Producer-Consumer Dialogue: The Role of International Energy Forum (IEF)

The Institute of Energy and Economics of Japan Annual Seminar 2018

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Secretary General, IEF Riyadh
Contents

- Global trends and projections compared
- 5 Uncertainties affecting markets
- Future policies and the IEF Dialogue
IEA and OPEC Outlooks: Small year-on-year change
When comparing the New Policies Scenario and Reference Case over 2 years

Comparison of 2016-2017 IEA and OPEC Outlooks on World Energy Demand and IRENA-IEA Long Term Perspectives on 2050

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Color Key:
- Blue: Coal
- Red: Oil
- Green: Gas
- Purple: Nuclear
- Black: Renewables
IEA departs from 450 Scenario
IEA’s New Sustainable Development Scenario grows fossil fuels’ share by 4%

Comparison of 2016-2017 IEA and OPEC Outlooks on World Energy Demand and IRENA-IEA Long Term Perspectives on 2050
OPEC projects higher oil demand than year ago
OPEC’s Reference Case increases oil at the expense of gas and renewables
IEA/IRENA see fossils fall below 40%...
With rapid new technology roll-outs plus substantial and sustained efforts

Comparison of 2016-2017 IEA and OPEC Outlooks on World Energy Demand and IRENA-IEA Long Term Perspectives on 2050
U.S. EIA main projections align best with OPEC
IEA is bullish on renewables including possible breakthroughs by 2050

Comparison of 2016-2017 U.S. Energy Information Outlooks against main IEA OPEC and IRENA-IEA Long Term Perspectives on 2050

- U.S. EIA 2016
- U.S. EIA 2017
- IEA 2016
- IEA 2017
- OPEC 2016
- OPEC 2017

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Legend:
- Coal
- Oil
- Gas
- Nuclear
- Renewables
BP and ExxonMobil see only very gradual ‘changes’
BP's Re-Push, Less Gas, and Even Faster Transition scenarios break with trend

Comparison of 2016-2017 U.S. Energy Information Outlooks against main IEA OPEC and IRENA-IEA Long Term Perspectives on 2050
Contents

• Global trends and projections compared

• 5 Uncertainties affecting markets

• Future policies and the IEF Dialogue
5 Uncertainties

1. U.S. Sanctions on Iran
2. Venezuelan Production
3. Saudi Production
4. U.S. Oil Production and Exports
5. U.S. China Trade Tensions
JODI Fundamental to Risk Assessments

Improving visibility - including stock data - raising brand awareness

Enhanced cooperation with private data agencies

Energy Data Transparency Exhibition / Reception

Associated with the 13th International JODI Conference
10 October 2017, One Birdcage Walk, Westminster, London
Iran crude oil production

History shows close to 1 mb/d in output gains are at risk of sanctions

Iran (Islamic Rep.) Crude Oil Production

- Donald Trump Inaugurated
  45th President of the US 20 January 2017
- US Reimposes Sanctions on Iran 8 May 2008
- Joint Comprehensive Plan of Action 15 July Vienna 2015
Iran Exports
Crude Oil and Total Oil Products

Iran Exports of Crude Oil and Total Oil Products

- Iran Deal Agreed
  Joint Comprehensive Plan of Action 15 July Vienna 2015
  UN Security Council Resolution 2231 20 July New York 2015

- Donald Trump Inaugurated
  45st President of the US 20 January 2017
  US Reimposes Sanctions on Iran 8 May 2008

Kb/d

0 500 1000 1500 2000 2500 3000


Crude oil
Total oil products

JodiOil
BETTER DATA BETTER DECISIONS
Venezuela crude oil production

When and how can production declines recover?

Kb/d

1336 Kb/d

Venezuela Crude Oil Production

JodiOil

Better Data Better Decisions
Saudi crude oil production

OPEC output increase of up to 1 mb/d largely depends on Saudi spare capacity

Saudi Arabia Crude Oil Production
OPEC/Non-OPEC Declaration of Cooperation
Enters into effect 10 December 2016 Vienna
Reset to 100% Compliance 23 June 2018

2.2 Mb/d
Saudi Arabia Exports
Crude Oil and Total Oil Products

Kb/d

Saudi Arabia Exports of Crude Oil and Total Oil Products

- Crude oil
- Total oil products
USA crude oil production

US stellar rise fueled by innovation and market fundamentals

- Oil prices around 100$/barrel
- Market down turn sets in
- Oil below 30 $/barrel
- Markets recover
USA Exports
Crude Oil and Total Oil Products

USA Exports of Crude Oil and Total Oil Products

Ban on crude oil exports lifted
US Congress, 18 December 2015

3.5 Mb/d

Crude oil
Total oil products

JodiOil
BETTER DATA BETTER DECISIONS
Revisions and differences highlight uncertainty
IEA and OPEC supply outlooks for US and Canada

Medium-term US and Canadian Oil Supply (excluding biofuels)

IEA 2017 Forecast
IEA 2016 Forecast
IEA 2015 Forecast
OPEC 2017 Forecast
OPEC 2016 Forecast
OPEC 2015 Forecast
Markets appear to tighten

OECD Stocks have come down below the five-year average

OECD total commercial oil stocks relative to 5-year moving average*

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IEF comparative analysis of IEA and OPEC Monthly Reports on the Oil Market June 2018
But globally stocks remain above average

Patchy Non-OECD stock data requires improvement as role grows

Accumulative OECD and Non-OECD* Crude + Product Builds Since End-2014

* Aggregate of all non-OECD data available through JODI. Not all non-OECD countries report inventory data and the countries in the aggregate may vary monthly depending on the regularity of individual country reporting.

Source: IEA, JODI, Rapidan Energy Group
U.S. China Trade Tensions
Pose a major risk to the global economy and oil and gas demand growth

3 Facts

- China largest US trading Partner Since 2015
- $500 billion total import-export worth
- 15% Total US Trade

5 Impacts

- Retreat from global trade system?
- Slow down in global economic growth?
- Down-turn in energy demand?
- Market volatility and reduced confidence?
- Delays to achieving shared goals?
## U.S. China Trade Tensions

### Step by step

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<td>22 January</td>
<td>US imposes 30% Tax on Solar Panels and Washing Machines</td>
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<td>1 March</td>
<td>US levies 25%-10% Import taxes on steel and aluminum respectively</td>
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<td>2 April</td>
<td>China issues tariffs on $2.4 billion in U.S. exports</td>
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<td>3 April</td>
<td>US lists 1300 goods valued at $50 billion for possible 25% import tariffs</td>
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<td>4 April</td>
<td>China lists 106 American goods for possible 25% import tariffs</td>
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<td>5 April</td>
<td>US expands list to value $100 billion</td>
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<td>16 April</td>
<td>US bans exports to Chinese telecom company ZTE for 7 years</td>
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<td>6 June</td>
<td>US ends export ban on ZTE</td>
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<td>15 June</td>
<td>US announces 25% tariff on $50 billion Chinese exports for July 6</td>
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<td>China unveils 25% tariffs on $50 billion US exports for July 6</td>
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<td>18 June</td>
<td>US expands list with 10% tariffs on $200 billion Chinese exports</td>
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<td>US Senate backtracks on US ZTE decision reinstating export ban</td>
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<td>27 June</td>
<td>US Congress Reviews Chinese Investment in Technology</td>
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<td>6 July</td>
<td>US tariffs on $34 billion in Chinese imports imposed</td>
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<td>China tariffs on $34 billion in Chinese imports imposed</td>
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Dialogue is key to stability and growth

1. U.S. Sanctions on Iran
2. Venezuelan Production
3. Saudi Production
4. U.S. Oil Production and Exports
5. U.S. China Trade Tensions
Prime Minister Shri Narendra Modi called for a:

I. Mutually supportive relationship between producers and consumers if the world has to grow as a whole.

II. Optimal use of the neutral platform of the IEF to build a global consensus on ‘responsible pricing’, that serves the mutual interests of both producers and consumers.
New Realism IEF16 focused dialogue on the mutual reinforcing role of fossil fuels and clean energy technologies, including renewables calling for:

I. Reliable, and realistic transformations that all can afford, and

II. Rational responses to the global energy challenges we face together.
Quadrilateral Engagement, and Deeper Analysis:

I. Quadrilateral Engagement in addition to the IEA and OPEC, the Gas Exporting Countries Forum (GECF) is now a partner on the neutral IEF platform creating a more robust and comprehensive interface between international organizations.

II. Deeper Analysis: The launch of a monthly comparative analysis on IEA and OPEC short-term oil market reports by the IEF deepens energy market insights and strengthens market transparency.
Contents

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United States of America

Beyond fearing peaks towards sharing abundance

“NEW ENERGY REALISM”
AND AMERICA’S GROWING ENERGY ABUNDANCE

By H.E. Rick Perry
Secretary of Energy, United States of America

“New Energy Realism”: A new paradigm has emerged in the United States:

I. As a major energy producer and consumer, the U.S. supports the work of the IEF and its contributions to the consumer-producer dialogue and greater oil-and-gas market transparency.

II. Ease draconian regulations and fiscal burdens towards a simple and transparent system that supports innovation, technology revolutions (shale and renewables), and investment.

III. Reject false choices between environmental protection and economic growth and advance both. From 2015 to 2017, the US led the world in reducing carbon emissions by 14% while becoming a net exporter of Natural Gas to 27 countries.

GLOBAL ENERGY SECURITY THROUGH DIALOGUE

KNOWLEDGE GENERATION THROUGH DIALOGUE
Multi-polarisation of supply and demand has developed. All countries should enjoy energy security together.

I. First principle of achieving shared growth through discussion and collaboration. We will give full play to multilateral cooperation organisations such as the IEF, which are helpful in promoting cooperation among producers and consumers and the stability of international and regional energy markets.

II. Second principle of mutual benefit and win-win cooperation. The global allocation of energy resources and demand for mutual benefit and win-win progress have increased.

III. Third principle of insisting on green and low carbon development. We should pay attention to friendly coordination with the ecological environment and push forward global energy transition.
Republic of India

Dialogue benefits our citizens in accessing clean, affordable and sustainable energy

INTERNATIONAL ENERGY FORUM

By H.E. Dharmendra Pradhan, Minister of Petroleum and Natural Gas, Republic of India

One of the largest transitions in history: A dramatic shift in energy supply and consumption.

I. India is the fastest growing large economy in the world. GDP grew by 7.2 per cent in Q1 2018. IMF, World Bank, ADB predict India will grow by between 7-8 per cent in 2019 and 2020.

II. India is boosting local manufacturing in industries such as textiles, petrochemicals, defense and engineering through enabling policy measures. This is increasing energy consumption further.

III. India revamped its upstream policies and regulations to bring transparency and competitiveness to the sector. Bidding criteria changed to revenue sharing reducing government intervention. The Open Acreage and National Data Repository (NDR) will help domestic and foreign companies participate in fields of interest and help increase the exploration interest in India’s upstream sector.
Kingdom of Saudi Arabia

The IEF Dialogue, Vision 2030 and a Transition Blue Print

For effective communication and cooperation to take place, there must be a venue where all participants are made welcome, and where all can be heard. The IEF provides just such a platform, and over the years the Kingdom of Saudi Arabia has found it to be an effective forum for a frank exchange of views and ideas as well as a neutral facilitator among producers, consumers and transit states. 

HE Khalid A. Al-Falih,
Minister of Energy, Industry & Mineral Resources of the Kingdom of Saudi Arabia

Consider the “Totality of Energy” as the recipe for an orderly and successful transformation

I. The world will need all energy sources including increasing volumes of oil and gas. First we need to develop new energy sources and technologies, but second we must continue investing in existing sources.

II. In Saudi Arabia we will continue to strengthen our oil and gas business while concurrently developing renewable energy in which we intend to be a global leader. Crown Prince HRH Mohammad ibn Salman Vision 2030-Saudi Aramco IPO, and announcement of a 200 GW solar power programme; both the world’s largest ever.

III. The IEF has done a tremendous job of advancing consumer-producer dialogue, the need for dialogue has never been greater, but it would perform another invaluable service by organizing the effort to develop an optimum energy transition blueprint.
Proposals:

Strengthen JODI → Transparency + Information
Full use of IEF Platform → Dialogue & Cooperation
Action on new trend → Green, Low Carbon, Efficient, Sustainable
2018/20 Key Dialogue Meetings

1. 4th IEA-IEF-OPEC Gas and Coal Market Symposium
   6 November 2018 | Paris, France

2. 6th IEF-IGU Ministerial Gas Forum
   21-22 November 2018 | Barcelona, Spain

3. 8th Asian Ministerial Energy Roundtable
   9-10 September 2019 | Abu Dhabi

4. 17th IEF International Energy Ministerial
   2020 | China