environmental policies. Other key uncertainties relate to economic growth assumptions, patterns of car ownership growth and usage in developing countries and technological change, especially in the transportation sector.

The Symposiums also heard details of the outlooks for the downstream sector. It was noted that surplus refinery capacity is emerging, particularly in the Atlantic region. This raises the prospect of potential refinery closures.

There was consensus on the need to alleviate energy poverty. Participants considered the objective of universal access for the poor to modern energy services laudable; some, however, were of the view that the suggested level of per household consumption was insufficient and should be made more ambitious.

The meetings identified the main similarities and differences between the IEA's and OPEC's outlooks and discussed the reasons behind these differences, such as those related to definitions, data sources and uses or presentation of the results. The differences in historical baseline figures were also discussed.

The two Symposiums recommended moving towards harmonizing definitions, where possible and appropriate, and the use of more disaggregated data, in a more timely manner, to enhance the outlooks. In addition, they highlighted the need for a better exchange of data and information through a strengthened and improved JODI. Moreover, they recommended exploring the possibility of further joint technical meetings and/or Symposiums on certain technical areas of interest, including:

- Data definitions and clarifying (the reasons for) differences in historical data.
- Presentation of results, e.g. regional breakdown of supply and demand.
- Non-OECD demand and energy intensity
- Demand growth in some regions, such as China, India and the Middle East,
- Costs, long-term price assumptions; ethane, bunker fuels; elasticity assumptions for supply and demand; and conversion factors,
- NGLs, unconventional oils and biofuels.
- Better exchange of data and information, including upstream and downstream capacity expansion plans, through a strengthened and improved JODI.

Participants commended the efforts made by the three Organisations and praised the areas of cooperation that they have identified and included in the Cancun Declaration. With this in mind, the third Symposium on Energy Outlooks will be held in 2013. The IEF Secretariat produced two background papers in consultation with the IEA and OPEC Secretariats, which provided a comparison of the IEA's and OPEC's short- medium- and long-term energy outlooks. The IEA, the IEF and OPEC jointly produced two reports summarizing the discussions and the outcomes of the two Symposiums.

The agendas, the two background papers and the two reports are available on the IEF website ([www.ief.org](http://www.ief.org)).

## **2. Physical and financial market linkages and energy market regulation**

Given the dual role that crude oil now plays as both a physical commodity and a financial asset, the IEA, the IEF and the OPEC recognized the need to improve understanding of the interlinkages between the physical and financial markets for energy, and agreed to jointly hold workshops on energy market functioning and meetings of energy regulators.

The first Joint IEA-IEF-OPEC Workshop on "Understanding the New Dynamic: How do the Physical and Financial Markets for Energy Interact?" and the first Forum on "Energy Market Regulation: Clarity and Coordination" were convened in London on 22nd and 23rd November, 2010.

The detailed Report of the Workshop is available at [www.ief.org](http://www.ief.org).

The first Joint IEA-IEF-OPEC event provided rich and diverse views from distinguished experts with different backgrounds and affiliations.

With regard to the magnitude of the impact of the derivatives markets (either exchange traded derivatives or OTC derivatives) on petroleum prices and volatility, there was no consensus; some participants underlined the role of excessive financial speculation in the surge in prices and volatility; other participants, especially those involved in price reporting, felt that spot markets set their own prices, independently of any influence from financial markets; a third group recognized that it is difficult to isolate the effect of the physical layers from the financial layers in the current oil pricing system and, therefore, it is difficult to construct theoretically and test empirically whether the financial market drives the physical or the other way around.

The Workshop noted the increasing interaction of the physical and financial energy markets. It recommended continuing the ongoing effort to better understand the functioning of each of these markets, as well as the linkages between the physical and financial markets. The Workshop also recommended the enhancement of the international cooperation on market data transparency, and commended the Joint Organisations Data Initiative (JODI) efforts in this regard.

The Forum recognized that regulations have important effects on market functioning and participants' behaviour and emphasized the need for appropriate regulation, with adequate international coordination.

The second Joint IEA/IEF/OPEC Workshop on the "Interactions between Physical and Financial Energy Markets" was convened in Vienna on November 29th, 2011. Its detailed report is available at [www.ief.org](http://www.ief.org).

Once again, the Workshop provided rich and diverse views from distinguished experts with different backgrounds and affiliations. The diversity of the opinion expressed in the event reflected, to a large extent, the differences of opinion between those attributing most of recent price movements to oil market physical fundamentals, acknowledging the role of financial market factors in amplifying short-term price movements; those who see speculative activity and the financialization of commodities as exacerbating price movements and leading to excessive volatility; and those that regard crude oil price formation consisting of a complex interaction of physical and financial factors, including speculation in the financial market activity. The discussion also reflected the diversity of views regarding the benefits, consequences and costs of various regulation proposals.

The Workshop noted that studies about the role of index funds, exchange traded funds, over-the-counter (OTC) swap and other derivatives on commodity futures markets have generated a wide range of arguments and views. To date, academics have not yet come to a consensus on a single theory over the role of speculation, on how it may influence oil price formation, nor on a consistent explanation about the mechanics or causal relationships in price formation.

In this respect, it noted that the financialization in commodity futures markets is broader than just the rise of index funds, OTC swap and other derivatives, and called for clear definition of financialization and for further research on the market impact of commodity index funds and OTC swaps as well as the impact of increased liquidity and financial flows on commodities.

On the price reporting agencies (PRAs), the Workshop noted the IEF, IEA, OPEC and IOSCO report on PRAs to the G20. Regarding the debate on PRAs regulation, some participants acknowledged that the PRAs need some oversight and that they should have more dialogue with the market participants. However, it was not clear how this would happen and there was no consensus on precisely what steps were necessary moving forward. However, some participants argued that the role of price reporting agencies is well defined, and that the current structure works well, leaving no need for government regulation.

Participants noted the ongoing effort on regulatory reform in the financial and derivatives markets and recognized the need to preserve the ability of physical traders to use these markets to facilitate trade and manage underlying price risk. It was also stressed again that international coordination of regulation is essential to avoid loopholes and unintended consequences.

The workshop acknowledged that transparency in the financial markets layer surrounding oil trading should mimic the enhancement of the international cooperation on physical market data transparency. Participants noted that data gaps in both financial and physical markets contribute to price volatility. They called for more data to enable a more complete and timely picture of activities in both financial and physical markets. In this connection, the workshop commended the international efforts to increase market data transparency, such as the JODI process, and stressed the need to make further significant progress in this area.

The participants recognized that continued cooperation and active dialogue are important elements in improving the understanding of the concerns of all parties and in enhancing oil market stability. They noted the successful outcome of the Workshop, as well as the positive and constructive nature of the dialogue among energy stakeholders. In this regard, they stressed the importance of continued efforts to improve the producer consumer dialogue to enhance stability in the oil market and increase transparency through comprehensive, timely and reliable data, for the benefit of all.

The Workshops commended the role of the IEF in promoting and facilitating the dialogue among producing and consuming countries, both developed and developing, increasing awareness of their common interest in transparency, stability and predictability of energy markets.

The IEF Secretariat produced two reports summarising existing views with regard to the interaction between physical and financial markets, in consultation with the IEA and OPEC Secretariats. The agendas and the two reports are available on the IEF website ([www.ief.org](http://www.ief.org)).

Further similar events covering the interlinkages between the physical and financial energy markets, as well as energy market regulation should be held again in future in order to promote a deeper understanding of, and dialogue on, these complex and important issues.

### **3. JODI related activities**

The objective of the Joint Oil Data Initiative (JODI), now relabeled Joint Organisations Data Initiative, a concrete achievement of the energy producer-consumer dialogue, is to achieve a step change in provision of timely, high quality and transparent oil market data which is essential to the stability of oil markets.

JODI is enjoying increasing interest from market players, and internationally recognized for its contribution to oil market stability. Towards this end, JODI partner organisations continued their efforts in training statisticians in charge of JODI data compilation and submission in participating countries/economies. In July 2010, JODI organisations organized their sixth JODI Training Workshop for Latin American countries in Bogota, Colombia. The Bogota training workshop addressed 27 officials in charge of energy and oil data collection from 15 Latin American and Caribbean countries.

The JODI organisations also hold in-house training in selected participating countries to raise awareness of both private and public entities on the importance of the oil data transparency initiative and its benefits for their decision making in global as well as domestic level. On 17 December 2010, the Center for Data and Information on Energy and Mineral Resources (PUSDATIN) of Indonesia held a JODI workshop in Bogor, Indonesia. This workshop aimed to produce a better understanding about the history and background of JODI as well as the data management procedure of JODI data in APEC not only of the PUSDATIN staff but also of the sources of monthly oil data such as MIGAS, BP MIGAS, BPH MIGAS and PERTAMINA. With better understanding of JODI, data sources are expected to provide more accurate data.

Another In-house JODI Training Workshop took place on 10-11 December 2009 in Sandton, South Africa. The workshop gathered some 20 participants from oil companies and Department of Energy of South Africa.

Participants in the 8th International JODI Oil Conference held in Beijing (10-11 October 2011) reviewed progress made since the 7th International JODI Oil Conference in Quito (June 2009) and discussed the quality of additional data points collected through the extended JODI Oil questionnaire. They also discussed the findings of the 3rd JODI Oil Data User Survey which reveals that the Initiative is increasingly benefiting from users inputs, comments and suggestions. The Conference highlighted the importance of stock level as 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 (metadata).

JODI organisations also developed new tools and practices, both at country and organisations level, to regularly check JODI data and streamline data submission. Given the increasing in JODI data from market analysts, the organisations worked on enhancing interaction with data users and upgraded JODI related platforms such as the JODI website, JODI database accessibility and usefulness.

Responding to market analysts' request for more data on market flows to be provided through JODI World Oil Database, JODI organisations worked on an extended version and have been testing it with their member countries participating in the Initiative. The results of the reporting by participating countries were assessed by an independent consultant to measure the reliability and integrity of the JODI-Oil database with additional data points collected through the extended JODI-Oil format. The assessment shows that submission of additional data required in the extended questionnaire is challenging for many participating countries. The full implementation of the extended format -- or "maxi-JODI" -- sets an aggressive agenda for many participating countries to address a number of gaps and inconsistencies that affects the completeness and accuracy of reported data.

While JODI partner organisations are aware of such challenges, they agreed to release the extended questionnaire to the public and hope it will help to improve the quality of data submission, through interaction with market analysts and JODI-Oil data users.

Responding to IEF Ministers' call to start collecting monthly gas data through a mechanism similar to JODI-Oil, JODI partner organisations initiated a collection exercise with their gas member countries submitting relevant gas data such as supply, demand and trade on monthly basis. Today, 47 countries are participating in this exercise and the IEF Secretariat intends to launch JODI-Gas at the Second Gas Data Transparency Workshop to be hosted by Qatar in May 2012. They also invited other relevant organisations such as the Gas Exporting Countries Forum (GECF) to join this collective effort towards more transparent gas markets.

Calls for the extension of JODI to cover annual data on upstream and downstream capacities and expansion plans have been noted and work on extension to investment has been already initiated by JODI partner organisations (starting with oil), with preliminary findings on schedule for delivery in 2012.

#### **4. Activities related to the G-20 or to energy-relevant organisations**

The IEA, IEF and OPEC closely cooperated on activities related to the G-20, and submitted the following reports:

##### **4.1 Price Reporting Agencies (PRAs)**

The G-20 Seoul Summit Leaders' Declaration<sup>2</sup> called on the IEF, IEA, OPEC and IOSCO to produce a joint report, by the April 2011 Finance Ministers' meeting, on how the oil spot market prices are assessed by oil price reporting agencies and how this affects the transparency and functioning of oil markets.

The four organisations appointed two consultants to prepare a report based on agreed Terms of Reference (TOR). The IEF, IEA, OPEC and IOSCO prepared their joint report based on the Consultants' report and the comments and clarifications received from the PRAs. The final report on PRAs was submitted to G20 Finance Ministers in October 2011. The report is available at [www.g20.org](http://www.g20.org)

The report examined three inter-related areas: (1) the methodology used in identifying the oil price, (2) the reliability and transparency of price assessments and (3) the internal measures that PRAs implement to protect the integrity of the price assessment process. Further to this report, the G20 Cannes Summit Final Declaration on 3-4 November 2011 *"Recognizing the role of Price Reporting Agencies for the proper functioning of oil markets, asked IOSCO, in collaboration with the IEF, the IEA and OPEC, to prepare recommendations to improve their functioning and oversight to our Finance Ministers by mid-2012"*.

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<sup>2</sup> "We also request the IEF, IEA, OPEC and IOSCO to produce a joint report, by the April 2011 Finance Ministers' meeting, on how the oil spot market prices are assessed by oil price reporting agencies and how this affects the transparency and functioning of oil markets." THE G20 SEOUL SUMMIT LEADERS' DECLARATION, NOVEMBER 11 - 12, 2010.

## 4.2. Gas and Coal Volatility

The G20 Washington Summit Leaders' Declaration in April 15-16, 2011 requested "the IMF and IEF, as well as IEA, GECF and OPEC, to develop by October 2011 concrete recommendations to extend the G20's work on oil price volatility to gas and coal."

The IMF, IEF, IEA and OPEC prepared a report on the extension of the G20's work on oil price volatility to gas and coal to the G20 Finance Ministers in October 2011. The report examined five inter-related dimensions: (1) inter-linkages between gas, coal and oil, (2) gas and coal outlooks (3) gas and coal markets structure and functioning (4) gas and coal volatility and (5) transparency in gas and coal markets. The report is available at [www.g20.org](http://www.g20.org).

Further to this report, the G20 Cannes Summit Final Declaration on 3-4 November 2011 *"notes the new JODI-Gas database and commits to work on contributing to it on the basis of the same principles as the JODI-Oil database. They call for annual symposiums and communiqués on short, medium and long term outlook and forecasts for gas and coal. They also call for further work on gas and coal market transparency and ask the IEA, IEF and OPEC, to provide recommendations in this field by mid-2012"*.

## 5. Web-based facility

The unique composition of the IEF (covering both producer and consumer countries including major producers outside OPEC and major consumers outside IEA) and its neutral status position the IEF Secretariat for an enhanced role in providing improved and expanded relevant market data and compiling/pulling together relevant analytical reports with respect to both the physical and paper oil market. This with the objective to achieve a more constructive and focused producer-consumer dialogue, based on a greater degree of trust and openness, that could promote confidence-building measures among producers and consumers and send strong market signals to help stabilize long-term expectations.

At their 12<sup>th</sup> Ministerial meeting in Cancun, Energy Ministers called for<sup>3</sup> "the IEF Secretariat to catalogue regulatory efforts in major energy derivatives markets, bearing in mind that the role of the IEF in reducing market volatility should continue to be non-regulatory, leaving direct market oversight responsibility to states".

To ensure further dissemination of energy market relevant information through one single platform, the IEF, in cooperation with the IEA and OPEC, has developed a web-based facility to access, including through links, i) publicly available energy outlooks and associated studies ; ii) energy market legal and regulatory texts and related studies.

An electronic forum dedicated to the subject of market functioning and behaviour, where experts, researchers, multilateral organisations members and others, can exchange views, post research findings and share publications is now in place.

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<sup>3</sup> Cancun Declaration, March 2010.

## **6. Conclusion**

- The implementation of the IEA-IEF-OPEC joint programme, which started immediately after the 12<sup>th</sup> IEF Ministerial as requested by Energy Ministers, delivered concrete and tangibles results..
- Looking ahead, IEA, IEF and OPEC will continue to cooperate on the areas listed in their joint programme of activities;
- The joint Symposium on Energy Outlooks is now established as an annual venue for experts from IEA, IEF, OPEC, industry, academia and others to share insights and exchange views about energy market trends and short- medium- and long-term energy outlooks ;
- Further events covering the interlinkages between the physical and financial energy markets, as well as energy market regulation will be held in the future in order to promote a deeper understanding of, and dialogue on, these complex and important issues. This will be especially important following the implementation of G-20 commitments for reform and oversight of the energy derivative markets by end-2012;
- The ongoing work on the Joint Organisations Data Initiative will continue towards an improvement of data disseminated through the JODI World Oil Database, the development of monthly gas data collection and annual investment data in cooperation with other relevant organisations such as the Gas Exporting Countries Forum (GECF).
- Joint activities relating to the G-20, or to energy-relevant organisations, as could be agreed by the three Organisations.