

OPEC bulletin

5/12

*Vienna hosts 5th OPEC Seminar
161st Conference*



Petroleum: Fuelling Prosperity
Supporting Sustainability

13–14 June 2012

Hofburg Palace
Vienna, Austria

www.opecseminar.org

Contact:
+44 7833 245 507
monique@moniquequant.com

The quest for price stability in uncertain times

As OPEC approaches the mid-year Meeting of its Ministerial Conference on June 14 in Vienna, there is still much uncertainty in the air about the outlook for the world economy and hence energy and oil demand. Indeed, most recently, added concern about the world economic outlook has been reflected in a general weakening of oil prices.

OPEC's latest *Monthly Oil Market Report (MOMR)* puts it as follows: "Overall, the global economic outlook remains fragile, with heightened uncertainties in the Euro-zone and potential spill-over effects in the emerging markets."

Turning to demand, it states: "Given the stabilization of the US economy and the shutdown of Japanese nuclear power plants, world oil demand growth has — at least, for the short term — stopped its declining trend and is showing some growth. Oil demand in non-OECD countries is also indicating a slight improvement."

And on supply, the *MOMR* notes that incremental non-OPEC supply and the increase in OPEC output of natural gas liquids will satisfy expected growth in world oil demand this year. It stresses that higher OPEC crude oil production underscores the current trend of plentiful supply in excess of market requirements.

Clearly, many uncertainties abound at the present time and efforts must be made to minimize the impact on oil prices of a sudden change in perceptions. In this light, it is worrying to note that, shortly before we went to press, expressed concern about a weakening global economy saw OPEC's Reference Basket price lose \$7.69/barrel in just three days.

This will be the situation facing OPEC's Oil and Energy Ministers in the Austrian capital, as they assess the oil market outlook for the coming months and on into 2013. They will be helped, as usual, by the market reports they receive from the Secretariat, as well as by input from the Member Countries themselves.

However, there will be valuable additional support this time, since the Conference is scheduled to meet at the Organization's modern new headquarters building shortly after the doors close on the 5th OPEC International Seminar in the nearby ancient splendour of the Hofburg Palace.

The Seminar — with the theme '*Petroleum: Fuelling Prosperity, Supporting Sustainability*' — will provide an opportunity for experts and decision-makers at the highest levels to deliberate upon key issues of the day in the realm of global energy and associated areas. Participants will include Ministers from OPEC's Member Countries and other oil-producing states, heads of intergovernmental organizations, chief executives of national and international oil companies, academics and the media.

OPEC's Ministers, in the build-up to the Conference, will be interested in the broad range of topics covered by the Seminar, which, taken together, provide a comprehensive picture of the multifaceted challenges facing the industry in the coming decades.

The four main sessions will be dedicated to the following topics: 'The global energy scene', 'Oil and the world economy', 'Capacity expansion and investment' and 'Technology, environment and policies'. Finally, a concluding panel discussion will seek to draw out key insights from the Seminar to provide some timely, useful, thought-provoking messages to take away from the event.

The benefits of all this to OPEC's Ministers are clear and are likely to enrich their discussions during the 161st Meeting of the Conference, as they address some of the very real challenges facing the industry at the present time. And their sights will be set specifically on restoring stability to oil prices, in the interests of producers and consumers alike and in support of sound world economic growth. ■■

Market Spotlight 4



Global oil supply sees steady increase

Seminar 6



5th OPEC Seminar set to discuss wide range of topical issues

In Focus 14



As uncertainty continues, OPEC remains committed to ensuring oil market stability – *El Badri*

Exhibition 16



Iranian exhibition scores big in participating companies from overseas

Ghasemi highlights Iran's importance to global oil sector (*p19*)

MDTC 20



Research vital to OPEC's work, 12th MDTC participants told



Cover
This month's cover depicts traditional Vienna and the city's famous Hofburg Palace, venue for the 5th OPEC International Seminar (see pp6–13).
Image: Shutterstock.

Vol XLIII, No 4, May 2012, ISSN 0474–6279

Publishers

OPEC
Organization of the Petroleum Exporting Countries
Helferstorferstraße 17
1010 Vienna, Austria
Telephone: +43 1 211 12/0
Telefax: +43 1 216 4320
Contact: The Editor-in-Chief, OPEC Bulletin
Fax: +43 1 211 12/5081
E-mail: prid@opec.org

Web site: www.opec.org

Visit the OPEC Web site for the latest news and information about the Organization and back issues of the *OPEC Bulletin* which are also available free of charge in PDF format.

Hard copy subscription: \$70/year

OPEC Membership and aims

OPEC is a permanent, intergovernmental Organization, established in Baghdad, on September 10–14, 1960, by IR Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. Its objective — to coordinate and unify petroleum policies among its Member Countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry. The Organization comprises 12 Members: Qatar joined in 1961; SP Libyan AJ (1962); United Arab Emirates (Abu Dhabi, 1967); Algeria (1969); Nigeria (1971); Angola (2007). Ecuador joined OPEC in 1973, suspended its Membership in 1992, and rejoined in 2007. Gabon joined in 1975 and left in 1995. Indonesia joined in 1962 and suspended its Membership on December 31, 2008.

Carbon Capture 26



UK moves to establish first commercial-scale CCS plants

Opinion 28



Monetary policy's inexorable push on oil

Spotlight on Africa 36



Kenya's oil discovery offers transformational opportunity for East African nation

First oil — now Ghana prepares to launch gas industry (p40)

Newsline 42



Naimi dismisses reports of any oil shortage — wants \$100/b crude price
Algeria planning revised hydrocarbons law by end of 2012 (p44)
Iraq looking to secure investment for petrochemicals development (p45)
BP's return to Libya seen as significant development (p46)
Draft Nigerian oil legislation stipulates end to gas flaring (p47)
UAE opts for nuclear to help satisfy rising domestic energy demand (p48)
Venezuela strengthens oil and gas cooperation with Japan, China (p49)

Secretary General's Diary 50

Student Briefings 51

Obituary 53

OPEC Fund News 54



OFID joins forces with private sector to fight energy poverty

Market Review 56

Noticeboard 70

OPEC Publications 72

Secretariat officials

Secretary General

Abdalla Salem El-Badri

Director, Research Division

Dr Hasan M Qabazard

Head, Data Services Department

Fuad Al-Zayer

Head, Finance & Human Resources Department

In charge of Administration and IT Services

Department

Alejandro Rodriguez

Head, Energy Studies Department

Oswaldo Tapia

Head, Petroleum Studies Department

Dr Hojatollah Ghanimifard

Head, PR & Information Department

Ulunma Angela Agoawike

General Legal Counsel

Asma Muttawa

Head, Office of the Secretary General

Abdullah Al-Shameri

Contributions

The OPEC Bulletin welcomes original contributions on the technical, financial and environmental aspects of all stages of the energy industry, research reports and project descriptions with supporting illustrations and photographs.

Editorial policy

The OPEC Bulletin is published by the OPEC Secretariat (Public Relations and Information Department). The contents do not necessarily reflect the official views of OPEC nor its Member Countries. Names and boundaries on any maps should not be regarded as authoritative. No responsibility is taken for claims or contents of advertisements. Editorial material may be freely reproduced (unless copyrighted), crediting the OPEC Bulletin as the source. A copy to the Editor would be appreciated.

Editorial staff

Editor-in-Chief/Editorial Coordinator

Ulunma Angela Agoawike

Editor

Jerry Haylins

Associate Editors

Keith Aylward-Marchant, James Griffin,

Alvino-Mario Fantini

Production

Diana Lavnick

Design & Layout

Elfi Plakolm

Photographs (unless otherwise credited)

Diana Golpashin and Wolfgang Hammer

Distribution

Mahid Al-Saigh

Indexed and abstracted in PAIS International

Printed in Austria by Ueberreuter Print GmbH

Global oil supply sees steady increase

OPEC Organization of the Petroleum Exporting Countries Monthly Oil Market Report

May 2012

Feature Article:
Global oil supply developments

Oil market highlights	1
Feature article	3
Crude oil price movements	5
Commodity markets	10
World economy	15
World oil demand	27
World oil supply	37
Product markets and refinery operations	47
Tanker market	53
Oil trade	56
Stock movements	62
Balance of supply and demand	67



Helfferstorferstrasse 17, A-1010 Vienna, Austria
Tel: +43 1 21112 Fax: +43 1 2164320 E-mail: prid@opec.org Web site: www.opec.org

Global supply of crude oil in the first quarter of this year has exceeded market needs, thanks to a combination of higher non-OPEC supply and rising OPEC production.

And, according to OPEC's *Monthly Oil Market Report (MOMR)* for May, higher crude oil production from the Organization underscored the current trend of plentiful supply in excess of market requirements.

A feature article in the publication noted that OPEC oil production, based on secondary sources, had shown a steady rise over recent months to reach a total level of 31.3 million barrels/day in March.

Preliminary data for April indicated a continued upward trend, with output averaging 31.62m b/d for the month.

This, said the report, represented a cumulative increase of more than 2.4m b/d over a year ago.

The higher production could also be seen in the contra-seasonal build in OECD stocks to comfortable levels above the five-year average, representing 59 days of forward cover.

Additionally, said the *MOMR*, the supply/demand balance in the first quarter of the year also suggested a substantial stock-build outside the OECD, especially in China.

Cumulative growth

At the same time, the production of OPEC natural gas liquids (NGLs) and non-conventional oils had shown a steady gain last year of 300,000 b/d, supported mainly by projects in IR Iran, Nigeria, Qatar, Saudi Arabia and the United Arab Emirates (UAE).

“For the current year, (production of) OPEC NGLs and non-conventionals are forecast to increase by 400,000 b/d to average 5.7m b/d, representing cumulative growth of 1.8m b/d since 2008,” the *MOMR* stated.

This, it said, highlighted the important role played by OPEC NGLs in the total supply picture.

The report maintained that, based on current forecasts for global oil supply and demand, incremental non-OPEC supply and the increase in OPEC NGLs would satisfy expected growth in world oil demand this year.

Initial forecast

Looking specifically at non-OPEC supply, the *MOMR* noted that following a good performance in 2010, supply from producers outside OPEC in 2011 experienced relatively minor growth of 70,000 b/d to average 52.4m b/d. The current 2011 data reflected various revisions which brought growth down from an initial forecast of 340,000 b/d.

“These revisions have been due to a number of factors that have negatively impacted growth in most regions and pushed incremental non-OPEC supply to the lowest level since 2008,” the report observed.

It said factors behind the downward revisions included unfavourable weather conditions and the slow ramp-up of new projects, as well as political and technical issues.

“Weather conditions significantly impacted Australia’s supply and Brazil’s ethanol output, the latter of which has played an increasingly important role in non-OPEC supply growth in recent years.”

The slow ramp-up of new projects also affected Brazil’s supply growth. Political factors reduced output from the Sudans, Syria and Yemen, for a total loss of 140,000 b/d, while continued technical difficulties

sharply influenced supply in the North Sea, Malaysia, Azerbaijan and China.

“At the same time, some countries experienced a better-than-expected performance, namely the United States, Canada, Columbia, Russia and Mexico. The strong growth of 520,000 b/d from North America was supported by shale activities and oil sand developments.”

The *MOMR* said that, in 2012, the forecast for total non-OPEC supply growth was showing an increase over the previous year of 600,000 b/d to average 53m b/d.

“As in 2011, growth has also experienced various downward revisions since the initial forecast, due mainly to developments in the North Sea, Syria, Yemen, and the Sudans.

“However, continued strong growth from North America is expected to largely offset much of the decline. The 2012 supply forecast continues to be associated with a high level of uncertainty, due mainly to the weather, technical and political developments and the availability of data,” the feature article stated.

So far, weather conditions had impacted Australia’s supply and could affect US output during the hurricane season. Technical difficulties had required some downward revisions to North Sea supply and could further dampen non-OPEC growth.

“Meanwhile, political developments have sharply reduced the supply forecast for the Sudans and Syria in 2012. The lack of actual production data for these countries could also influence the non-OPEC forecast, as production is assumed without the availability of actual data, potentially resulting in considerable revisions once the data becomes available.

“Overall, it is important to note the general consensus among various sources regarding the good performance of non-OPEC supply this year, implying more barrels will be available in the market,” the report added.



Its three in a row for Vienna's Hofburg Palace



set to discuss
wide range of topical issues



Dr Heinz Fischer, Federal President of the Republic of Austria.



Abdul-Kareem Luaibi Bahedh, President of the OPEC Conference and Iraqi Minister of Oil.

On the third successive occasion, the historic Hofburg Palace in Vienna, which, over the years, has housed some of the most powerful people in European and Austrian history, is the setting for OPEC's 5th International Seminar in June — and there is certainly much to talk about. The former imperial residence of the Habsburg dynasty, rulers of the Austro-Hungarian Empire, will open the doors of its grandiose Conference Centre on June 13–14 to some of the energy industry's most influential figures and personalities, including all 12 OPEC Oil and Energy Ministers.

The 5th International Seminar, which will follow the very successful 3rd and 4th editions of the high-level OPEC gathering that were held at the Hofburg in 2006 and 2009, respectively, will have as its latest theme '*Petroleum: fueling prosperity, supporting sustainability*'.

Also in attendance and making presentations at this year's event will be numerous non-OPEC oil and energy ministers, government officials, heads of major oil companies and international organizations, and renowned academics and analysts (see pictures).

The Seminar's special guest of honour will be Austria's President, Dr Heinz Fischer, who will make welcoming remarks to assembled delegates alongside OPEC Conference President, Abdul-Kareem Luaibi Bahedh, Iraq's Minister of Oil. And with so many interesting developments taking place in the global energy sector right now, discussions over what promises to be a very busy one-and-a-half days are likely to be intense.

One of the topics that will surely be the centre of considerable attention will be the current state of the global economy, the prognosis for the future and how the situation is affecting the international energy sector.

Ironically, when the 2009 OPEC Seminar was convened, the energy industry, in common with other leading sectors of the world economy, was striving to come to terms with the deepening global recession and financial turmoil, the debilitating impact of which was already being felt right along the supply chain — affecting everything from day-to-day activities to long-term investment.

Today, with the after-effects of that recession still



Ali I Naimi, Saudi Arabian Minister of Petroleum and Mineral Resources.



Rafael Ramírez, Venezuela's Minister of Popular Power of Petroleum and Mining.



Mohamed Bin Dhaen Al Hamli, United Arab Emirates Minister of Energy.



Eng José Maria Botelho de Vasconcelos, Angolan Minister of Petroleum.



Diezani Alison-Madueke, Nigerian Minister of Petroleum Resources.



Wilson Pástor-Morris, Ecuador's Minister of Non-Renewable Natural Resources.



Dr Youcef Yousfi, Algerian Minister of Energy and Mines.

lingering, as reflected in the slow recovery of the world economy, the energy sector is still facing a great deal of uncertainty over future demand levels, particularly as a result of the ongoing debt crisis in the Euro-zone, which is threatening to curtail petroleum use further.

This subject is one that will be foremost on the minds of OPEC officials attending the Seminar. That is because when the Seminar's deliberations draw to a close, the Organization's Oil and Energy Ministers will immediately move to their Headquarters, also in the Austrian capital, for the 161st Meeting of the OPEC Ministerial Conference.

It will be at those talks that OPEC's Ministers will decide whether or not to leave their current production ceiling in force. This will depend on their overall assessment of the international oil market, especially the fundamentals of supply and demand. All in all, with the Seminar and the Conference, it will prove to be a busy time for the Organization and its Members.

Widespread attention

But then OPEC is used to such situations. The OPEC Conference, whenever it is held, attracts the attention of hundreds of media representatives, industry experts and analysts, who travel from all parts of the globe to attend the Organization's Ministerial Meetings.

And the OPEC International Seminar is going in the same direction. Scheduled to be held every two years, the event is today recognized as one of the most significant industry gatherings on the global energy calendar.

This is primarily due to the calibre of participants and the high level of discussion that takes place on all the leading issues affecting the global energy sector. And again, the media find the Seminar an invaluable source of information on today's petroleum industry developments and current modes of thinking.

Notes in the official Seminar programme for 2012 point out that, building on the success of the 4th OPEC Seminar in 2009, "the prestigious event will focus on key issues affecting today's fast-changing global energy industry."

Bringing together strategic players that have a bearing on the present and future direction of the international petroleum industry, the Seminar has not only developed a wide outreach across the energy sector, but also encompasses important related areas, such as the global economy, international finance, sustainable development, technological processes and the environment.



Dr Mohammed Bin Saleh Al-Sada, Qatar's Minister of Energy and Industry.



Eng Rostam Ghasemi, Iranian Minister of Petroleum.



Eng Abdurahman Benyezza, Libyan Minister of Oil and Gas.

Hani Abdulaziz Hussain, Kuwaiti Minister of Oil, Alternate President of the Conference.



Abdalla Salem El-Badri, OPEC Secretary General.



Dr Rilwanu Lukman, former Nigerian Petroleum Resources Minister and one time OPEC Secretary General.

Over the years, Seminar participants have typically included, of course, Ministers from OPEC's Member Countries and other oil-producing and oil-consuming nations, as well as heads of intergovernmental organizations, chief executives of national and international oil companies, academics, specialist media and other energy experts.

Seminar's reputation has grown

The event has increased in size and scope with each successive Seminar, as its reputation in international energy circles has grown. While an earlier Seminar in 1978 was attended by just 200 participants, there was nearly four times that number — 750 — three decades later in 2009.

The First OPEC Seminar was held, like all its predecessors, in Vienna and took place on June 30–July 5, 1969, with the theme of 'International oil and the energy policies of the producing and consuming countries'.

There was a wait of more than eight years before the next such gathering, which turned out to be the first in a mini-series of Seminars. They comprised (date and theme) — October 1977: 'The present and the future role of the national oil companies'; October 1978: 'Downstream operations in OPEC Member Countries: prospects and problems'; October 1979: 'OPEC and future energy markets'; and November 1981: 'Energy and development: options for global strategies'.

Another decade elapsed before a one-off 'Seminar on the Environment' in April 1992 was convened to help acquaint Member Countries with key environmental issues in the build-up to the Earth Summit (more formally, the United Nations Conference on Environment and Development) in Rio de Janeiro in June 1992.

Then, a new series of the 'OPEC International Seminar' began in 2001, although the first of these was called simply the 'First OPEC Seminar'.

Others in the series have been in September 2001, with the theme 'OPEC and the global energy balance: towards a sustainable energy future'; September 2004: 'Petroleum in an interdependent world'; September 2006: 'OPEC in a new energy era: challenges and opportunities'; and March 2009: 'Petroleum: future stability and sustainability'. The Seminars are divided into sessions blending topical issues under close international scrutiny at the time with longstanding topics which need a regular airing at such events.

The 5th OPEC International Seminar will comprise four sessions.



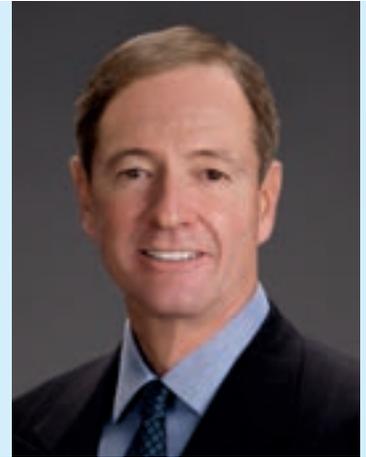
Günther Oettinger, Commissioner for Energy, European Union (EU).



Abdul-Hussain Bin Ali Mirza, Minister of Energy, Bahrain.



Jaipal Sudini Reddy, Minister of Petroleum and Natural Gas, India.



Alan Crain, Senior Vice President, Baker Hughes.

Session 1

Session 1 on ‘The global energy scene’ will look at recent trends and energy outlooks, challenges and opportunities facing the petroleum and energy industries, and potential game-changers in the industry, for example in transportation, consumer behaviour and supply and demand.

The Session, which will be chaired by Ali I Naimi, Saudi Arabia’s Minister of Petroleum and Mineral Resources, will see Rafael Ramirez, Venezuela’s Minister of Popular Power of Petroleum and Mining, make the keynote address.

Other speakers will include Abdalla Salem El-Badri, OPEC Secretary General, Guenther Oettinger, European Union Commissioner for Energy, as well as Ryan Lance, Chief Executive Officer (CEO) of ConocoPhillips, Michael Suess, CEO of the Energy Sector at Siemens, and Wang Dongjin, Vice President of the China National Petroleum Corporation (CNPC).

Session 2

In *Session 2*, participants will review developments in the global economy, including looking at the lessons learned from the economic crisis, as well as studying the impacts of the global business cycle and economic recovery on the international oil market. Lastly, the session will look at the changing paradigm in global economic cooperation and governance, specifically G20 regulations.

Wilson Pastor-Morris, Ecuador’s Minister of Non-Renewable Natural Resources, will be the keynote speaker, while Diezani Alison-Madueke, Nigeria’s Minister of Petroleum Resources, will chair the session.

Other speakers scheduled to appear include Rostam Ghasemi, Iran’s Minister of Petroleum, Jaipal Sudini Reddy, India’s Minister of Petroleum and Natural Gas, Lars H Thunell, Executive Vice President and CEO of the International Finance Corporation (IFC), and Michael Masters, Chairman of Better Markets Incorporated.



Christophe de Margerie, CEO, Total.



Christiana Figueres, Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC).



Aldo Flores-Quiroga, Secretary General, International Energy Forum (IEF).



Ryan Lance, CEO, ConocoPhillips.



Michael Lynch, President, Strategic Energy and Economic Research, Inc (SEER).



Michael Masters, Chairman, Better Markets, Inc.



Brad Page, CEO, Global Carbon Capture and Storage Institute (GCCSI).

Session 3

Session 3, on ‘Capacity expansion and investment’ has as its themes capacity expansion plans and investments, including managing spare capacity, uncertainties in demand and their impacts on upstream investment decisions, strengthening cooperation between the national and international oil companies, and challenges facing oil firms, both in upstream and downstream operations.

Chaired by Mohamed Bin Dhaen Al Hamli, Minister of Energy of the United Arab Emirates (UAE), the keynote speaker will be Mohammed Bin Saleh Al-Sada, Qatar’s Minister of Energy and Industry.

Other speakers at this session will comprise OPEC Conference President, Iraqi Oil Minister, Abdul-Kareem Luaibi Bahedh, Abdurahman Benyezza, Minister of Oil and Gas of Libya, Paulo Scaroni, CEO of Italy’s Eni and Gerhard Roiss, CEO of Austria’s oil company, OMV.

Session 4

In *Session 4*, entitled ‘Technology, environment and policies’, delegates will look at the importance of multilateralism in addressing climate change, environmentally friendly technologies, including solutions and challenges for the oil sector, new technologies in supporting the oil industry, technological developments and their potential impacts on oil demand, as well as policies affecting the energy scene.

Hani Abdulaziz Hussain, Kuwait’s Minister of Oil and Alternate President of the OPEC Conference, will give the keynote address at this session, which will be chaired by Youcef Yousfi, Algeria’s Minister of Energy and Mines.

The other speakers will be Christiana Figueres,



Gerhard Roiss, CEO, OMV.



Urban Rusnák, Secretary General, Energy Charter Secretariat.



Paulo Scaroni, CEO, Eni.



Michael Suess, CEO Energy Sector, Siemens.



Lars H Thunell, Executive Vice President and CEO, International Finance Corporation (IFC).



Peter Voser, CEO, Royal Dutch Shell plc.



Wang Dongjin, Vice President, China National Petroleum Corporation (CNPC).

Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), Peter Voser, CEO of Royal Dutch Shell, Brad Page, CEO of the Global Carbon Capture and Storage Institute (GCCSI), Urban Rusnak, Secretary General of the Energy Charter Secretariat, and Alan Crain, Senior Vice President at Baker Hughes.

Panel discussion

A final *Panel Discussion* on ‘Petroleum for progress and cooperation’ will discuss the role of oil in the global energy scene, the importance of multilateralism in stabilizing the world oil market, petroleum in a changing world economic landscape and energy poverty and the quest for development.

Chaired by Jose Maria Botelho de Vasconcelos, Angola’s Minister of Petroleum, it will be attended by Abdul-Hussain Bin Ali Mirza, Minister of Energy of Bahrain, Dr Rilwanu Lukman, former Nigerian Petroleum Resources Minister and OPEC Secretary General, Aldo Flores-Quiroga, Secretary General of the International Energy Forum (IEF), Christophe de Margerie, CEO of France’s Total, and Michael Lynch, President of Strategic Energy and Economic Research Incorporated (SEER), in addition to the 2012 winner of the OPEC Award for Research.

At the end of the first day of deliberations, a gala dinner will be held at Vienna City Hall. This will also feature the presentation of OPEC’s bi-annual Awards, one dedicated to honouring excellence in Research and the other in Journalism.

OPEC Awards

At the 2009 Seminar, the OPEC Award (for Research) was conferred on Prof Paul Stevens, an Emeritus professor at the Centre for Energy, Petroleum and Mineral Law and Policy of the University of Dundee.

The Award is given to researchers who have demonstrated a record of making contributions to improving the understanding of the key determinants that support oil market stability and have exhibited a consistently critical, yet impartial, view on oil-related issues in public debates and discourse.

The first OPEC Research Award, made in 2004 at the 2nd OPEC International Seminar, went to Professor Robert Mabro of the Oxford Institute for Energy Studies, while the second Award, made at the 3rd Seminar in 2006, went to energy economist Professor Peter Odell of Erasmus University, Rotterdam.

The inaugural OPEC Award for Journalism in 2009 went to Dr Walid Khadduri, the former Editor-in-Chief of the Middle East Economic Survey (MEES).

This Award was established to honour journalists and analysts whose careers have been devoted to objective and balanced reporting and analysis of the oil market, in general, and OPEC, in particular.

Full coverage of the OPEC Seminar will appear in the next issue of the OPEC Bulletin. ☛



Dr Hasan M Qabazard, Director of OPEC’s Research Division and Chairman of the Seminar’s Steering Committee.

As uncertainty continues, OPEC remains committed to ensuring oil market stability – *El Badri*



*OPEC Secretary General, **Abdalla Salem El-Badri** (pictured), attended the 13th International Oil Summit in Paris, France, in early May. In a keynote address to the gathering, he spoke on the current oil market situation, stressing how speculation continues to drive the price of crude. El-Badri also made it clear that there is no shortage of oil in the marketplace, stating that consumers' needs are being fully met as the Organization's Members strive to maintain market equilibrium.*

The global petroleum industry must be supported in its quest to develop, produce, transport, refine and deliver energy in an ever-more efficient and economic manner.

That was the message delivered by OPEC Secretary General, Abdalla Salem El-Badri, to the 13th International Oil Summit in Paris.

In relaying a number of key messages concerning the current oil market situation, he said: "It is critical that we focus on the market fundamentals and continue to evolve a clear and consistent environment."

El-Badri pointed out that with today's oil price levels continuing to be driven by excessive speculation, it was essential to mitigate this development.

"Our goal today, and in the future, must be one focused on stability," he maintained.

The OPEC Secretary General stated that the petroleum industry was working against a backdrop of continuing uncertainty in global economic growth, with the Euro-zone still being the main area of concern.

But what was clear, he said, was that there had been no shortage of oil in the market.

"Producers have been able to meet consumers' needs. There has been, and there remains, more than enough supply to meet demand. We also see this as the case for the rest of 2012 and the foreseeable future," he affirmed.

Looking at the situation more closely, El-Badri said that both last year and the first part of 2012 had been another eventful and testing time for the global oil and energy industries.

"Last year saw much turbulence in the global economy, alongside events that none of us could have predicted, such as the uprisings in a number of countries in North Africa and the Middle East, and the destructive Japanese earthquake and tsunami, and subsequent nuclear crisis.

"This year, we continue to see much uncertainty about the future of the global economy," he continued.

Oil prices had been trending upwards, much focus had been placed on geopolitics, and there had been the supply disruptions in Syria, South Sudan, Yemen and the North Sea, although this had been offset by Libya taking enormous strides in bringing its production back to pre-uprising levels.

"While there has been no shortage of oil in the market, as we head into the second half of 2012 there remain many concerns for the market to digest and act upon," El-Badri said.

He stated that global economic growth continued to be patchy and uncertain, although in the United States, there had been some recent positive signs.

The US Federal Reserve had suggested there were grounds for "cautious optimism" and both labour market and consumer confidence were improving. However, the nation's gross domestic product (GDP) for the first

quarter of 2012, at 2.1 per cent, was a little down on the three per cent for the final quarter of last year.

In Japan, said El-Badri, there had been some improvements in areas such as manufacturing and consumption, but the country was still suffering from the consequences of last year's triple disaster.

The Euro-zone continued to struggle with sovereign debt issues and the region's economic growth continued to decline with the forecast for 2012 put at a contraction of 0.3 per cent. Unemployment rates remained high and there were many uncertainties for Euro-zone leaders.

"The road ahead remains extremely rocky," commented the OPEC Secretary General.

Continuing with the gloomy economic picture, he noted that the United Kingdom had recently announced that it had slipped into its first double-dip recession since 1975.

Meanwhile, in China, while economic growth remained above eight per cent, El-Badri said that recent data suggested that the economy was slowing. However, it was unclear whether this was a long-term trend, or just a short-term issue.

And in developing countries, in general, there were concerns as to whether problems in the OECD region would spill over into their economies, particularly in terms of reduced demand for their exports, as well as less investment capital from the developed world.

"There is clearly much to keep policymakers engaged as countries and regions strive to get their economies back on track. The economic recovery remains fragile," contended El-Badri.

In terms of crude oil prices, he said that in 2012 so far they had generally been seen moving in an upwards direction.

However, he stressed, current prices were not due to market fundamentals. Speculation was pushing prices higher. Trading was being made on the perception of a supply shortage, rather than evidence of any actual or impending shortfall. "It is related to geopolitics. In many respects it can be described as a 'fear factor'," he said.

"As we are all aware, oil is increasingly being treated as an individual asset class by financial investors. Since 2005, the total open interest of the NYMEX and ICE Brent crude oil futures and options has increased sharply.

"Today, the level of open interest on the NYMEX is close to 3 million contracts. And combined with Brent it is 3.85m. It means that the level of open interest on these two exchanges is equivalent to more than 44 times the size of physical demand.

El-Badri noted that the issue of speculation was discussed in much detail at the 13th International Energy Forum (IEF) Ministerial in Kuwait. It was also a topic that had been an area of cooperation between the International Energy Agency (IEA), the IEF and OPEC, agreed upon at the 12th IEF in Mexico in 2010. To date, this had included two workshops and forums on the interlinkages between physical and financial energy markets and on regulation.

"I am sure everyone here can appreciate that we cannot avoid speculation and volatility altogether. It is a part of the market. However, it is essential that we look to mitigate extreme volatility and excessive speculation, which are detrimental," he professed.

The OPEC Secretary General stated that it was also important that prices did not impede economic growth.

On the supply side, he said, the disruptions seen this year had been more than offset by the quick return of Libyan crude to the market. In December last year, Libyan crude output was close to 800,000 barrels/day, whereas now it was around pre-war levels of 1.5 million b/d.

"In addition, it should be noted that the first quarter of the year saw a relatively strong increase in non-OPEC supply. From the 2011 average, it increased by 400,000 b/d in the first quarter of this year, led mainly by developments in North America."

All this underscored the fact that world oil supply was increasing. It had done so significantly since May last year.

Looking at some of the figures, El-Badri said that total OECD commercial oil stocks remained at healthy levels and, in the past month or so, had trended upwards and were now above the five-year average.

Forward demand cover in March for the OECD was over 59 days, compared with the five-year average of 56.

And there had also been a steady build up in commercial and strategic petroleum reserve stocks in non-OECD regions, such as China and India.

In terms of OPEC crude production, El-Badri told the conference that there has been a steady rise in the Organization's output over the past few years. In fact, since March 2011 there had been an increase from 28.8m b/d to the current 31.3m b/d, which reinforced the fact that the Organization was making sure its consumers' needs were being met.

At the same time, said El-Badri, spare capacity remained at comfortable levels. For OPEC, it was at around eight to ten per cent of the Organization's total capacity — comfortable levels that were seen remaining for the foreseeable future.

"When looking at the global demand and supply balance, the story for 2012 is one of rising demand and plenty of supply to meet this increase. The projection is for a surplus supply balance in each quarter of 2012," maintained El-Badri.

He said that global oil demand was forecast to grow by around 900,000 b/d in 2012 with non-OPEC supply expected to increase by 600,000 b/d during the year.

"From OPEC's perspective, demand for its crude in 2012 is projected to average 30m b/d. This is more than 1m b/d lower than its current production volume," commented El-Badri, adding that this development reinforced the Organization's commitment to market stability. 

Iranian exhibition scores big in participating companies from overseas





Left: Iranian First Vice President, Mohammad Reza Rahimi, at the Exhibition's opening ceremony.

Iran's annual *International Oil, Gas, Refining and Petrochemical Exhibition*, one of the largest events of its kind on the global energy calendar, proved to be as popular as ever in 2012.

The Exhibition, the 17th edition so far to be staged, was attended by 44 countries, which was ten per cent higher than in 2011.

Held over four days from April 17 at Tehran's International Permanent Fairground, the event also attracted the participation of over 300 foreign companies, up by 35 per cent over the previous year, as well as a near 1,000 domestic firms.

"Despite the international sanctions on Iran, the number of countries participating in this year's exhibition has increased," Es'haq Rouyvar, Director of the 17th Iran oil show, was quoted as saying.

He disclosed that initially 1,255 Iranian and foreign companies had voiced an interest to participate in the Exhibition and 940 domestic and 315 foreign firms were actually listed to take part.

Rouyvar stressed that the participation of several international oil companies from the United States, Germany, the United Kingdom, Italy, South Korea, Malaysia and Norway indicated the importance of the Iranian petroleum industry in the international arena.

The official inauguration ceremony of the Exhibition, which was delayed by one day because of bad weather, was attended by Iranian First Vice President, Mohammad Reza Rahimi, Petroleum Minister, Eng Rostam Ghasemi, the Chairman of the Board and Managing Director of the Iran International Exhibitions Company, Kazem Akbarpour, and a number of Iranian parliamentarians, including members of the Energy Commission, ambassadors, representatives from foreign countries, including Nigeria's Foreign Affairs Minister, and oil officials.

Rahimi, in his opening address, highlighted the growing importance of his country in the global marketplace and paid tribute to the progress made by Iranian manufacturing concerns locally.

He revealed that, as a result of this push, some 60 per cent of the technologies needed for Iran's domestic petroleum industry were now being provided from inside the country.

In previous years, he stated, more of the industry's needs were imported from abroad, but by the end of this year's development programme, the nation would reach a rate of 85 per cent self-sufficiency. This was being made possible through the utilization of the capacity of domestic universities and research centres.

According to Rahimi, under the government's Fifth Development Plan, investment in the oil industry would



Over 300 firms participated in the Exhibition. Above, visitors look at publications on the OPEC Secretariat stand.

reach around 110,000 million tomans (Iranian currency) and \$185 billion.

He noted that production in the country's petrochemical plants had increased 40 fold.

"Petrochemical production in the Iranian year 1357 (1978–79) was 1.6 million tons. This rate increased in 1383 (2004–05) to 15m t and, with dramatic growth, hit 40.2m t annually in 1389 (2010–11)," he was quoted as saying.

Iran's presence in more than 60 per cent of global export markets, including South America and Africa, the Iranian Oil Exchange, which opened last summer, and the use of new financial instruments in oil industry projects, were all important developments for the domestic petroleum industry, he said.

Rahimi maintained that Iran would become the reference for the pricing of petroleum products in the Middle East region in the near future. All Iranian investors in various projects abroad were invited to deal in the buying and selling procedures of the country's oil products.

The First Vice President stated that, based on the country's assessments, the domestic construction of equipment, in terms of both quality and price, in comparison to similar imported goods, was now more advantageous and both the public and private sectors had been able to operate successfully in this regard.

Ghasemi also reinforced the extent of the progress achieved in domestic manufacturing, stating that local industrialists today had the capacity to run all oil projects.

The speed at which the South Pars field was being developed was one such instance of the advancements being made.

No alternative to crude oil

Turning to the global oil sector, the Minister professed that there was no alternative to oil in world markets, stressing that there was no limit on the sales of Iran's high-quality crude in world markets.

"We hope that the Iranian and foreign companies and oil industry partners attending the 17th International Oil, Gas, Refining and Petrochemical Exhibition will exchange and have good experiences about the anticipated plans for this year, especially the planned \$200bn investment for the development of oil, gas, refining and petrochemicals in the Fifth Development Plan."

Meanwhile, Akbarpour said in his opening comments that the Exhibition provided the opportunity for the most significant companies, organizations and institutions within and outside the country to communicate and negotiate in a highly specialized area.

He pointed to the importance of the numerous meetings, workshops and seminars that were being held alongside the Exhibition, which provided the necessary research for knowledge-based companies.

Quoted by the Foreign Affairs and Public Relations Department of the Iran International Exhibitions Company, Akbarpour said that, in his opinion, these events were equally as important as the Exhibition itself, in which domestic oil companies and foreign firms presented new and valuable processes, while creating a suitable business environment.

Also highlighting the effectiveness of the Exhibition, Rouyvar pointed out that the event was an opportunity for active sectors in the oil and gas fields from around the world to gather and exchange information, interact and transfer experiences, and present their latest findings and achievements in the oil industry.

The Exhibition, he continued, which in 2012 centred around upgrading domestic manufacturers, represented the development, vitality and ceaseless efforts of the Islamic Republic of Iran in moving forwards and towards expansion and prosperity.

"I hope that the Exhibition will provide a good platform for the development and expansion of Iran's domestic potential and will be a window to the promotion of the country's oil industry in the international fields," he added.



Ghasemi highlights Iran's importance to global oil sector

The recent rise in crude oil prices has confirmed the standing of Iran within the international oil sector, according to the country's Petroleum Minister, Eng Rostam Ghasemi.

Speaking to reporters at the the 17th International Oil, Gas, Refining and Petrochemical Exhibition in Tehran, he said the 20 per cent hike in international oil prices was an indication of the importance of Iranian oil to global markets.

"Iran is the second major OPEC oil producer on world markets and the increase in the price of crude shows the significance of its oil," he affirmed.

The Minister was referring to the sanctions imposed on Iran's oil operations, which have contributed to higher crude prices on international markets over fears that the country's oil exports could be substantially affected.

He warned that in case of the continuation of sanctions on Iranian oil, conditions in the international market would be "vice-versa to normal".

But he said that considering Iran's domestic capacities, the country should actually play a crucial role in global decision-making.

A pioneer in all spheres

Referring to Iran's 100-year oil and gas background, he said the country should be a pioneer in all spheres and not just in the sale of oil products.

Concerning the domestic petroleum sector, the Minister said it was important to raise the volume of extractions since estimates showed that Iran's oil and gas reserves in-situ totalled more than 600 billion barrels.

In applying existing recovery methods, the country would be able to get as much as 150–160bn b of oil from its fields, which was equal to 25 per cent of its total reserves.

Ghasemi pointed out that an addition of just one per cent to the current volume of extraction would result in an increase in the nation's oil capacity of 6m b.

"Using the present methods of recovery would guarantee oil for more than 100 years in Iran. The reserves of many other countries will be exhausted within the next 30 years," he observed.



Eng Rostam Ghasemi, Iran's Petroleum Minister.

Speaking on the second day of the Exhibition, Ghasemi was asked why so many more companies had attended the 2012 event, compared with the previous year.

He replied that free trade was something the whole world was looking forward to achieving.

"The likelihood of them trying to limit free trade (with sanctions) is very slim," he professed.

The Minister noted that despite the sanctions and all the political pressures, numerous companies from more than 44 countries had taken part in the Exhibition.

"So, free trade has not been threatened. And I would personally like to thank all the companies that took part in this Exhibition. The names of these companies will be remembered by Iran's oil sector," he added.

Later, speaking at a seminar on 'Upgrading national production capacity, relying on national labour and capital', held on the sidelines of the Exhibition, Ghasemi said the Petroleum Ministry was actively supporting industrialists in the country.

"We side with all industrialists and manufacturers producing the parts and commodities needed by the Iranian petroleum industry and we support them by financing the whole production stage, beginning from the modeling to the marketing of products, as well as the conclusion of long-term contracts," he explained.

The Minister said that the products and services on show at the Exhibition reflected the strong determination of the Iranian authorities to support domestic production, create job opportunities and encourage sound financial conditions.

This, he stated, was all aimed at providing a vibrant and flourishing economy, backed by an efficient economic system and relying on industrial production at a high technological level.

This would help the country turn into a generator of technology, rather than a mere consumer, he added.



Research vital to OPEC's work, 12th MDTC participants told



Dr Hasan M Qabazard (c), Director, Research Division, who welcomed participants to the MDTC. He was accompanied by Alejandro Rodriguez Rivas (r), Head, Finance and Human Resources Department, in charge of Administration and IT Services Department, and Dr Taher Massoud Najah, Downstream Oil Industry Analyst in the Energy Studies Department.

Research is the driving force behind OPEC and extremely important to the efficient functioning of the Organization and the activities of its Member Countries.

That was the message Dr Hasan M Qabazard, Director of OPEC's Research Division, had for this year's attendees of the Organization's 12th Multi-Disciplinary Training Course (MDTC), held at the OPEC Secretariat in Vienna in mid-April.

In welcoming remarks to the 34 participants from Member Countries attending the 2012 course, he said that the research carried out by the Secretariat provided the Organization's various organs with the fundamental data that guided OPEC Ministerial decisions.

"And it helps the Organization in its efforts to ensure regular and stable demand for oil, as well as a regular and steady supply. Working towards this stability is part of this Organization's over-arching mission," he stressed.

The MDTC, which is held each year, has gone from strength to strength. The course, held over four days, brings together a diverse mix of cultures, knowledge and experience from Member Countries, all aimed at improving the understanding of the Organization's work, as well as the workings of the international oil market.

The intensive programme, which features comprehensive presentations on all facets of the Secretariat's work, also sets out to increase cohesion and solidarity among Member Countries, as well as acquaint participants with the management and staff of the OPEC Secretariat.

Qabazard said that seeing the assembled participants was a reminder that OPEC was an international organization united by a common purpose.

He pointed out that the MDTC was designed to offer professionals from Member Countries a broad overview of what the OPEC Secretariat did.



Course participants heard presentations on all aspects of the Secretariat's work.



Right: In 2012, the MDTC went 'green'. All participants received handheld digital readers with all the lectures and presenters.



Left: OPEC Secretariat officials at the MDTC (l-r): Haidar Khadadeh, Oil Supply Analyst; Dr Mohamed El-Shahati, Economic Analyst; Dr Joerg Spitzzy, Senior Research Analyst; Esam Al-Khalifa, Oil Demand Analyst.



Anna Gredinger

Right: Team building is a very important function of the MDTC.



Left: Angela U Agoawike (second right), Head, PR and Information Department; with (l-r): Kurt Zach, Senior Applications Specialist; Khaled Albader, Archive Specialist; Layla Abdul-Hadi, Head, Human Resources Section; Ghada Sahab, Web Content Specialist.



Above: Dr Mohammad Taeb (r), Environmental Coordinator; and Dr Taher Massoud Najah, Downstream Oil Industry Analyst.

In this way, participants were provided with a better understanding of the role OPEC played in research, in promoting a positive image of the Organization to the world and in bringing benefits to Member Countries.

“In addition, this course will also give you some insights into the dynamics and fundamentals of the global oil market and related issues.

“In an increasingly interdependent world, in which oil plays a central role, it is essential for us all to broaden our understanding of the often complex elements that make up the global oil market,” he affirmed.

But the OPEC Research Division Director stressed that the course was not viewed as a one-way street, with the OPEC Secretariat and its staff providing all of the inputs.

“We welcome your feedback and expertise and we hope that we are all able to share in frank and informative discussions and debates.

“This training course is a central element for enhancing collaboration and improving understanding between the OPEC Secretariat and its Member Countries, as well as between Member Countries themselves,” he stated.

The Course was divided into eight sessions.

Session 1 featured an introduction to the Secretariat, while *Session 2* provided an overview of short-term issues, including the global economic outlook, supply and demand, prices, and volatility and stock movements.

Session 3 covered energy modeling, including models that the Secretariat used for its long-term planning, while *Session 4* highlighted data issues, both at the Secretariat and with the Joint Organizations Data Initiative (JODI), based in Riyadh, Saudi Arabia.

Qabazard informed that *Session 5* emphasized longer term related topics, such as the role of technology, the impact of energy policies, reserves and resources, fiscal regimes and carbon emissions, while *Session 6* covered OPEC’s corporate image and its public relations activities.

Session 7 looked at legal and human resource issues, while *Session 8* comprised a panel discussion, which



Participants were also able to take a tour of the city of Vienna.

included OPEC Secretary General, Abdalla Salem El-Badri, and members of Management. It also featured the presentation of MDTC certificates.

“We hope you learn about all the activities in which the OPEC Secretariat is involved and how this Organization benefits its Member Countries,” Qabazard told the participants.

“I hope that you all make the most of the next four days. All of you have the potential to make a significant

impact on the future of the industry, though this need not be done in a highly visible manner, or even at a very senior level.

“We do, of course, wish you much success in your careers and hope that the training you receive this week will benefit the future of your countries, OPEC and the oil community at large.

I also hope this week’s course helps establish a sound and effective long-term relationship between you



Abdalla Salem El-Badri (c), OPEC Secretary General, speaks to the participants at the 2012 MDTC. He is accompanied by (l-r) Abdullah Al-Shameri, Head, Office of the Secretary General; Asma Muttawa, General Legal Counsel; Mehdi Asali, Modelling and Forecasting Analyst; Oswaldo Tapia Solis, Head, Energy Studies Department; Fuad Al-Zayer, Head, Data Services Department; Angela U Agoawike, Head, PRID; Layla Abdul-Hadi, Head, Human Resources Section.



The MDTC participants also paid a visit to the OPEC Fund for International Development (OFID), where they were addressed by Suleiman J Al-Herbish, the institution's Director-General.



and our Organization. Perhaps by the end of the Course you will appreciate even more the positive impact OPEC has made on the lives of all of us here, by virtue of being Member Country nationals,” he said.

During their stay in Vienna – which Qabazard described as rich in history and culture and, without doubt, one of the most beautiful capital cities in the world – the participants also visited the OPEC Fund for International Development (OFID) and held talks with its Director-General, Suleiman J Al-Herbish.

A welcome dinner was held at Hotel de France and participants enjoyed a city tour by bus, complete with an English-speaking guide.

And for the first time in 2012, the MDTC went ‘green’. All participants received handheld digital readers with all the lectures and presenters, including contact details and the course agenda.



Participants pictured outside the OFID building in Vienna.



Some 34 participants attended the 2012 MDTC. Here they are in a group photo with OPEC Secretary General, Abdalla Salem El-Badri, and other Secretariat officials.

UK moves to establish first commercial-scale CCS plants

One of the most vexing questions for operators during industrial processes and coal and gas-fired power generation is how to manage carbon emissions, which damage the atmosphere and contribute to climate change.

Carbon capture and storage (CCS) is the mechanism that has the potential to capture up to 90 per cent of carbon dioxide (CO₂) emissions from power generation.

But no infrastructure has yet been built to a commercial scale where the oil industry is confident that solid results to reduce emissions can be deployed all over the world.

Developing the technology

The United Kingdom government is hoping to change all that by inviting applications from companies that are developing CCS technology to win funding for their project.

In early April, the government re-launched the £1 billion ‘*CCS Commercialization Programme*’ competition where it will scrutinize submissions that focus on the design, construction and operation of commercial-scale CCS applications.

The winner(s) will be offered suitable financing under the UK’s Electricity Market Reform to bring the projects to fruition in the country.

Companies that are interested in participating must show that their project is either a full chain CCS, or part-chain capable of becoming part of a full chain project in the future — by 2016–20.

The power plant and capture facility must be in the

UK and the storage site offshore. There are no targets on how many CCS plants should be up and running in the country. Previously, this was four large-scale CCS demonstration projects by 2018, as the government wants industry to lead on the developments.

However, the competition requires state aid approval from the European Commission.

Edward Davey, the UK’s Secretary of State for Energy and Climate Change, described the package as “one of the best anywhere in the world. We have £1bn available to support the upfront costs of early projects, along with a commitment to further funding through low carbon ‘contracts for difference’, we have £125m to support research and development, including a new UK CCS Research Centre, and we have the long-term incentives in place through our Electricity Market Reforms.”

Plans to capture emissions from a potential 30 gigawatts of power stations and industrial facilities have been published in a new road map by the Department of Energy and Climate Change, along with policy measures to help pay for the new technology.

With forecasts that the CCS industry will provide 100,000 UK jobs by 2030 and generate up to £6.5bn a year, the UK is keen to position itself as a leader in CCS technology, which, so far, on a global basis, has attracted \$40bn in support from governments.

OPEC, in recent years, has shown great interest in CCS, a process that its Members see, in combination with CO₂-enhanced oil recovery, as a ‘win-win’ situation in increasing oil reserves in mature fields and storing the carbon.

And one of its North African Members, Algeria, has been running a pioneering project to develop the technology for carbon capture and storage (CCS) through the removal of CO₂ from the gas produced at its In Salah field.

OPEC's interest in developing CO₂-EOR and CCS is reflected in the number of meetings it has participated in on the subject over the years.

In June 2004, the Organization held a Joint Workshop with the World Petroleum Congress in Vienna on 'Carbon capture and storage, CO₂ for EOR and gas-flaring reduction'.

Two years later, in September 2006, it organized a Joint Roundtable on CCS in Riyadh, Saudi Arabia, as part of the Organization's bilateral Energy Dialogue with the European Union.

And in November 2009, the Organization, as a member of the IEA's Greenhouse Gas Research and Development Programme, organized a workshop for Member Country scientists and professionals in Algeria, with the focus on CCS.

In a separate initiative, the UK government has also committed £60m to support CCS projects in developing countries.

This is not the first time that the UK government has tried to funnel interest in CCS via a competition: the last round collapsed in October 2011, following failure between the government and Scottish Power to agree on how much funding it would need for its Longannet CCS project after forecasted costs rose.

Professor Jim Watson, Director of the Sussex Energy Group at the University of Sussex, who has assessed

the technical, economic, financial and social uncertainties facing CCS technologies cautioned: "It will be vital to keep options open in the government's CCS commercialization programme.

A long way to go

"Whilst it is welcome that the government has learned from the mistakes of the past, and now plans to support a number of CCS technologies, there is a long way to go before CCS is a reality at full scale. Complex negotiations with industry lie ahead," he stated.

CCS works in three stages — by capturing the CO₂, transporting it by pipeline, and storing it underground in empty oil and gas reservoirs, or deep saline aquifer formations. In the UK North Sea, the British Geological Survey has estimated that storage capacity amounts to at least 7.8 gigatons.

Each element of the CCS chain — capture, transport and storage — is a proven technology with a track record of several decades in different industries. The challenge is to connect together on an industrial scale.

The other drawback for CCS investors is the lack of clarity around a CCS policy framework so they can receive the right signals to proceed with projects.

They have expressed concerns around driving down costs of implementing the technology, carbon prices and the safety of transporting and storing CO₂.

Globally, there are currently eight operational large-scale CCS plants in Norway, the United States/Canada, and the aforementioned Algeria. 

Monetary policy's inexorable push on oil

The trading of crude oil on global energy exchanges has become a very complex and intricate business. Gone are the days that simple supply and demand fundamentals governed the price at which crude oil was sold. Today, the financial markets and specifically the activities of a growing number of speculators have a big influence on price direction. And, as OPEC has warned repeatedly, their actions are indirectly causing wide fluctuations in prices and creating instability in the global oil markets, which serves no one's interests.

Ben Turney, a technical analyst living in Sweden, also holds the view that the financialization of international commodity markets, including crude oil, has been — and continues to be — a source of excess price volatility, a disturbing fact that he elaborates in this exclusive article for the OPEC Bulletin.

Tuesday, September 18, 2007, is not a date in the popular consciousness. It did, however, mark a watershed for the oil market. From that day forward, the pricing mechanism for crude fundamentally altered. The traditional forces of supply and demand were superseded by a new, more powerful force — monetary policy.

Over the course of the summer of 2007, West Texas Intermediate (WTI), the American benchmark crude, broke out through the \$70/barrel barrier and made a late surge to hit an all-time record close of \$81.51/b on September 18. This new record price was fairly remarkable in itself, but this was not the most significant event of that day.

For most of the preceding decade, oil had been in a structural bull market. Most commentators attributed this to increased demand from Asia, but recently traders' attention had been elsewhere. Their eyes were firmly fixed on the next anticipated action of the Federal Open Markets Committee (FOMC).

At its autumn meeting (see *Graph 1*), the FOMC announced a cut in interest rates of 0.5 per cent, lowering the base rate to 4.75 per cent. Citing the “tightening of credit conditions”, the Federal Reserve embarked on what would become one of history’s greatest monetary expansions. The effects of these policies were to have a profound impact on financial markets, none more so than oil.

The changing nature of the beast

Most financial professionals will agree that markets are a function of liquidity. Movements of price are best characterised as reversion to the mean. Advances and declines become more pronounced as monetary conditions tighten and relax. This effect is amplified as regulatory oversight is increased or reduced.

By the summer of 2007, a kind of trading nirvana had been reached. A series of measures around the world had ensured that both monetary policy and regulatory control had been successively relaxed to allow the free flow of international capital and the sustenance of globalization.

From 2002 to 2007, the major central banks doubled their balance sheets. Arguably, there were many benefits

to this liberal approach, but there were also severe unintended consequences.

This environment proved to be fertile breeding ground for speculative financial bubbles. Easy access to money and its unfettered utilization gave succour to an appetite for risk. Many would say this appetite became too strong, perhaps even all-consuming. Whatever the case, it certainly became the norm.

Even though serious concerns about the state of the United States housing market were apparent, market participants had become used to an era of low regulation and cheap money.

As anticipation grew that the FOMC was going to cut rates in early autumn, this encouraged a flurry of buying. Speculators took on positions and drove up prices.

Glance at most charts from this time and they all show the same pattern. The market expected the good times to continue and positioned itself accordingly.

Over the coming months, as storm clouds were brewing, the FOMC continued to cut rates and stepped in to underwrite the bailout of Bear Stearns. The message was clear. The Federal Reserve would act aggressively to underpin the financial system. Risk was definitely on.

Oil goes parabolic and then promptly crashes

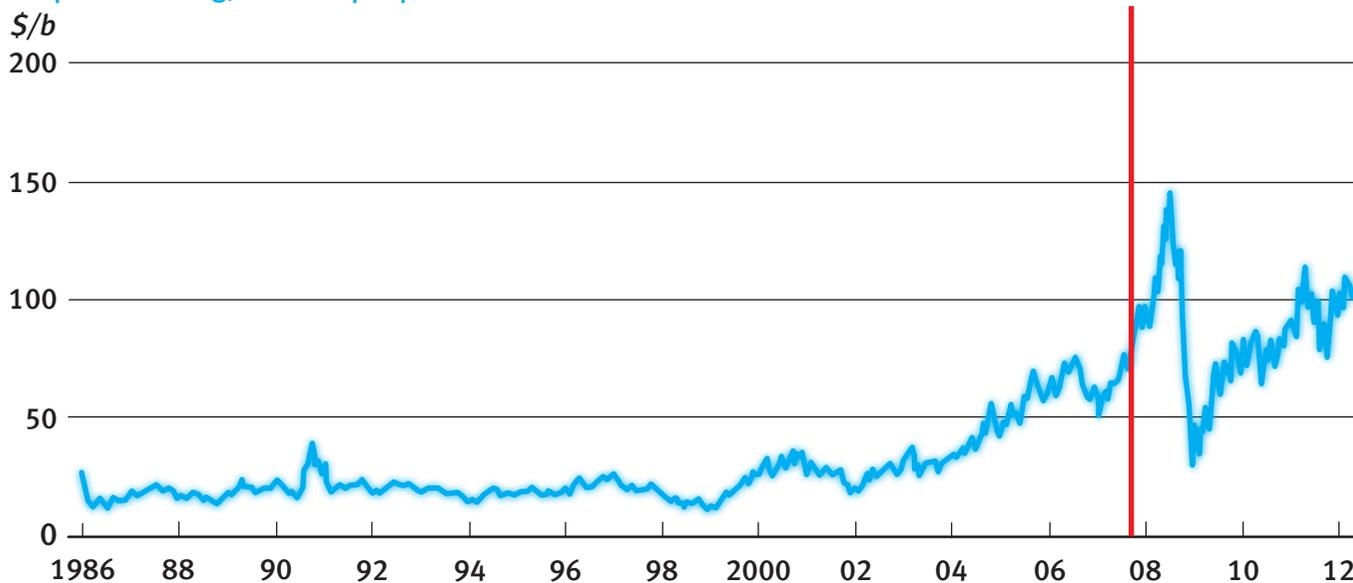
Before the Credit Crisis really hit home, the Fed-inspired buying frenzy led to wild swings in prices. Oil was especially susceptible to this. From mid-September 2007 to July 14, 2008, WTI went parabolic, setting an all-time record price high of \$145.16/b.

There was much discussion at the time as to what was causing such extreme price movements. In response to this, the Commodity Futures Trading Commission set up an Interagency Task Force, involving their European counterparts, to investigate events in the market.

On July 22, the Task Force released its first findings through an *Interim report on crude oil*. The timing could not have been more ironic.

One of the key findings of this report said: “To date, there is no statistically significant evidence that the

Graph 1: Cushing, OK WTI spot price fob



Source: www.eia.gov.uk.

position changes of any category, or sub-category, of traders systematically affect prices. This is to be expected in well-functioning markets.”

Within eight weeks, WTI had fallen by 30 per cent and by December 23, it hit a low of \$30.28/b (see *Graph 2*).

So, what caused the price of oil to fall off a cliff? Had the world found an alternative energy source? Had unimaginably vast new discoveries suddenly erupted into production? Had humanity cast their cars, trucks and vans to one side and taken to the joys of riding bicycles?

Of course not; but such a precipitous drop in price could easily have suggested such a paradigmatic shift in consumption, or supply.

It is true that economies had started to slip into recession. As the months went by this worsened, however, not to the extent that explains the 80 per cent crash from peak to trough. A commodity just should not exhibit such acute behaviour.

So, if demand had not collapsed, or supply had not massively increased, then there must have been another explanation for this move.

Cast one’s mind back to July 2008. As the subprime mortgage crisis grew and banks were forced to recognise larger and larger losses, liquidity was drying up. It was at this time that rumours were gathering pace of the trouble Lehman Brothers was in. Other banks around the world were failing, but Lehman presented a huge systemic risk.

Inevitably, the sector as a whole sought refuge in cash.

Crucially, this meant liquidating higher risk positions. For WTI to drop \$115/b in six months there was clearly a stampede to the exit. That this happened in parallel to the worsening financial crisis demonstrated the causal link between general liquidity conditions and the price of oil.

The only logical conclusion we can draw from this link is that oil had adopted the characteristics of a financial product. Underlying drivers of supply and demand would still remain fundamental, but they were no longer necessarily the most important factor steering the price.

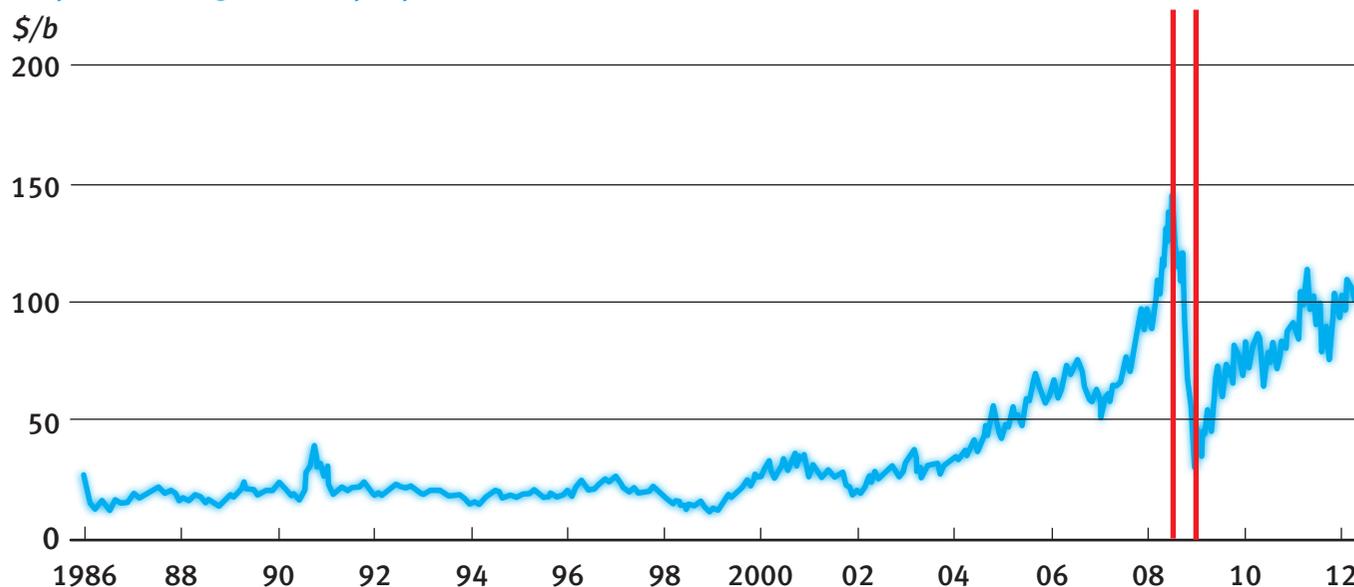
This view would be reinforced over the coming years.

The new normal

In response to the epic collapse in the financial markets, central banks around the world upped the ante in an unprecedented manner. They set in motion a grand economic experiment. Eager to avoid a repeat of the Great Depression, and in a bid to halt a deflationary death spiral, they fired up the printing presses. In this action the US led the way.

In the aftermath of the failure of Lehman Brothers and the bailout of AIG, US President George Bush signed the Troubled Asset Relief Programme (TARP) into law on October 3, 2008.

Graph 2: Cushing, OK WTI spot price fob



Source: www.eia.gov.uk.

This marked the beginning of a series of innovative and untested policy initiatives to avert a total financial meltdown. The following month, the Fed started buying \$600 billion of Mortgage Back Securities and a tidal wave of liquidity was unleashed on the world.

By March 2009, the Fed had grown its balance sheet to \$1.75 trillion of bank debt, but it was the introduction of the Public-Private Investment Programme (P-PIP), which heralded the bottom of the market.

In short, P-PIP gave the US Treasury a vehicle to lift the “legacy assets” off the balance sheets of distressed banks.

These “legacy assets” tended to be bundles of some of the worst investments made during the housing bubble and represented a veritable assortment of extreme poor quality and underperforming loans.

Their existence was causing great anxiety, not least because the holding banks had not really acknowledged the losses and taken the write-downs. By removing these “assets” from the financial system, the Treasury, at a stroke, eliminated the deflationary pressure, which had been holding back the inflationary impetus of all the new money in circulation.

Everything surged.

Between March 2009 and June 2010 (see *Graph 3*), the oil market behaved in a manner that gave clear indication that monetary policy was now the key driving factor.

While the global economy was gripped by recession, WTI first rose to and then passed beyond pre-September 2007 levels.

This seemingly inexorable rise was only brought to a halt when there was a lull in liquidity expansion. The original proposal for TARP authorised the programme to spend \$700bn.

However, popular outrage at the perceived preferential treatment of Wall Street manifested itself most visibly through the Dodd-Frank legislation.

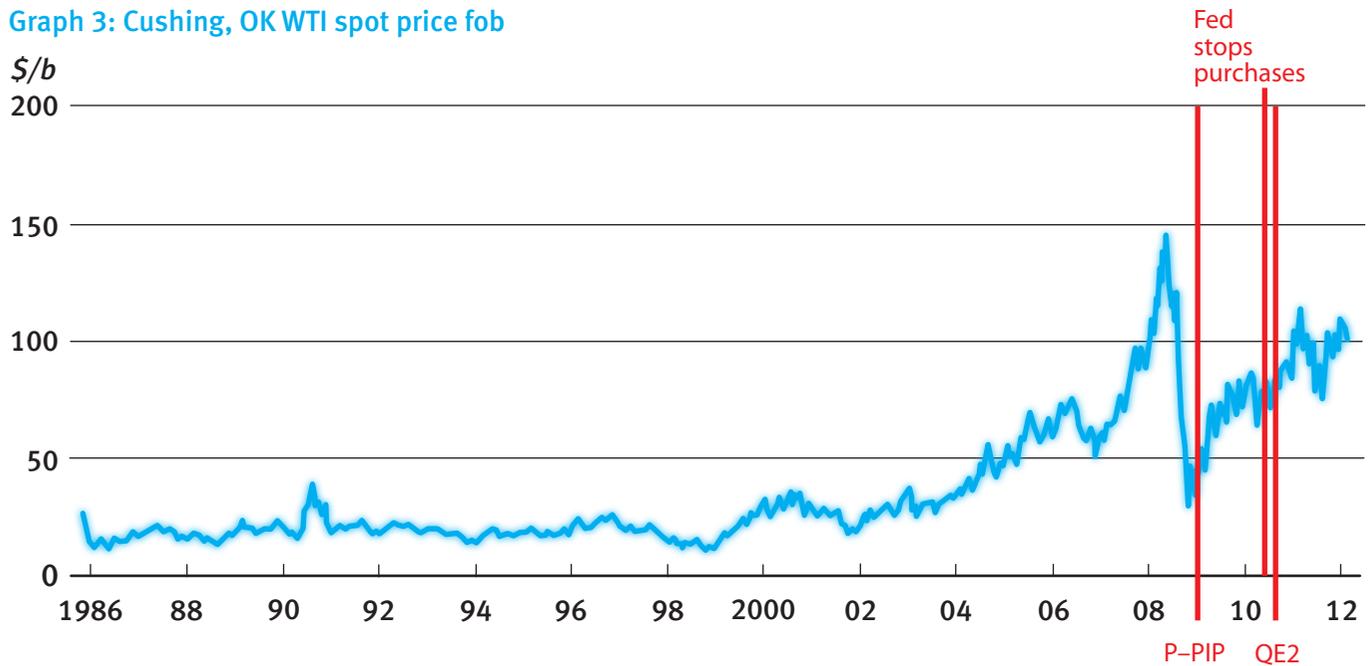
Leaving to one side the debate over how effective this law was in curbing excessive banking behaviour, it did have one key effect on markets. It reduced TARP’s sanctioned spending to \$475bn.

Just before Dodd-Frank came into law, in June 2010, the Federal Reserve also announced its intention to stop its purchasing programme. The official line was that the economy was starting to show signs of improvement. The general mood probably had a bearing on this decision.

Again in anticipation of this cessation, markets had already stalled and then fallen. WTI fell from \$86.19/b on May 3 to \$68.03/b on May 21, 2010. By historical standards, an \$18/b drop within three trading weeks would have been pretty exceptional and suggestive of a serious event, such as supply-interrupting conflict.

However, this decline was just part of the new normal. Liquidity conditions were once more tightening, so

Graph 3: Cushing, OK WTI spot price fob



Source: www.eia.gov.uk.

financial market participants did what they always do when facing this threat. They closed their higher risk positions and retreated to cash.

Although not as extreme as the previous example of the summer of 2008, this sell-off further revealed the bond between oil and monetary conditions.

Over the coming months, oil traded in a wide range. In August, the Federal Reserve restarted its purchasing programme and, on November 3, it formally announced the introduction of a new programme of Quantitative Easing.

Called 'QE2' this fresh scheme allowed the Federal Reserve to purchase an additional \$600bn of "longer-term Treasury Securities" by the end of the second quarter of 2011.

Markets had already started rising in expectation of QE2, so it was no surprise that they continued their march higher for the following six months. Of course, WTI was affected by the political events of last spring, but it is surely no coincidence that the price topped just after QE2 came to an end.

The extremities of the trading patterns were yet more evidence that factors beyond supply and demand were influencing the price. When QE2 was announced on November 3, WTI closed at \$84.45/b. By April 29, 2011, it peaked at \$113.39/b, only to retreat \$20/b in the next seven weeks.

The drop was especially noteworthy for its timing. The threat of interruptions to supply had not completely eased during these two months, so this did not really explain the decline. Something else was obviously afoot.

The credit crisis was back and two new financial crises threatened to engulf the global economy.

Uncertainty grips

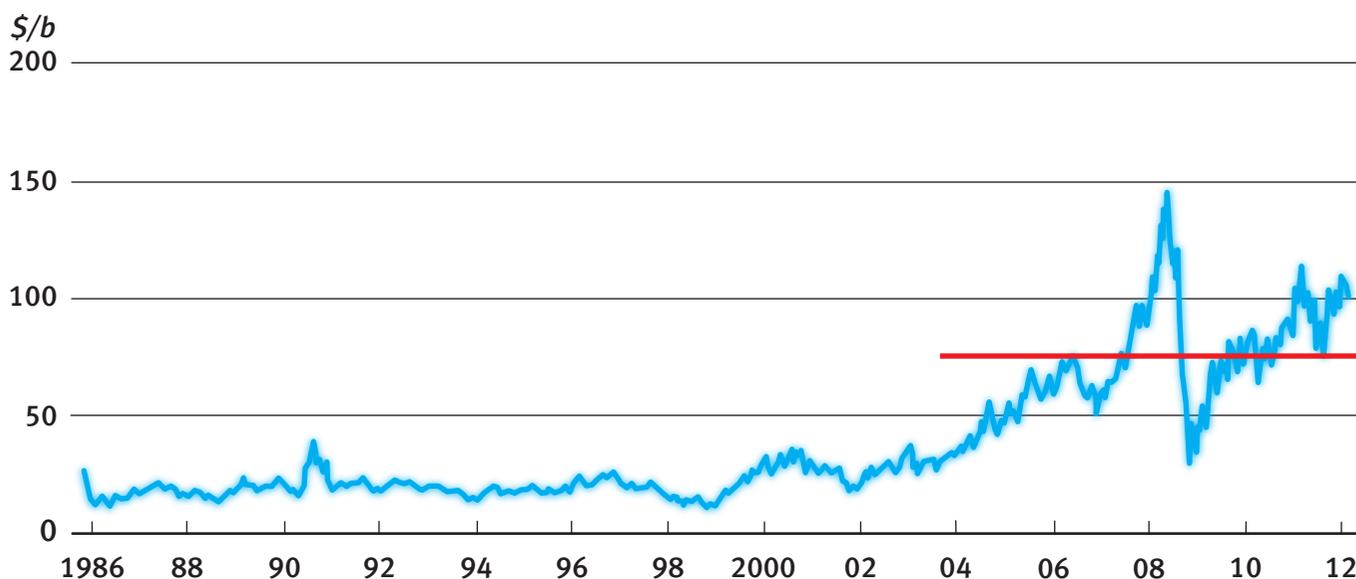
Putting it mildly, the summer of 2011 was one of uncertainty. As America grappled with the deficit ceiling impasse, Europe teetered on the brink, trying to resolve its sovereign debt crisis.

Risk was taken off the table and WTI fell sharply. The repetition of this pattern was not exactly surprising. However, what was interesting was where crude fell to.

On October 4, WTI closed at \$75.40/b. As the chart above shows, this had been a significant level of resistance just over five years before. Now this price acted as support (*see Graph 4*). Oil bottomed and rallied \$20 over the next five weeks.

Once again, the pronounced nature of this rise was more symptomatic of a racy financial product, rather than a sedate commodity, but there was also another important technical aspect to note.

Graph 4: Cushing, OK WTI spot price fob



Source: www.eia.gov.uk.

When resistance becomes support, or vice versa, this can suggest that the underlying financial instrument has experienced a rerating to the better or worse. In the case of oil, the picture is clear. A new, higher trading range had been established.

Even the threat of a Greek default and contagion spreading to other stricken nations, or the deadlocked US political system grappling with its budget deficit, could not push the price of oil further down.

It was not that long before that \$75/b oil seemed really expensive. Now this price acted as a floor. For this to have happened, the market must have fundamentally altered.

And the cause for this had to have been recent global monetary policy.

The final evidence

To explain crude's resilience in bearing the weight of such tremendous macro-pressure it is necessary to consult published statistics of what has actually happened in the last four-and-a-half years, beyond just the actions of the Federal Reserve.

To appreciate the scale of these policies, consider first the following table of nominal GDP rates for the major developed nations (*see Table 1*).

Now examine the aggregated balanced sheets of the world's major central banks (*see Table 2*).

On the right hand column, one will notice the percentage these central banks have increased their balance sheets by since the end of 2007. The estimated total aggregated value is now about \$13.8tr.

Some \$7,000,000,000,000 of this (0s added for emphasis) did not exist four-and-a-half years ago. Everyone has been printing, including the European Central bank (ECB).

The central bank assets of the G4 (US, Euro-zone, Japan and Great Britain) are now 24 per cent of the combined GDP of this group's economies. In September 2007, this figure stood at ten per cent. The recession accounts for some of this gain, but the overwhelming majority is explained by expansionist monetary policies.

And as if this was not enough, the major developed nations have also persisted with historically low interest rates (*see Table 3*).

The cheap availability of credit to financial institutions is just another liquidity boosting measure. In the US, there is speculation that the Federal Reserve will maintain its Zero Interest Rate Policy (ZIRP) until 2015. If they stick to this path, then it is probable other central banks will follow suit.

What this tells us is straightforward. Quite simply, for

Table 1: Nominal GDP rates of selected major economies 2011

Country/region	GDP 2011 (nominal) \$ million	Rank
World	70,160,000	–
European Union	17,720,000	1
US	15,060,000	2
China	6,989,000	3
Japan	5,855,000	4
Germany	3,629,000	5
France	2,808,000	6
UK	2,481,000	8

Source: <https://www.cia.gov/library/publications/the-world-factbook/>.

the foreseeable future, we can expect more of the same expansionist policies, which have defined the last four-and-a-half years.

It's all to do with debt

All this leaves one unanswered question. Why are central banks pursuing such aggressive, potentially inflationary policies? The answer is both simple and complex. It is all to do with debt.

A cursory glance at some of the headline statistics can be deeply troubling. According to the Federal Reserve, total US debt, including government, corporate and household debt, is currently about \$57.3tr.

The Bank of Japan has stated its public national debt is c.220 per cent of the country's GDP.

A report from PricewaterhouseCoopers in late 2010 declared that total British debt (public and private) was £7.5tr in 2009, or roughly 5.4 times GDP. This report forecast the amount would rise to £10.2tn by 2015.

As for Europe, well who really knows what the situation is there? Greece has already received two bailouts in the order of several hundred billion euros (including the associated write-downs).

Portugal and Ireland have also come to rely totally

on the ECB's purchasing of their national debt and the yields of Spanish ten-year bonds have just jumped back to 6.1 per cent (six per cent being the level at which their borrowing costs apparently become unsustainable).

These statistics are fairly disparate, but they have been chosen to demonstrate the breadth and depth of the challenge facing monetary policymakers. Further analysis of associated or comparative data-sets will only confirm the severity of the situation. Yet, herein lies a key contradiction.

While much of the world is weighed down by unprecedented burdens of debt, the system appears able to sustain itself through the creation of money. How long this will last is anyone's guess, but, in the meantime, this is exceptionally bullish for oil and other commodities.

The problems associated with debt will not simply go away. Nor is it likely that economies will be able to repay what they owe, without drastic reductions in living standards. Default is a possibility, but this is in no one's interests.

For the time being, the most probable outcome is that central banks will continue to print as much as they dare, without triggering dangerous levels of inflation. While the monetary system continues to function the additional

Table 2: Major Central Bank aggregated balance sheets

Central Bank	Estimated balance sheet total (\$:€:¥:£:CHF millions)	Estimated balance sheet total (\$ millions equivalent)	Per cent increase since end of 2007
People's Bank of China	\$4,500,000	4,500,000	93
European Central Bank	€2,965,333	3,877,470	51
Federal Reserve	\$2,869,519	2,869,519	222
Bank of Japan	¥140,000,000	1,725,780	125
Bank of England	£340,000	538,968	87
Swiss National Bank	CHF 273,574	297,427	230

Sources: Bloomberg, Thomson Reuters, Bank of England.

capital has to go somewhere. Financial markets are the obvious outlet.

With this in mind, it is little wonder that the market for oil has performed in the manner it has. Reduced regulation has made it easier to trade, while monetary policy has ensured market participants are well funded and able to push prices higher.

Thanks to this, oil now acts as a proxy for general liquidity. It could even be argued it acts as a proxy for liquidity expectations, further underlining the speculative nature of its traded contracts.

We are witnessed such an event only recently. From May 2–17, the price of WTI fell from \$106/b oil to \$93/b oil. The resumption of the European Sovereign Debt crisis has been the primary catalyst for this drop. Uncertainty over the policies of France's new President, Francois Hollande, and concerns over the sustainability of Spain's national debt are at the forefront of market concerns. Once again, risk is being withdrawn and the first asset classes to fall significantly were the most speculatively traded.

As long as this situation lasts, the price of oil will remain high.

This may be a controversial view, but just look at the chart for WTI since September 2007. Clear and repetitive patterns emerge. Consider the extremity of

Table 3: G4 Base rates

Central Bank	Interest rate (per cent)
European Central Bank	1.00
Federal Reserve	0.25
Bank of Japan	0.10
Bank of England	0.50

Source: Thomson Reuters.

price movements in this period. Note the occurrence of advances and declines in anticipation of and reaction to central bank actions, or worsening monetary conditions.

Mark the amplified response to supply-affecting, real world events. Observe the strength of the uptrend and the establishment of a higher new trading range, in stark contrast to the anaemic economic recovery. Finally, just look at the price.

In this grand economic experiment we are living through, \$100/b oil has become the new normal. ☛

Kenya's oil discovery offers transformational opportunity for East African nation



Kenya's rolling plains, luscious landscape, glorious beaches along the Indian Ocean and diverse wildlife across 19 national parks and game reserves are the driving force of its economy.

The government's aspirations for the tourism industry, which contributed 13.7 per cent to the country's gross domestic product (GDP) in 2011, is high as it hopes to double tourism numbers and revenue before 2015. Travel and tourism's total contribution to GDP in 2011 was \$4.5 billion.

But now Kenya may have something else significant to offer the world — oil. It has taken over six

decades of exploration and 31 dry wells to reach this point and the reaction, unsurprisingly, has been euphoric.

The government has been struggling to contain the excitement of Kenyans who are hoping that fuel bills will drop sharply within a short time frame.

Kenya's neighbours — Uganda, Ethiopia and South Sudan — would benefit from any oil infrastructure that is established, especially as they have been in talks to construct an oil pipeline from South Sudan to the port of Lamu in Kenya.

Any exploration interest in Kenya is also likely to rub off on its neighbours, who will use Kenya's success to drum up investor interest in their exploration blocks and licensing rounds.

Turkana County in northern Kenya, where the oil was found, is a semi-desert environment with harsh weather conditions.

After six decades of failed exploration, Kenya has announced its first oil discovery in Turkana County, in the north of the country. Although its size and commerciality are yet to be determined, expectations are high that the find will be transformational — offering Kenya the opportunity to slash its fuel import bill, exert influence in the region, and position it as a petroleum hub for East Africa.



Focusing on the Turkana Rift basin in March, Tullow Oil drilled its first well in Kenya, Ngamia-1, onshore Block 10BB in Turkana County.

It encountered in excess of 20m of net oil pay and found oil at a depth of 1,041 metres; the well is yet to reach its total depth of 2,700 m. Tullow Oil is operator of the concession with a 50 per cent stake, while Africa Oil holds the other half.

Tullow Oil described the crude discovered as being waxy in nature and similar to that found in Uganda.

“Moveable oil with an API greater than 30° has been recovered to surface,” Angus McCoss, Exploration Director at Tullow Oil, said.

“To make a good oil discovery in our first well is beyond our expectations and bodes well for the material programme ahead of us. Tullow is working closely with the Government and people of Kenya as a committed long-term partner to unlock the oil potential of the region,” he affirmed.

The partners were expected to have reached the total depth of the well by the end of April and afterwards planned to spud the Paipai-1 wildcat on Block 10A in the second half of this year, using the Weatherford 804 rig.

Manage expectations

By the time Tullow Oil completes drilling the Ngamia 1 well, it will have spent up to \$40 million. Although it is still very early days, Kenya’s discovery is bringing hope of transforming the country’s economy, creating thousands of jobs, and boosting its political influence in East Africa.

Tullow Oil has hinted that the discovery could transcend the 1 billion barrels it has found in neighbouring Uganda. The partners are still to analyze well data to determine the commerciality of the find, but so far they are optimistic.

However, depending on the complexity of the project, it could take years before any field comes into production — the experience of Uganda, which found oil in 2006, is a pertinent example of the potential delays that can occur.

Describing Tullow Oil’s success in Kenya as a “major breakthrough”, the country’s President, Mwai Kibaki, has tried to calm the excitement by saying: “It is ... the beginning of a long journey to make our country an oil producer, which typically takes in excess of three years. We shall be giving the nation more information as the oil exploration process continues.”

Kibaki’s announcement, however, needs to be supported by an information campaign to educate nationals about how the industry works so that their expectations are realistic. More wells would have to be drilled to decide if the field warranted investment.

Operational and policy challenges

Turkana County has a history of tribal conflict and its residents are demanding that they see tangible benefits from Tullow Oil’s presence. With a terrible famine and starvation last year, Turkana has been desperately searching for water — but finding oil instead.

Tullow Oil and its partners are building relations with the communities through the provision of education, health and water. The company is constructing primary schools in Turkana South. These new facilities mean that local students can now experience learning in modern classrooms.

Bringing a new field onstream cannot happen in a vacuum; the Kenyan government has many challenges that it needs to urgently address if it is to ensure fast monetization of the discovery.

The operators have found it difficult to bring heavy and sensitive

equipment to the remote site because of poor roads. The government will need to formulate a new legal framework to facilitate investment and establish contracts between itself and the oil companies.

Transparency and accountability must be the underlying principles so that revenues are not lost through corruption and mismanagement, as in other African oil producers.

Then there is also the importance of not allowing the oil sector to distort Kenya’s economy by focusing on this to the neglect of anything else: Kenya’s 2030 vision of being an industrialized and middle income country will require flourishing agricultural, wholesale and retail trade, manufacturing and tourism industries.

This will require an upgrading of Kenya’s physical infrastructure as its lack of investment has left it in a dilapidated state, adding to both the time and cost of doing business.

Security is another consideration — primarily as tensions are high with lawless Somalia and this presents a major obstacle to doing business in the country. In addition, piracy offshore will pose a serious risk to deep-water exploration.

Drilling plans

Tullow Oil has other interests in Kenya and will embark upon an extensive drilling programme. It has a 50 per cent operated interest in Blocks 10BB, 10A, 12A and 13T, covering over 67,000 sq km (six times the size of the licences in Uganda).

Last year, Tullow Oil farmed into Block L8, offshore Kenya, and now holds a 15 per cent equity position with a five per cent additional equity option. In February, Tullow Oil farmed in to Block 12B.

Unsurprisingly, the oil discovery has drawn interest from other operators in neighbouring blocks who now feel to some extent that their bet has been de-risked.

This year, Kenya will see several wells drilled onshore and there have been expressions of interest in deepwater offshore blocks from France’s Total and Petrobras of Brazil. There are 16 unlicensed blocks and nine companies have made enquiries about 13 of them.

Anadarko of the United States has five deep-water blocks offshore the north of Kenya with a 45 per cent working interest: L-05, L-07, L-012, L-11A and L-11B.

It believes there is the potential for light oil and is confident that with its gas success in Mozambique, this trend will extend into Kenya. One well is scheduled for

the fourth quarter of this year and another for early 2013.

For offshore block L8, Apache and its partners have just finished shooting 1,400 sq km of 3-D seismic over the large Nanaa and Kozi leads. The consortium will drill Mbawa-1 in the third quarter of this year, targeting gross upside of 610m b of oil equivalent.

The partners are Apache (operator) with 50 per cent, Origin Energy (20 per cent), Pancontinental Oil and Gas (15 per cent), and Tullow Kenya (15 per cent).

Lion Petroleum has also unveiled plans to drill on Block 1 in Kenya in the fourth quarter of this year where it is mapping major structures with existing 2-D seismic and shooting new seismic.

This block is in the Mandera-Lugh basin in north eastern Kenya on the border of Somalia and Ethiopia. It is the southern extension of the Ogaden basin which has four trillion cubic feet of proven gas reserves.

Australia's Pancontinental Oil and Gas is also collecting 3-D seismic over the offshore L6 Block, which will cover 680 sq km and is expected to cost A\$13.67m.

The acreage lies in the Lamu Basin and within the Tana River delta, north of recent world-scale natural gas discoveries off the coasts of Mozambique and Tanzania. Drilling is planned for next year.

Simba Energy will acquire 750 sq km of seismic data over Block 2A in May. James Dick, a Director at the firm, said: "The planned survey covers a portion of both basins within Block 2A where the company has already identified two exploration leads by re-working existing 2-D seismic data. These existing exploration leads will receive the immediate focus, along with any additional leads identified from ongoing 2-D re-interpretation."

Resource rich neighbours

Kenya's find can reshape the political dynamic in East Africa if it turns out to be substantial. And if the resources are large enough for export, it can be the bridge into Asia. As the largest economy in the region, its clout is in no doubt.

To date, Tullow Oil has invested at least \$1bn in the exploration of oil and gas in Uganda, landing a 1bn b oil field, which was revealed in 2006.

Uganda had hoped to be an oil exporter into Kenya and other neighbouring states, a development that would give it a leadership position in the region. In partnership with China's CNOOC and Total, the group will start production next year.

But this looks like it could be derailed as Kenya now

is considering how it can anchor itself as a petroleum hub for East Africa, utilizing these internal and external discoveries. Effectively, both will have to compete for investment capital.

Mozambique, Uganda and Tanzania's experiences of striking oil and gas had left Kenya highly puzzled as to why it had not enjoyed a similar track record considering similar geological similarities.

This can be attributed to poor quality data that prevented operators from drilling successful wells in the Isiolo and Lamu basins. Companies prefer to focus their energies on proven plays with a production track record, instead of frontier plays like Kenya, where unpredictable oil prices leave them nervous about carrying out drilling.

Kenya is riding a wave of interest in Mozambique that has been catapulted into the limelight; it has emerged as a gas province. Further discoveries last month confirmed this as Italy's Eni, operator of Area 4, increased the resource base by at least 10tr cu ft of gas, of which 8tr cu ft are contained in reserves there. The Mamba complex in Area 4 now has an estimated potential of at least 40tr cu ft of in-place gas, according to Eni.

Operators have expressed interest in acreage and so the government is planning another licensing round for blocks in the southern part of the offshore Rovuma Basin at the end of this year.

It is looking for companies that can develop its gas industry, suggesting that integrated oil and gas firms could have an advantage.

Outlook

The National Oil Corporation (NOC) of Kenya estimates that petroleum consumption in Kenya will hit 10m tonnes by 2030, compared with 4m t today. Any indigenous discoveries will be a welcome relief as fuel accounts for 25 per cent of the country's imports bill.

The NOC is formulating a master plan to categorize the nation's petroleum requirements through to 2030, according to Ken Mugambi, Strategic Planning and New Business Development Officer, through establishing special economic zones around infrastructure needs, which so far are concentrated in the south.

Another suggestion is developing project clusters that could be marketed for private and public participation and proposing the cost finance structure and legal environment to enable these ventures.

The NOC has also begun to envision a petroleum hub in East Africa that would tap into its hydrocarbon resources and those of Mozambique, Tanzania and Uganda — in a similar fashion to Rotterdam in Europe, or Singapore in the Far East.

Kenya's oil discovery has now placed the country in the international spotlight. Discussions in the local press are already focusing on how profits would be split between the government and the oil companies — before a single drop has even been produced on a commercial scale.

Investors are now flocking to Kenya and are eager to make money, but Kenyans are also demanding that oil wealth delivers jobs, education and opportunities. The government knows it must deliver on both. ■■

First oil — now Ghana prepares to launch gas industry

Ghana, whose Jubilee oil field start-up in 2010 launched the country into the exclusive oil producers' club, is now busy ushering in a new era — natural gas. Eventually, with the right planning, it hopes to develop its own resources of the environmentally friendly fuel, which is widely used in power generation.

The *OPEC Bulletin* reports.





Shutterstock

Ghana has secured an \$850 million loan from the China Development Bank Corporation for its gas infrastructure project, led by the newly formed Ghana National Gas Company and the China Petroleum and Chemical Corporation (Sinopec).

This amount is part of a wider loan package totaling \$3 billion, which focuses on several projects. Ghana, in turn, will make repayments through delivering to China 13,000 barrels/day of oil at market prices over 15-and-a-half years.

Gas is being sourced from the giant Jubilee field — around 120m standard cubic feet/day under the initial phase — which will be sent to a new greenfield 150m cu ft/d processing plant to produce lean gas, propane, butane, liquefied petroleum gas (LPG) and condensate.

Other gas discoveries in the country, including the Sankofa, Dzata, Tweneboa, as well as North and South Tano fields, will also contribute to the plant in Domunli, near Bonyere, in the Western region.

Sinopec will construct and commission the gas processing plant, alongside a 36 kilometer shallow water offshore pipeline from the Kwame Nkrumah FPSO to the plant; a 120 km onshore pipeline from the gas processing plant to Aboadze; a 75 km onshore pipeline from Esiama to Prestea; and a jetty to export natural gas liquids.

The lean gas will be transported to the existing power plant in Aboadze, near Takoradi. The propane, butane, LPG and condensate will be stored and sent to both the domestic and foreign markets.

John Dramani Mahama, Ghana's Vice President, signed the deal in Beijing in April.

New dynamic in Ghana's relations

China's interest in Africa is underpinned by its need to import natural resources to feed its economic growth.

But the country is also offering help to governments to build roads and railways and foster trading opportunities. This has led to a new dynamic in Ghana's relationship with China.

Although the loan is critical for Ghana's fledging natural gas industry, it is not without controversy. Critics have accused the Ghanaian government of using its oil as collateral for the loan, a charge Mahama denies.

Other concerns centre on the amount of interest Ghana will end up paying — \$5bn — according to reports and that it breaches its Petroleum Revenue Management Act which states that collateralization is limited to a maximum of ten years.

There are also worries about whether Ghanaians will be awarded the jobs in building and maintaining the infrastructure, or if they will go to the Chinese.

However, there is pressure on Ghana to quickly develop its gas industry, considering its aspirations for the power sector. Whether Ghana decides to liberalise or privatize the gas industry remains to be seen.

Speaking to *Bloomberg*, Mahama defended the government's decision, arguing that securing loans from the World Bank and the International Monetary Fund was a tiresome process with onerous terms.

The gas development represents further good news for Ghana's petroleum sector. The country is set to ramp up output following the encouraging results from Tullow Oil's appraisal well near its giant Jubilee field, where production is now expected to reach between 70,000 b/d and 90,000 b/d in 2012. ■■

Saudi Minister reassures consumers of adequate supplies

Naimi dismisses reports of any oil shortage — wants \$100/b crude price

Global crude oil supplies, which are currently in excess of market requirements, are not expected to tighten as the year progresses, according to Saudi Arabia's Minister of Petroleum and Mineral Resources (*pictured*).

Speaking during a visit to Japan, Ali Naimi said there was between 1.3–1.5 million barrels/day of extra supply over demand in the marketplace.

He told reporters that the Kingdom was currently producing around 10m b/d of crude, which, coupled with higher output from non-OPEC producers, had led to the ample supplies.

Naimi, who was touring several countries to attend industry events, used the occasions to calm fears about high prices and any threat of a potential shortage of crude oil on world markets.

Later, during a visit to Adelaide, Australia, he said his country was seeking an oil price of around \$100/b, which it deemed as acceptable to all parties.

Naimi told reporters that Saudi Arabia was working with other Members of OPEC towards bringing crude oil prices down to that level.

The Minister said that the fact producers were pumping more supplies than the market required should give comfort to consumers.

It meant that more oil was going into stocks. In fact, he said, inventories were already at the equivalent of around 58 days of demand.

Addressing the Australian Petroleum Production and Exploration Association (APPEA) conference, Naimi said that the price he was speaking of was necessary for tapping further oil resources in the Kingdom.

"It is that technology, partly driven by prices, that enables ever greater reserves to be booked, and eventually recovered," he stated.



Saudi Arabia was aiming to boost the recovery rate on its major producing fields from 50–70 per cent.

While emphasizing that oil and gas would remain a core part of the future energy mix, Naimi maintained that non-hydrocarbon forms of energy would also be required.

Saudi Arabia saw it in its fundamental long-term economic interest to develop renewable energy, including wind, solar, geothermal and tidal energy sources.

"I see the increasing use of renewables as supplementing existing energy sources, which will help to prolong our continued export of crude oil," he said.

Naimi said the Kingdom's investments in renewables were also for environmental reasons.

"We accept that global warming is happening. We accept that Saudi Arabia, like all countries, needs to be more energy efficient," he said.

Oil market balances

Earlier, on a visit to South Korea, Naimi stressed that, fundamentally, the international oil market remained balanced and there was definitely no lack of supply.

He pointed out that Saudi Arabia, which had invested a great deal to sustain its production capability, would also use its spare production capacity to supply the market with any additional volumes that might be required.

Other OPEC producers, as well as Saudi Arabia, had raised output, which ensured that global oil stocks were at high levels.

Concerning the high prices of international crude seen since the beginning of 2012, the Minister professed that there was no rational reason for them.

In an opinion piece in the London *Financial Times*, he said such a high level of price was bad news — bad for Europe, bad for the United States, bad for emerging economies and bad for the world's poorest nations.

“A period of prolonged high prices is bad for all oil-producing nations, including Saudi Arabia, and they are bad news for the energy industry more widely,” he said.

The Minister said it was clear that geopolitical tensions in the Gulf region and concerns over supply were helping to keep prices high.

“Yet, fundamentally, the market remains balanced. It is the perceived potential shortage of oil that is keeping prices high — not the reality on the ground. There is no lack of supply. There is no demand which cannot be met,” he reiterated.

Naimi said it was clear that sustained high prices were starting to take their toll on European economic growth targets. They were contributing to trade balance deficits and feeding inflationary pressures.

“It is an unsatisfactory situation and one Saudi Arabia is keen to help address. In an interconnected world, European economic growth is in our national interest. No one benefits from a stagnating European economy and we want to do what we can to help encourage growth,” he was quoted as saying.

The Minister pointed out that Saudi Arabia did not control the price of oil and it sold its crude oil according to international prices.

“But the Kingdom remains the world's largest producer and the country with the greatest proven reserves, so it has a responsibility to do what it can to mitigate prices,” he maintained.

Naimi said that the bottom line was that Saudi Arabia would like to see a fair and reasonable price that would not hurt the global economic recovery, especially in the emerging and developing countries, and one that would generate a good return for producing nations and attract greater investment in the oil industry.

He noted that total commercial stocks for OECD nations were within target and the days of forward cover were enough to handle almost any eventuality.

The Minister said that what Saudi Arabia wanted to actually do was correct the myth that there was, or could be, a shortage.

“It is an irrational fear, a fear without basis. Saudi

Arabia's current capacity is 12.5m b/d, way beyond current levels demanded and a reliable buffer against any temporary loss of production.”

Naimi said the Kingdom's assurance that it would use its spare production capacity — currently running at more than 2.5m b/d — to supply the oil market with any additional required volumes was not empty rhetoric.

“We have proved to be a reliable supplier many times in the past. We increased production following the invasion of Iraq. We increased production following a workers' strike in Venezuela in 2002. We stepped in following a surge in demand from emerging economies, specifically China, in 2004.

“We increased supplies to the US in the wake of Hurricane Katrina. And when a popular uprising swept through Libya in early 2011, we stepped up production to offset any losses.

“We have done it many times before — we will do it again,” he stated.

The Minister said that the other, sometimes overlooked, fact was that Saudi Arabia's crude oil was suitable and acceptable for most global refineries.

“We are also uniquely capable of supplying volume when and where it is needed, thanks to multiple delivery points, our strong marketing capabilities and ample storage — inside the Kingdom and in other parts of the world, especially the Mediterranean, northern Europe and Asia,” he explained.

“For the record, as things stand today, our inventories in Saudi Arabia and around the world are full. Our Rotterdam inventory is full, our Sidi Kerir facility is full, our Okinawa facility is full — 100 per cent full.”

Naimi said that it should also be noted how other OPEC Member Countries, such as Libya, Iraq and Angola, had also taken positive strides forward in increasing output. They were well poised for further advances.

“And if you look towards Canada and the US, these nations are increasing oil production this year and beyond and further supplies are being contributed from Russia, South America, Kazakhstan and Azerbaijan,” he said.

“So the story is one of plenty. Supply is not the problem and it has not been a problem in the recent past. There is no rational reason why oil prices are continuing to remain at high levels.

“We want to see stronger European growth and realize that reasonable crude oil prices are key to this,” he added.

Naimi concluded by saying that, over the past 200 years, oil had powered incredible and unprecedented economic and social progress in Europe and the wider world.

“It has transformed our lives and will continue to power the global economy for many decades to come. It will only do so if prices reach a more reasonable level — so it is in all our interests to do what we can to achieve this aim,” he said. 

Algeria planning revised hydrocarbons law by end of 2012



Dr Youcef Yousfi, Algeria's Minister of Energy and Mines.

Algeria is aiming to revise its hydrocarbons legislation by the end of 2012 in a bid to make foreign investment in the development of the country's non-conventional oil resources more attractive.

According to Ali Hached, an adviser to Algeria's Minister of Energy and Mines, Dr Youcef Yousfi, the government planned to offer incentives for the exploration of non-conventional hydrocarbons in the country.

Speaking at a conference in Paris, he was quoted as saying: "The amendments to Algeria's hydrocarbons law will introduce tax incentives that aim to boost offshore exploration and attract foreign companies that can bring technology know-how for the development of unconventional reserves."

Proportionate with the risk

Hached said the amendments would offer improved terms for future contracts in either conventional or non-conventional oil. The terms would more than likely be proportionate with the risk.

He revealed that new schemes coming onstream in the country would boost Algeria's oil output to over 1.5 million barrels/day by the end of 2012.

In April, Yousfi announced that Algeria planned to change the way it levies tax on some energy projects so that foreign oil companies pay tax on profits they make from the projects and not on turnover.

Quoted by the *El Khabar* newspaper, he said the new tax mechanism would apply only to oil and gas projects not currently in production and considered high risk.

"The tax imposed will be based on their profitability of the projects, not as before, based on turnover," he stated, adding that the changes were included in draft amendments to the hydrocarbons law drawn up by the Energy and Mines Ministry.

Shale gas development

Algeria is now looking to develop its shale gas and offshore production to help ensure security of supply. But the government is seeking the help of foreign oil companies to achieve its long-term ambitions.

Abdelhamid Zerguine, Chief Executive Officer of the Algerian national energy company, Sonatarch, told *Reuters* on the sidelines of the conference that the production of shale gas could start within the next three years.

But he stressed that while the country was keen to make conditions more attractive to foreign investment, the government would remain the majority partner in all schemes.

Under the current system, the government applies taxes on foreign partners, but Zerguine conceded that the complex nature of non-conventional oil projects would mean "we need to make some adjustments."

Concerning the shale gas, he told the conference that a recent study had shown that with an extraction rate of 20 per cent over an area of around 180,000 square km, output could reach 0.6 billion cubic metres/square kilometre.

Zerguine disclosed that Sonatrach's investment budget over the next five years had been expanded from \$68bn to \$80bn, including \$12bn for non-conventional resources.



Iraq looking to secure investment for petrochemicals development

Iraq, which is continuing to make great strides in its domestic oil sector, with exports rising, is now looking to boost other areas of its petroleum activities, including the very lucrative petrochemicals operations.

The country has estimated that it will need foreign investment of \$35–50 billion between 2017 and 2023 to bring its planned petrochemicals programme to fruition.

According to Mohammed Abdullah, a Deputy Minister responsible for companies, the country was looking to produce 10 million tonnes of petrochemicals a year during the above period.

Quoted by *Reuters*, he stated: “This is our current view, which could be revised upwards in the future.”

Abdullah disclosed that the government was in discussions with Royal Dutch Shell and the Chevron Phillips Chemical Company to invest in some projects already identified.



Iraq's crude oil exports in April were at their highest level in over 30 years.

Projects in the pipeline

These comprised an \$8–10bn petrochemicals plant to be built by Shell in the southern oil hub of Basra, which would produce products for plastics, and the rehabilitation of a petrochemicals factory and the construction of a new plant in Basra, both by Chevron Phillips.

Gas from projects Iraq is currently developing would be used as feedstock for the plants.

The country's gas operations are being expanded in line with the push to boost Iraq's oil production capability. Crude exploitation is realizing large amounts of associated gas, which is being captured for domestic use.

By 2017, it is hoped that Iraq's oil output potential will amount to 12 million barrels/day, although recent reports have suggested that 8m b/d is more realistic in the current climate of lower demand.

Commented Abdullah: “As we progress in increasing oil production, we will progress in increasing our petrochemical industries.”

The move towards petrochemicals comes at a time when the country has reported the highest level of crude oil exports in over 30 years.

The country's State Oil Marketing Organization (SOMO) has disclosed that, in April, Iraq's crude oil exports rose to 2.508m b/d, up by 191,000 b/d over the previous month and the highest level since 1979.

Recently opened new offshore export terminals are helping the country increase its oil exports. Two terminals are already in operation and three others are set to go onstream over the next few years.

In April, oil exports from Basra rose to 2.115m b/d from 1.917m b/d in March.

According to OPEC's *Monthly Oil Market Report* for May, quoting secondary sources, Iraq produced 3.025m b/d of crude oil in April, up by 218,000 b/d from March. In 2011, the country's oil production averaged 2.667m b/d. ■■

BP's return to Libya seen as significant development



Michael Daly, BP's Executive President for Exploration.

Another significant development in the ongoing recovery of Libya's oil production activities is the news that oil major BP is to return to the North African OPEC Member Country.

Nuri Berruien, Head of Libya's National Oil Corporation (NOC), has signed an agreement in Tripoli with Michael Daly, BP's Executive President for Exploration, lifting the *force majeure* announced by BP last year on its Libyan Exploration and Production Sharing Agreement (EPSA).

Significant milestone

"This represents a significant milestone in BP's plans to return to the exploration of onshore and offshore blocks in Libya," Daly was quoted as saying in a statement.

The company suspended its operations in the country because of last year's internal conflict and its return is being seen as a major event for the country.

Libya continues to make good progress in bringing its oil production capability fully back online after the loss of output suffered in 2011.

BP withdrew its workers and closed operations in Libya in February last year, very soon after first protests broke out in the east of the country.

The news of BP's return is positive for the Libyan government which has already seen other majors, including France's Total and Eni of Italy, restart their operations in the country.

However, it is likely to be some months before BP is in a position to re-start its exploration work.

A company spokesman was quoted as saying that the first thing BP needed to do was re-establish the contracts for drilling and logistics. They needed to get the contractors to return for the onshore and offshore drilling, then "it is back to work as soon as possible."

The spokesman said that obviously the security situation in the country would also determine how quickly operations were up and running. At the moment, the company felt that security and safety was "sufficiently manageable."

The news of BP's return comes at a time when crude oil production in the country continues to recover.

Production set to be fully restored

The aim was to have output of 1.6m b/d by June, but according to Omar Shakmak, Libya's Deputy Minister of Oil and Gas, at the end of May, the country's production of crude and condensates already amounted to 1.6m b/d.

This was about 90 per cent of the country's pre-conflict level.

Shakmak stated that production was expected to be fully restored "in the beginning of the third quarter, hopefully."



Draft Nigerian oil legislation stipulates end to gas flaring

Nigeria is taking serious steps to ensure that gas-flaring in the country is eliminated by the end of 2012 by imposing fines on any company allowing the practice to continue.

Such a stipulation is contained in the government's newly drafted Petroleum Industry Bill (PIB), which, according to sources close to the legislation, is now close to being finalized.

Nigeria has for long been Africa's leading oil producer, but it has also been one of the world's biggest flarers of gas, which is associated with oil production activities, but not captured and utilized.

"Natural gas shall not be flared or vented after December 31, 2012, in any oil and gas production operation, block or field, onshore or offshore, or gas facility," the draft of the PIB states. However, it adds that such flaring can take place in "exceptional and temporary circumstances."

Fines for flaring

The draft continues: "Any licensee who flares or vents gas without the permission of the Minister in (special) circumstances ... shall be liable to pay a fine which shall not be less than the value of the gas."

According to latest Nigerian National Petroleum Corporation (NNPC) figures published by the News Agency of Nigeria (NAN), the country flared around 30 billion standard cubic feet of gas in January this year.

Of that amount, joint-venture partner, ExxonMobil, flared 9.85bn cu ft of gas, followed by Chevron with 8.25bn cu ft. In addition, Shell flared 5.44bn cu ft of gas.

Gas flaring has taken on a global dimension over the years with the World Bank estimating that as much as five trillion cu ft of gas was flared worldwide in 2011, releasing 360 million tonnes of carbon dioxide (CO₂) into the atmosphere.

Meanwhile, the 200-page PIB, a copy of which was obtained by *Reuters*, lists plans to partly privatise and list the NNPC, tax oil company profits at 20 per cent for deep offshore and 50 per cent for shallow, or onshore schemes, while giving the Petroleum Resources Minister

supervisory powers over all institutions in the industry.

The new legislation, which is aimed at completely overhauling the country's petroleum activities, is long awaited and has suffered many delays.

In recent months, the country's President, Goodluck Jonathan, has been pushing for it to be completed.

He has called on the National Assembly to fast-track the legislation, while, earlier this year, Petroleum Resources Minister, Diezani Alison-Madueke, set up a committee to speed up the passing of the oil law.

The reform of the NNPC is seen as key in the new legislation, in addition to formally drawing up future working conditions for the government's longstanding joint-venture oil partners.

In February, Mrs Alison-Madueke renewed Nigeria's oil licence with ExxonMobil of the United States, covering activities that produce around 550,000 barrels/day of the country's crude oil production.

The 20-year deal was given the go-ahead after months of negotiations and before the PIB was finalized.

Mrs Alison-Madueke was quoted as saying that the ExxonMobil leases, covering the OML 67, 68 and 70 blocks in the Niger Delta region, were renewed on a mutually fair basis on which to work together over the next two decades.

The Minister has since announced that similar renewals with Shell and Chevron would be signed very shortly.

Shell, the largest operator in Nigeria, has onshore assets that can produce 1 million b/d of crude.

"In order to show our commitment to a vibrant upstream sector ... we have started the renewal of leases in good faith. Renewals with Chevron and Shell are expected to be concluded in June," the Minister was quoted as saying in Abuja. ■■



Diezani Alison-Madueke, Nigeria's Petroleum Resources Minister.

UAE opts for nuclear to help satisfy rising domestic energy demand

With domestic energy demand in the United Arab Emirates (UAE) set to rise considerably in the years ahead, the country is moving on all fronts to meet the challenge — including opting for nuclear.

It is already committed to constructing four nuclear power installations and plans are in the pipeline for further units in the years ahead.

Energy consumption growing fast

Energy demand in the country is today essentially based on natural gas and growing fast.

Official figures show that the UAE's total energy consumption in 1971 was barely 1.3 million tons of oil equivalent. By 2010, it had reached the level of 86.8m toe, marking just over 11 per cent annual growth, more or less similar to the gas demand expansion rate.

There is almost total dependence on gas for electricity generation and water desalination and both are expanding quickly, due to urban and industrial development.

Electricity generation, which was just 17.1 terawatt hours (TWh) in 1981, stood at 88.6 TWh in 2010, a growth rate of almost six per cent a year.

The UAE's Gasco, which was incorporated in 1978, is now one of the largest gas-processing companies in the world. Its reserves grew from 2.4 trillion cubic metres in 1980 to 6tr cu m now.

Production of the fuel, which was a modest 1.5 billion cu m in 1971, grew to almost 80bn cu m in 2010. Consumption in the same period expanded from 1.3bn to 60.5bn cu m.

The country's crude oil sector is also on a path to expansion. Total production capacity today stands at around 2.7m barrels/day. Almost all the country's output comes from Abu Dhabi, while Dubai accounts for just 40,000 b/d.

However, Abu Dhabi's onshore and offshore developments, including expansions to the ExxonMobil-led Upper Zakum field, are set to bring the country's capacity to 3.5m b/d by 2017.

With the nuclear option, work is reportedly due to start in July on the first of the nuclear plants.

According to Kim Joong-kyum, President and Chief Executive of the Korea Electric Power Corporation (KEPCO), which struck the deal with the Emirates Nuclear Energy Corporation (ENEC) in December 2009, said the work would start four months ahead of schedule, pending regulatory approval by the end of June.

Completion was scheduled for 2017–20.

He announced that KEPCO would next year also begin discussions with the UAE on another agreement to build four additional nuclear plants to be completed by 2021.

"Our efficiency will increase as we build the first four plants. We will achieve cost competitiveness if the same type of reactor is chosen ... we can shorten construction time, meaning earlier returns on investment," Kim was quoted as saying.

Under the existing accord with ENEC, KEPCO is contracted to design, build and help operate four 1,400 megawatt nuclear power units. The value of the contract for construction, commissioning and fuel loads was estimated at around \$20bn.



Venezuela strengthens oil and gas cooperation with Japan, China

Venezuela's Minister of Popular Power of Petroleum and Mining has signed a number of agreements covering future cooperation between his country and Japan. The OPEC Member Country has also strengthened its ties with China.

Rafael Ramirez, who is also head of the national oil company, Petroleos de Venezuela SA (PDVSA), said at a joint signing ceremony in the Japanese capital, Tokyo, that Venezuela was "very optimistic" about the various areas of cooperation with Japan in the future.

"We see these as significantly important and these will be the foundation of the bilateral cooperation going forward," the Minister was quoted as saying in reference to PDVSA's latest agreements with Japanese firms.

The accords reached include a three-year extension of an oil and gas cooperation deal with the state-owned Japan Oil, Gas and Metals National Corporation, which Ramirez inked with the company's President, Hirobumi Kawano.

Japan's Mitsui has also signed a protocol with PDVSA to look at ways and means of securing additional funding for the 140,000 barrels/day El Palito refinery in Venezuela.

In addition, Marubeni has reportedly agreed to study the provision of additional financing for oil products' offtake.

Important partner

Japanese Minister of Economy, Trade and Industry, Yukio Edano, who attended the signing ceremony, stressed that the moves were a "significant outcome" of the fourth round of the Japan-Venezuela energy cooperation working group, which began in April.

"For Japan, Venezuela is an important partner mainly in energy," he was quoted as telling the joint ceremony.

In outlining his country's petroleum standing, Ramirez noted that Venezuela had around 300 years' worth of petroleum resources, backed by the 297 billion b of proven oil reserves of its giant Orinoco Oil Belt.

The signing of Japan's latest agreements with Venezuela comes after Japanese trading houses Itochu and Mitsubishi signed a \$1.5bn oil import deal with PDVSA, with financial and export credit support from the Japanese government, in June last year.

Meanwhile, Venezuela is also establishing stronger ties with fast-growing China, the world's second-largest oil consumer.

Ramirez was quoted as saying that PDVSA was looking to boost oil production under its Petrosinovensa joint venture with the China National Petroleum Corporation (CNPC) from the current 120,000–300,000 b/d by 2015.

The Minister explained that the output increase formed part of a \$4bn loan deal reached with CNPC earlier this year. PDVSA holds a majority 60 per cent interest in the Petrosinovensa venture, while CNPC possesses the remainder. The project entails developing heavy crude from the Orinoco Oil Belt.

Ramirez stated that China had so far loaned \$32bn to Venezuela. The first loan, for \$4bn, was made in 2007, followed by a similar amount in 2009. A further \$20bn was extended in 2010 to fund infrastructure projects in Venezuela.

As repayment, Venezuela exported some 230,000 b/d of crude, as well as making fuel oil deliveries, in 2011, according to China's General Administration of Customs.

In another development, PDVSA and CNPC in April began construction work on an oil refinery in China's Guangdong province.

According to a statement on CNPC's website, the new plant, costing an estimated \$9.3bn, which is expected to be operational at the end of 2014, would have the capacity to process 20 million tonnes of crude oil annually.

The corporation said that the ambitious scheme was the largest refining venture in China, in terms of initial design capacity. It also quoted Guangdong Governor, Zhu Xiaodan, as revealing that the project was also the largest Sino-foreign joint-venture industrial project in Guangdong, in terms of investment.

The new plant would also process heavy oil from Venezuela to produce fuels such as gasoline, jet fuel and diesel oil.

Considerable investment is being ploughed into China's domestic refining capability to meet rising demand.

Under a five-year development blueprint, China's crude oil processing capacity is slated to reach 600m t annually by 2015.

Figures from the Ministry of Industry and Information Technology (MIIT) show that domestic fuel demand in the country is expected to rise from 245.2m t in 2010 to 320m t by 2015, an average increase of 5.5 per cent annually through 2015.

Fuel products' output in the country may rise by more than five per cent to 280m t this year, while crude refining capacity is expected to expand to 578.2m t, CNPC said in a previous statement in February. ■■

In the course of his official duties, OPEC Secretary General, Abdalla Salem El-Badri, visits, receives and holds talks with numerous dignitaries.

This page is dedicated to capturing those visits in pictures.

Ms Florence Mangin (l), French Permanent Representative to the UN and International Organizations in Vienna, visited OPEC Secretary General, Abdalla Salem El-Badri, on April 24.



Dr Michael Levi (l), Senior Fellow for Energy and Environment, Council on Foreign Relations (CFR), with Abdalla Salem El-Badri, OPEC Secretary General, on April 27, 2012.



Above: Qatar's newly appointed Ambassador to Austria, Mohammed Ali Al-Malki, visited the OPEC Secretary General, Abdalla Salem El-Badri, on May 25, 2012.



Left: Dr Surood Najib, Iraq's Ambassador to Austria, visited the OPEC Secretary General, Abdalla Salem El-Badri, on May 29, 2012.

Students and professional groups wanting to know more about OPEC visit the Secretariat regularly, in order to receive briefings from the Public Relations and Information Department (PRID). In some cases, PRID visits schools to give them briefings on the Organization and the oil industry. *Here we present some snapshots of such visits.*

Visits



Students from the Colgate University, Geneva Study Group, visited OPEC on April 25, 2012.



Students from the University of Economics, Faculty of International Relations, Bratislava, visited OPEC on April 27, 2012.



Students from the University of Groningen, Holland, who visited OPEC on May 3, 2012.



Students from the Istanbul Commerce University, who visited OPEC on May 9, 2012.



Students from the University of Michigan, visited OPEC on May 10, 2012.



Students from the University of South Carolina, visited OPEC on May 14, 2012.

Outreach



Under OPEC's outreach programme, OPEC officials visited the American International School in Salzburg, Austria, on April 27, 2012.



Officials from the Organization visited OMV on May 8, 2012.

At the dawn of OPEC — Eduardo Arturo Acosta Hermoso (1918–2012)

by Saul Castro

Eduardo Arturo Acosta Hermoso, who took an active role in helping to create one of the most important intergovernmental organizations ever to grace the contemporary world — OPEC — passed away on May 12, according to a statement released by the Venezuelan media. He was 94.

News of his death brought widespread emotional reaction in the public domain, especially from those that had the privilege to meet him and work with him, particularly members of the Venezuelan Society of Petroleum Engineers.

Acosta Hermoso passed away in Valencia, a city in northern Venezuela that is not so far away from the major El Palito refinery, an important installation in the petroleum industry, both for Venezuela and the American continent.

This man of multiple talents and facets spent his last years there with his sons, grandchildren and the memory of his late wife, Elena Sanabria.

He was buried in the East Cemetery of Caracas, also known as ‘Cementerio de la Guairita’.

A truly public servant of Venezuela

Eduardo Arturo Acosta Hermoso carried out a variety of professional activities throughout his working life — from academic teaching at the Industrial Technical School of Caracas in the mid-1950s, where he instructed in the subject of ‘Petroleum and Mines’, up to more historical moments, especially the visit made by the Venezuelan delegation to the First Arab Petroleum Congress in Cairo, in 1959. This Congress was a preamble to what would be, one year later, the birth of OPEC.

In the run-up to this ground-breaking event, the League of Arab States made an invitation to the Venezuelan Government to attend oil talks in the Egyptian capital. This was honored by the participation of the country’s Minister of Energy and Mines, Juan Pablo Perez Alfonso, along with a certain skilled engineer assigned to the same bureau — Eduardo Arturo Acosta Hermoso. His presence at the subsequent meeting was not by chance.

As an outstanding professional, Acosta Hermoso occupied strategic positions in his working life, receiving numerous major awards during a very productive career that saw many years of dedicated service.

Worthy of mention was his medal, the ‘Gran Marshall of Ayacucho’, an award named after the successful military commander, Antonio José de Sucre, whose actions contributed to the consolidation of the liberation of South America from foreign empires. This valuable distinction was bestowed on him by the Engineers Association of Venezuela.

This award, alongside the ‘Merito al Trabajo’ medal, is the highest recognition any professional specialized in a specific area can achieve in Venezuela.

Acosta Hermoso was also inducted as ‘Doctor Honoris Causa’ at the Central University of Venezuela. But, more importantly, for a man with his personality, the gratitude and respect shared by his colleagues and the students were, probably, his most appreciated recognition, personally.

The ‘tío de la OPEC’

In his twilight years, he was awarded the ‘Sol de Carabobo’ medal in 2010. This is given to men and women with exceptional professional abilities — abilities that have been used to help create a better world.

For natives of Venezuela, the name ‘Carabobo’ has a really sublime

meaning. The ‘tío de la OPEC’, (the uncle of OPEC) was a nickname of Acosta Hermoso’s popularized among his closest friends. But there was no doubting he had a gift in being able to interpret, at the right time, the potential challenges that were to follow economic policies in modern Venezuela.

Acosta Hermoso, along with Juan Pablo Peres Alfonso, realized at an early stage the concerns over a country’s natural resources that had arisen in Venezuela long before the memorable inaugural OPEC Meeting in Iraq in 1960.

In fact, one can look back as far as 1949 when Venezuela’s then Minister for Development, Manuel Egaña, carefully analyzed interesting observations made on the subject by Joseph E Pogue, Vice-President of Chase National Bank.

During a conference held in Caracas, Pogue highlighted the interaction in petroleum matters that was taking place progressively between international oil companies and the Middle East region.

It was at this time that Egaña began to visualize the contacts that were needed to link the oil producer nations of the Middle East with another faraway country, also rich in crude oil.

Venezuela, due to its geographical proximity with the United States and the practical positioning of the oceans, would become instrumental in the implementation of policies related to the management of petroleum resources internationally.

But alongside the theoretical framework and diplomatic initiatives that emerged in Venezuela before the dawn of OPEC, another important aspect was also required. This involved the education and training of professionals capable of consolidating a petroleum culture in the subsequent years after 1949.

Talents towards tangible goals

Eduardo Arturo Acosta Hermoso was one of those leading professionals. He possessed an objective vision and subsequently became a clear example of a generation that put into practice talents that were oriented towards tangible goals.

By the time of the inaugural OPEC Conference in Bagdad in September 1960, Acosta Hermoso was Director of the Office for Technical Affairs at the Venezuelan Ministry of Energy and Mines.

His technical support, intellectual capabilities and human sensibility were central to the decision-making that took place when the Arab nations and Venezuela came together successfully to discuss the creation of an inter-government organization of international scope.

Throughout history, men and women have come together to accomplish great feats or establish precedents in different fields of work, but it is very difficult to determine how and when someone will actually come up with an extraordinary result.

When the high-level officials from Iran, Iraq, Kuwait, Saudi Arabia and Venezuela had the foresight, willingness and determination to combine forces to effectively manage their common and vital natural resource — oil — for the well-being of mankind, they were more than just policy makers policy-making — they were actually setting up something that would fuel prosperity for the entire world.

Eduardo Arturo Acosta Hermoso was among those responsible for bringing about that unique achievement. Over half a century later, his death will forever mark his contribution to OPEC’s birth. 



OFID joins forces with private sector to fight energy poverty

By Fatimah Zwanniken

Expanding access to modern energy services is an enormous challenge for developing countries, especially the poorest among them.

To 1.3 billion people worldwide, 84 per cent of whom live in the rural areas of Africa and developing Asia, electricity remains inaccessible, unaffordable or unreliable.

And a further 2.7bn people are without clean cooking facilities.

The energy poverty trap severely hinders economic progress and social advancement and must be overcome if the United Nations Millennium Development Goals (MDGs) are to be achieved by the targeted date of 2015.

The problem of energy poverty is solvable. Often, antiquated transmission grids between power plants and the end-user hinder the ability to ensure uninterrupted electricity supply at a reasonable price.

In other cases, national power resources remain untapped, mainly due to a lack of funding.

The private sector will play a key role in achieving universal energy access by 2030, the chief goal of the UN Secretary-General's *Sustainable energy for all* campaign.

Private-sector expertise will be needed to develop large and complex cross-border power generation and transmission projects.

Independent power producers (IPPs) can also help mobilize the estimated \$640bn needed to meet this goal, including through micro-credit schemes.

They can equally help in achieving the objectives of both doubling energy efficiency and the share of renewable energy in global energy supply by the 2030 target date.

Conscious of the acute need for financing the energy poverty reduction initiative, The OPEC Fund for International Development (OFID) is scaling up its assistance to the energy sector under its Energy for the Poor Initiative (EPI), working in partnership with the private sector and other development finance institutions.

OFID facilitates access to reliable and environmentally sound power in the South by establishing new and improving existing utility companies and by helping countries tap into their renewable energy sources.

Cumulatively to date, OFID has made available \$108.5 million in direct support to private-sector energy-poverty reduction projects under its Private Sector Facility.

Activities have included the construction of new facilities and the rehabilitation and upgrade of older inefficient facilities in Jordan, Kenya, Jamaica and Pakistan.

In Jordan — an energy-importing country — OFID has provided a \$20m loan to Qatrana Electric to help finance a project for the construction and operation of a 373 megawatt combined cycle gas turbine power generation facility in Al-Qatrana on a 'build own operate' basis.

Under a 25-year power purchase agreement, the project receives gas from, and sells all its power output on an exclusive basis to, the National Electric Power Company of Jordan, without exposure to dispatch and/or price risk.

In Kenya, OFID has extended a \$20m loan to Gulf Power Limited, a special purpose vehicle involved in the design, construction, erection, commissioning and operation of an 80.32 MW heavy fuel oil power plant.

Electricity shortages

Kenya is currently experiencing significant electricity shortages, due to droughts, which result in low levels of hydroelectric power generation.

Given strong growth in demand, electricity shortages are expected to continue. Consequently, the Kenyan government is keen to develop and expand base-load generation capacity alternatives to hydro-power plants.

In Jamaica, the Jamaica Public Service Company (JPS) has benefitted from a \$25m OFID loan to help finance the expansion of its run-of-river Maggotty Hydropower Plant, as part of a strategy to increase the use of renewable energy in the country's energy mix to 15 per cent by 2016.

The new and upgraded power projects will help improve the efficiency of the generating system by an average 50–70 per cent. The projects will also help reduce the

OPEC Fund for International Development (OFID)

cost of electricity in the long term, sustain demand growth and maintain the country's power reserves.

In Pakistan, OFID has supported the expansion of both conventional and renewable sources of energy.

In March 2007, it extended a \$15m loan in support of the country's Engro energy project. The scheme consists of the development, construction and operation of a 217 MW combined cycle plant in Dharki, Punjab Province.

And in December 2011, Pakistan again benefited from a \$15m OFID loan to support its Fauji wind projects. This initiative consists of two distinct schemes that will be implemented and financed separately.

They comprise Beacon Energy's 50 MW wind power project and Green Power's 50 MW wind power project. Once completed, the schemes will be Pakistan's first privately financed wind power projects constructed under the country's Renewable Energy Policy 2006.

At a global level, OFID has a €6.5m equity participation in the Energy Access Fund, which invests in small enterprises involved in power generation systems (eg solar home systems), micro-generation infrastructure (eg hydro, solar, wind and biomass), 'energy kiosks' (electricity generation points with centralized energy consumption by businesses), a fleet of batteries, or any other activity linked to expanding access to electricity for rural and sub-urban populations of Africa and developing Asia.

Going forward, at least ten per cent of the Fund's aggregate commitments will be invested in institutions involved in the financing of energy access projects, or the distribution of energy loans to rural or sub-urban microfinance-related companies. ■■



Engro Energy

This section includes highlights from the OPEC Monthly Oil Market Report (MOMR) for May 2012, published by the Petroleum Studies Department of the Secretariat, with additional graphs and tables. The publication may be downloaded in PDF format from our Website (www.opec.org), provided OPEC is credited as the source for any usage.

Crude oil price movements

After three consecutive months of gains, the OPEC Reference Basket price fell in April to \$118.18/barrel, although it retained high levels linked to risk premiums associated with the ongoing geopolitical concerns.

The decline was primarily a reflection of the overall crude oil market sentiment during the first month of the typically low-demand season in the second quarter of the year.

Most physical crude oil markets showed signs of weakness in April, shifting into contango for the first time in over a year, at a time of high supply and weak demand.

Losses in crude oil prices also occurred, as refined product prices came down from the peak levels reached in the previous months.

Moreover, rising production from OPEC Member Countries – in a bid to cool down prices and allow global inventories to build strongly – kept a lid on prices, causing them to move sideways throughout the month.

Off and on, bearish macroeconomic indicators from the United States and China, as well as revived concern about the Euro-zone economy, pushing the euro down against the US dollar, also helped dampen crude oil markets.

The OPEC Basket price average of \$118.18/b in April was \$4.79/b, or 3.9 per cent, down from

March. Nevertheless, the \$117.66/b year-to-date average for the Basket was \$12.38/b, or 12 per cent, above that of the same period last year.

All Basket components decreased in April, with North and West African crudes and Middle Eastern benchmark grades showing slightly higher losses, compared with other grades.

Brent-related crudes – Saharan Blend, Es Sider, Bonny Light and Girassol – slumped by a significant 4.2 per cent to \$121.30/b, down by \$5.30 for the month.

Meanwhile, Middle Eastern crudes Murban and Qatar Marine dropped by \$5.29/b, or by over 4.3 per cent, to \$118.92/b.

Latin America's Basket components – Ecuador's Oriente and Venezuela's Merey – showed moderate losses of \$3.93/b, or 3.4 per cent, to average \$111.24/b.

And components that are priced on multiple pricing markers, due to their multi-export destinations, namely Arab Light, Basrah Light and Iran Heavy, lost four per cent of their value in April to end the month at \$117.63/b, which was \$4.92/b down from March. The Basket price stood at \$109.85/b on May 9.

In the oil futures market, crude prices were down in April, after several months of progressive gains, but maintained resilience attributed to supply security fears, in spite of massive stock-builds.

Prices, particularly with regard to the actions of the speculative community, were still being affected by the ongoing geopolitical factors and the potential disruption of trade flows.

The New York Mercantile Exchange (Nymex) West Texas Intermediate (WTI) front-month price averaged \$103.35/b in April, down by only 2.7 per cent from the average in March.

US benchmark futures for WTI continued their slow-paced decline that had already started in March, amid sporadic bearish macroeconomic indicators, coupled with consecutive weeks of sharp inventory builds, particularly in Cushing, Oklahoma, to reach record highs.

The shaky performance of major US equity and global commodity markets also weighed further on the petroleum complex.

Meanwhile, the overall decline in international crude oil futures was also attributable to rising production and inventories held by OPEC Member Countries, which was seen as a move to keep a hold on prices for the sake of global economic recovery.

Moreover, China's lower-than-expected quarterly economic growth and the modest slip in US consumer sentiment in early April, due to higher gasoline prices, also helped dampen crude oil futures.

OPEC Reference Basket: An average of Saharan Blend (Algeria), Girassol (Angola), Oriente (Ecuador), Iran Heavy (IR Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es Sider (SP Libyan AJ), Bonny Light (Nigeria), Qatar Marine (Qatar), Arab Light (Saudi Arabia), Murban (UAE) and Merey (Venezuela).

Amid additional pressure from revived concern about the downside risks to the Euro-zone economic outlook and political uncertainty, the ICE Brent front-month price fell by 3.3 per cent, or \$4.10/b, to average \$120.49/b for April.

Price volatility was reduced further in April, since trading in both crude oil futures, WTI and Brent, was range-bound, particularly during the second half of the month.

From mid-April on, Nymex WTI and ICE Brent traded in narrow windows with ranges of only \$2.66/b and \$1.95/b, respectively, compared with a range of over \$5/b each in March.

This signified easing volatility and thus lower speculative activity, compared with the previous months.

In contrast with last year, when risk premiums due to the disruption in Libyan production were at their peak, the front-month WTI year-to-date average price was up by nearly five per cent at \$102.94/b, while ICE Brent was more than nine per cent higher at \$118.93/b.

Crude oil futures prices fell sharply in the second week of May, when Nymex WTI settled below the key \$100/b mark at \$96.81/b and ICE Brent stood at \$113.20/b.

Commodity markets

The World Bank's energy commodity price index dipped by 3.6 per cent month-on-month in April, while the non-energy price index showed only a slight 0.4 per cent m-o-m drop, representing a slowing pace of decline, compared with around 2.8 per cent in January-February.

Food edged up by 0.4 per cent, while base metals declined by a further 3.7 per cent, compared with one per cent in March, and grains also dropped by two per cent.

Commodity prices were affected by persistent worries about global growth, especially the re-emergence of concern about China and US economic growth and apprehensions over Spanish sovereign debt. Thus, global business confidence dipped in April.

The Henry Hub natural gas price fell by ten per cent m-o-m in April, compared with minus 14 per cent in the previous month. The slower

decline in price was related to favourable news, such as an easing of the storage overhang in late-April.

The volatile weather pattern in the US of cold-hot-cold was also a bullish factor, but weak fundamentals, especially huge inventories, still set the direction for natural gas prices.

The agricultural price index remained unchanged in April. Grain prices decreased by two per cent, compared with one per cent a month earlier, driven by a drop in corn and wheat prices.

The World Bank's base metal price index declined by a further three per cent m-o-m in April, compared with one per cent a month earlier.

Similarly to March, the price-drop embraced the whole complex, with only lead showing a modest improvement in April. The performance of base metal prices as a whole reflected lower Chinese import demand and the re-emergence of concern about the growth of the global economy.

Copper prices declined by two per cent m-o-m in April, compared with a 0.3 per cent rise the previous month, driven mainly by weak demand from China and a weakening in imports, following strength in the first quarter.

Aluminium prices decreased by 6.2 per cent m-o-m in April, compared with a 1.1 per cent drop in March, due to a reduction in Chinese imports on a monthly basis.

Gold prices posted a mild drop of 1.4 per cent m-o-m, compared with a three per cent drop in March, mainly on ongoing concern about global economic growth.

World oil demand

Demand for OPEC crude in 2012 is projected to average 30.0m b/d, unchanged from the previous report.

Within the quarters, the first three months has seen a downward adjustment of 300,000 b/d, reflecting an upward revision of 400,000 b/d in non-OPEC supply and 100,000 b/d in world oil demand.

In contrast, the second and the third

quarters each show an upward revision of 100,000 b/d, while the fourth quarter remains unchanged.

Required OPEC crude is forecast to see negative growth of 100,000 b/d, vis-à-vis last year. The first quarter is estimated to decline by 400,000 b/d, compared with the same quarter last year, while the second quarter is projected to increase by 100,000 b/d. The third and the fourth quarters are forecast to remain unchanged from the same period last year.

Meanwhile, estimated demand for OPEC crude in 2011 remains unchanged from the previous assessment, with the figures for world oil demand and OPEC NGLs seeing only minor revisions.

Within the quarters, the first three quarters remain unchanged, while the fourth quarter has seen a downward revision of around 100,000 b/d.

At 30.1m b/d, demand for OPEC crude last year was 400,000 b/d above the 2010 level.

The first and the second quarters of 2011 show growth of 100,000 b/d and 300,000 b/d, respectively, while both the third and the fourth quarters have seen growth of 100,000 b/d, compared with the same period the previous year.

Meanwhile, in 2012, given the stabilization of the US economy and the total shutdown of Japanese nuclear power plants, world oil demand has – at least, for the short term – stopped its decline and has begun to show growth.

Oil use in both the US and Japan has been growing for various reasons. Furthermore, demand in non-OECD countries is indicating an improvement. India and Saudi Arabia are consuming more oil than expected.

The only exception is the European economy, which is still subject to some uncertainties. Hence, the world oil demand forecast shows a minor upward change from the last estimate and is set at 900,000 b/d year-on-year to average 88.7m b/d.

US oil demand has placed a considerable amount of uncertainty on the existing demand assessment. The upcoming driving season might be affected by retail gasoline prices and

economic uncertainties; hence the country's oil demand would show further declines, cutting the current forecast of the year's total world oil demand growth by between 200,000 b/d and 300,000 b/d.

Furthermore, should Japan restart its nuclear plants, the country's high oil-usage would slow down dramatically.

Although there are some signs of economic stabilization within the US, the country's economic activity is still having a negative impact on the use of oil. The most important sector – transportation – continues to consume less oil than it did last year, due mainly to the country's economic activity and high retail prices.

The latest monthly US oil consumption data for February shows a 0.6 per cent y-o-y con-

entire year remains rather pessimistic, depending on the development of the economy and transportation fuel prices.

The latest report on Mexican oil consumption in March showed a solid increase of around 2.5 per cent, compared with the same month last year. All product categories were positive and this was attributed mainly to increases in industrial fuel usage.

The latest available figures for Canadian oil demand in February show a decrease of 1.6 per cent, compared with last year. The positive contribution to oil consumption from liquefied petroleum gas (LPG) and jet fuel has been more than offset by the decline in oil usage in transportation.

For the whole of 2011, North American oil demand shrank by 260,000 b/d. And, in 2012, demand is projected to decrease again, but by a smaller magnitude of 100,000 b/d.

After hitting a 30-year low in 2009, US auto sales had a second straight year of growth during 2011, at approximately seven per cent, as a result of easier credit, low interest rates and increased demand for cars and trucks.

During the first four months of 2012, US auto sales have continued to grow at a stronger rate of approximately ten per cent y-o-y, with most segments increasing, especially mid-sized cars and trucks. Expectations for 2012 show a growing market of around ten per cent.

In Canada, automakers sold 1.59 million vehicles in 2011, up from 1.56m in 2010 (two per cent), as a result of low interest rates and increased demand. Canadian sales for 2012 are projected to be in line with those of 2011, as a recession in Europe, slower growth in emerging markets and an uncertain economic and political climate in the US continue to weigh on consumer sentiment.

The very close relation between the Mexican automobile industry and the US auto market boosted auto production and exports in 2011 by 13 per cent and 15 per cent, respectively, compared with 2010.

The latest Mexican data shows first quarter 2012 production, exports and domestic sales rising by 11 per cent, 15 per cent and 11 per cent, respectively. The Mexican auto market

is expected to continue growing during the remainder of 2012, as a result of its proximity to the US auto market.

The European economic crisis is considered to be the reason behind the massive decline in the continent's oil use.

This decline is not confined to the smaller economies, but has also affected the larger nations, such as the 'Big Four' (France, Germany, Italy and the United Kingdom).

Germany's oil demand declined by 3.3 per cent in the first quarter of this year. Most of the decline was attributed to industrial oil use, leading to lower consumption of diesel and fuel oil.

The Big Four's oil demand declined by 3.5 per cent in February y-o-y. Almost 80 per cent of the total decline was related to less use of gasoline and diesel. This trend is expected to continue for the entire year. In the most moderate estimate, OECD Europe is expected to use 1.8 per cent less oil this year.

European oil consumption contracted again in March, the seventh monthly fall in a row. Just as with last year, the first quarter of this year saw a decline of 300,000 b/d y-o-y, reflecting a weak regional economy.

March consumption in France, Germany, Italy and UK fell as a result of decreasing demand in industrial fuels, due, in turn, to weak industrial activity.

Furthermore, the continent's oil demand decline resulted from shrinking transportation fuels because of the relatively high prices, which were given added impetus by rigorous taxation.

Nevertheless, the short- and medium-term development of European oil consumption will be determined most of all by the continuing debt problems in several of the continent's economies.

The region's total contraction in oil demand stood at 320,000 b/d in 2011. For 2012, oil consumption is expected to shrink again, this time by 260,000 b/d, as a result of the turbulence in several European economies.

The European auto market presented a mixed picture during 2011, with substantial increases and decreases across countries for new passenger car registrations.

According to figures from the European

“The European economic crisis is considered to be the reason behind the massive decline in the continent's oil use.”

traction, the lowest observed since April 2011. Distillate consumption grew, while the bulk of contractions was seen in gasoline and fuel oil.

The first four months of 2012 were generally quite disappointing for US consumption, with contractions in all product categories, especially motor gasoline and residual fuel oil.

The main factors influencing consumption were ongoing economic concern, relatively high fuel prices and a warmer-than-usual winter. Nevertheless, the situation showed some improvement in March and April.

As for April, the country's consumption revealed the first growth since March 2011, being pushed up by industrial fuel consumption. However, high pump prices were the main cause of decreasing transportation fuels.

The outlook for US oil consumption for the

Automobile Manufacturers' Association, new passenger car registrations increased by 11 per cent in Germany, they fell slightly in France, by 1.4 per cent, and they shrank strongly in the UK and Italy, by six per cent and 12 per cent, respectively. In total, 'EU-27' new passenger car sales fell slightly during 2011.

In March 2012, demand for new cars in Europe declined for the sixth consecutive month, by seven per cent y-o-y, and registered the lowest level since 1998.

During the remainder of 2012, the European auto market will almost certainly be dominated by economic concern and austerity measures in several countries influencing future trends for smaller, fuel-efficient cars.

The expectations for 2012 are for a decreasing market of as much as six per cent y-o-y, depending on the magnitude of the sovereign debt crisis in the region.

In Japan, the latest monthly data – for March – is dominated once more by huge increases in the direct use of crude and residual fuel oil.

As a result of the shutdown of all the country's nuclear plants and, in combination with stricter stress tests as one of several conditions for their restarting, direct crude and residual fuel burning for electricity production is expected to increase further throughout 2012.

Power plants are using crude – only those crudes with a low-sulphur content – fuel oil and LNG for power generation.

Moreover, driven by increased mileage and numbers of vehicles, as a result of government incentives, as well as starting from a very low baseline, transportation fuel consumption increased too.

In South Korea, oil consumption increased by a strong 4.1 per cent y-o-y in February; big falls in residual fuel oil use were offset comfortably by increasing LPG, gasoline, naphtha and distillate requirements.

OECD Pacific oil consumption grew by 40,000 b/d during 2011. It is expected to grow also in 2012, by 200,000 b/d, and the bulk of the increase will result from direct crude/fuel oil-burning for electricity generation and substituting nuclear energy.

In Japan, for the period between January

and April 2012, automobile sales rose by 59 per cent, also as a result of the low baseline.

Japanese auto demand is now expected to rise strongly for the rest of the year, partly due to higher sales in tsunami-hit areas, where thousands of cars were destroyed.

Auto sales surged by 92 per cent in April from a year earlier, sustaining a strong upward trend; however, they failed to reach the pre-earthquake level of April 2010.

South Korea's automobile sales posted a record high in 2011, up by 13 per cent from 2010. The latest data, for April 2012, shows South Korean automobile sales up by six per cent y-o-y.

Indian oil demand for March hit a strong 5.1 per cent growth rate y-o-y. This was the second-highest rate (after February) since November last year.

Diesel oil demand grew the most, by ten per cent, adding another 130,000 b/d to the total diesel consumption pool. India consumes 1.5m b/d of diesel and this is the most consumed petroleum product in the country. Although diesel is consumed mostly by the transportation sector, large amounts of it are also used by the industrial and agricultural sectors.

LPG and gasoline are the most consumed oil products after diesel, making up for 14 per cent and 11 per cent, respectively, of the country's total oil demand.

Due to the seasonality and the competing price of natural gas, Indian consumption of fuel oil is on the decline. It plunged by 26 per cent in March alone.

For 2012, India's oil demand is expected to grow by 120,000 b/d y-o-y.

The Indian automobile market faced moderate growth of just four per cent during 2011, after solid growth of 31 per cent during 2010.

For the current year, according to the Society of Indian Automobile Manufacturers, domestic passenger car sales increased by 23 per cent during March y-o-y. This was the highest rate of growth over the last ten months and the fifth consecutive month of growth.

Indonesia is the second-largest oil consumer in Other Asia, after India, and its economic activity calls for more oil. Demand in

February rose by a sharp 9.1 per cent y-o-y, to average 1.3m b/d. Diesel and gasoline consumption grew strongly, each adding 50,000 b/d to total demand. As for the whole year, oil demand is forecast to rise by 1.6 per cent.

Given the healthy economies in most of Other Asia, the region's oil demand growth in 2012 is estimated at 200,000 b/d y-o-y.

The cool season in the Middle East has passed, along with the low use of oil. Saudi Arabian oil demand is back in growth mode, with demand for electricity inching up.

Fuel and crude oil consumption by power plants increased by more than 45 per cent each in March. The country's total oil demand rose by 16 per cent during that month, to average 1.9m b/d.

Overall, Middle East oil demand is forecast to grow by 2.3 per cent, to average 7.7m b/d in 2012.

Strong gasoline consumption hiked Brazil's oil demand by 16 per cent in February y-o-y,

“Overall, Developing Countries' oil demand growth is forecast at 600,000 b/d, to average 28.3m b/d in 2012.”

adding another 93,000 b/d to the country's total oil consumption.

This increase came about despite the massive slide in petroleum alcohol usage. Brazil consumed 660,000 b/d of gasoline and this trend is expected to continue for the year.

The country will contribute the lion's share to Latin America's oil demand growth this year.

Overall, Developing Countries' oil demand growth is forecast at 600,000 b/d, to average 28.3m b/d in 2012.

China's oil demand growth has been at its weakest level since September last year.

Demand grew by 1.9 per cent in March, adding 190,000 b/d to the country's total oil demand.

Kerosene demand expanded the most in March – by 39 per cent y-o-y – to average 420,000 b/d. Despite the turbulence in oil demand, the country is expected to consume 400,000 b/d of extra oil this year.

Although China has been importing much oil, this oil has been directed to the country's stockpile, rather than domestic consumption.

In 2011, China's auto-market increased by a mere 2.5 per cent, the slowest rate since the mid-1990s and way behind the high rates seen in the previous five years.

And while some analysts are forecasting slightly better prospects for 2012, most do not expect a return to the high levels of growth of the past, as market demand will be limited by traffic congestion and air pollution. During the first quarter of 2012, Chinese auto sales increased by eight per cent y-o-y.

World oil supply

Preliminary figures indicate that global oil supply experienced a minor decrease of 60,000 b/d in April, compared with the previous month. This was due to a 380,000 b/d decrease in non-OPEC supply, as well as a 320,000 b/d rise in OPEC crude production.

The share of OPEC crude oil in global production increased to 35.2 per cent in April. The estimate is based on preliminary data from non-OPEC supply, OPEC NGLs and OPEC production. Estimates for OPEC NGLs and OPEC production are derived from secondary sources.

Meanwhile, non-OPEC oil supply is estimated to have averaged 52.39m b/d in 2011, indicating an increase of 70,000 b/d over the previous year. This estimate is unchanged from the last report.

On a regional basis, North America was the main supporter of this growth, with a supply increase of 500,000 b/d. This was, in turn, supported by a healthy addition to its volume from shale and oil sands developments.

Latin America followed, with supply growth of 80,000 b/d, while the Former Soviet Union

(FSU) and China came next with minor increases of 30,000 b/d and 20,000 b/d, respectively.

In contrast, OECD Western Europe experienced the largest supply decrease among all non-OPEC regions in 2011, down by 320,000 b/d, or 7.2 per cent, from the year before.

The OECD Pacific, Middle East and Other Asia followed, with supply declines of 100,000 b/d, 90,000 b/d and 70,000 b/d, respectively.

Individually, the US, Canada, Colombia and Russia were the main countries where supply experienced healthy growth in 2011, while the UK, Azerbaijan, Norway, Australia, Malaysia, Yemen, Syria and the Sudans (South Sudan and Sudan) encountered significant declines.

Weather, technical and political factors had a strong impact on output in 2011.

On a quarterly basis, non-OPEC supply in 2011 is estimated at 52.71m b/d, 51.97m b/d, 52.03m b/d and 52.84m b/d, respectively.

For 2012, non-OPEC supply is expected to increase by 640,000 to average 53.02m b/d, representing an upward revision of 50,000 b/d from the previous month's report.

The overall supply forecast remains relatively stable with North and Latin America expected to have the highest growth, followed by the FSU and China, while supply in Africa, the Middle East and OECD Western Europe is projected to decline.

On a quarterly basis, non-OPEC supply this year is seen to average 53.19m b/d, 52.66m b/d, 52.88m b/d and 53.36m b/d, respectively.

Total OECD oil production is expected to average 20.60m b/d in 2012, a strong increase of 530,000 b/d from last year and an upward revision of 190,000 b/d from the previous report.

The upward revision has come from North America, while OECD Western Europe's supply forecast has been revised down and the OECD Pacific's has remained flat from the previous month. The anticipated supply growth is the highest for the OECD since 1996.

On a quarterly basis, OECD oil supply in 2012 is seen to average 20.83m b/d, 20.43m b/d, 20.46m b/d and 20.70m b/d, respectively. Preliminary data shows that the first quarter

indicated an increase of 770,000 b/d from a year ago.

North America's oil supply is anticipated to grow by 660,000 b/d in 2012 to average 16.16m b/d, representing an upward revision of 240,000 b/d from the previous report.

On a quarterly basis, North America's supply in 2012 is expected to stand at 16.25m b/d, 16.03m b/d, 16.12m b/d and 16.23m b/d, respectively.

US oil supply is forecast to increase by 530,000 b/d to average 9.54m b/d in 2012, the highest growth among all non-OPEC countries.

This strong growth represents a significant upward revision of 230,000 b/d from the previous OPEC report, due mainly to updated production data for the early months of 2012.

On average, total US supply increased by 1m b/d in January and February, compared with the same period a year ago. The robust ramp-up of tight oil production from shale developments is the main force behind the strong growth experienced so far in 2012.

On a quarterly basis, US oil supply this year is seen to average 9.60m b/d, 9.46m b/d, 9.50m b/d and 9.59m b/d, respectively. According to preliminary data, supply is estimated to have grown by 870,000 b/d in the first quarter, compared with the same period in 2011.

Canadian oil production is expected to increase by 170,000 b/d in 2012 to average 3.72m b/d, indicating a minor upward revision of 10,000 b/d from the previous month.

On a quarterly basis, Canada's oil supply in 2012 is anticipated to average 3.73m b/d, 3.67m b/d, 3.72m b/d and 3.76m b/d, respectively. According to preliminary estimated data, supply increased by 180,000 b/d during the first quarter, compared with the same period a year earlier.

Oil supply from Mexico is anticipated to decline by 40,000 b/d in 2012 to average 2.90m b/d, unchanged from the previous report.

On a quarterly basis, supply this year is expected to average 2.92m b/d, 2.89m b/d, 2.90m b/d and 2.89m b/d, respectively. According to preliminary data, Mexico's oil supply dropped by 50,000 b/d in the first quarter of 2012, compared with the same period last year.

Total oil supply from OECD Western Europe is forecast to decline by 160,000 b/d to average 3.91m b/d in 2012, a downward revision of 40,000 b/d from the previous month.

On a quarterly basis, OECD Western Europe's oil supply is seen to average 4.08m b/d, 3.85m b/d, 3.78m b/d and 3.94m b/d, respectively. Preliminary first-quarter estimates indicate that output declined by 240,000 b/d, compared with the same period in 2011.

Norway's oil production is forecast to decrease by 70,000 b/d to average 1.97m b/d in 2012, indicating a downward revision of 10,000 b/d from the last report.

On a quarterly basis, Norway's oil supply this year is seen to average 2.09m b/d, 1.91m b/d, 1.89m b/d and 1.98m b/d, respectively.

The UK's oil production is expected to decline by 80,000 b/d to average 1.04m b/d in 2012, a downward revision of 30,000 b/d from the previous month.

On a quarterly basis, the UK's oil supply this year is estimated at 1.09m b/d, 1.03m b/d, 990,000 b/d and 1.06m b/d, respectively. First-quarter preliminary supply data indicates a y-o-y decline of 190,000 b/d.

Denmark's oil supply has met with a downward revision of less than 10,000 b/d, compared with the previous month, to average 210,000 b/d in 2012.

The OECD Asia Pacific's oil supply is projected to increase slightly, by 30,000 b/d, to average 530,000 b/d in 2012, flat from the previous month.

On a quarterly basis, the region's oil supply this year is expected to average 500,000 b/d, 560,000 b/d, 550,000 b/d and 520,000 b/d, respectively.

Oil supply from Australia is predicted to increase by 30,000 b/d to average 440,000 b/d in 2012, flat from the previous report.

On a quarterly basis, Australia's oil supply this year is expected to average 410,000 b/d, 460,000 b/d, 460,000 b/d and 430,000 b/d, respectively. During the first quarter of 2012, preliminary data indicated that production remained steady, compared with the same period a year earlier.

Total Developing Countries' oil supply

is expected to average 12.50m b/d in 2012, representing a decline of 150,000 b/d, and a downward revision of 125,000 b/d from the last report.

The supply forecasts from the Middle East and Africa drove the downward revisions, while Other Asia's supply projection experienced a minor upward revision.

Latin America remains the region with the highest expected growth in 2012 in the Developing Countries group, supported by Brazil and Colombia, while Africa's supply is expected to experience the largest decline among all the non-OPEC regions.

On a quarterly basis, total Developing Countries' oil supply in 2012 is seen to average 12.49m b/d, 12.42m b/d, 12.50m b/d and 12.58m b/d, respectively. During the first quarter of this year, preliminary data indicated that oil supply from the group decreased by 320,000 b/d, compared with the same period of 2011.

Other Asia's oil supply is anticipated to increase by 50,000 b/d to average 3.67m b/d in 2012, indicating a minor upward revision of 150,000 b/d from the previous report.

On a quarterly basis, Other Asia's oil supply this year is expected to stand at 3.64m b/d, 3.67m b/d, 3.68m b/d and 3.70m b/d, respectively.

India's oil supply is expected to average 900,000 b/d in 2012, an increase of 20,000 b/d from last year.

Malaysia's oil supply is seen to average 640,000 b/d this year, flat from a year earlier and an upward revision of 15,000 b/d from the previous report.

Indonesia's oil supply is expected to drop by 30,000 b/d in 2012 to average 990,000 b/d, steady from the previous month, while Vietnam's oil production is forecast to increase by 40,000 b/d to average 390,000 b/d this year, flat from the previous month.

Latin America's oil supply is projected to increase by 230,000 b/d to average 4.98m b/d in 2012, unchanged from the previous report.

Latin America's supply growth in 2012 is the second highest after North America among all non-OPEC regions.

On a quarterly basis, Latin America's oil

supply this year is expected to stand at 4.96m b/d, 4.94m b/d, 4.99m b/d and 5.02m b/d, respectively. Preliminary data indicates that the region's production increased by 260,000 b/d in the first quarter of 2012, compared with the same period of 2011.

Brazil's oil production is anticipated to increase by 180,000 b/d and average 2.81m b/d in 2012, indicating a minor upward revision of 10,000 b/d from the previous report.

On a quarterly basis, Brazil's oil supply this year is expected to stand at 2.83m b/d, 2.78m b/d, 2.81m b/d and 2.83m b/d, respectively.

Colombia's oil production is expected to increase by 70,000 b/d to average 1m b/d, unchanged from the previous report. In the first quarter of the year, supply averaged 950,000 b/d, an increase of 70,000 b/d over the same period of 2011.

Argentina's oil supply is forecast to average 710,000 b/d in 2012, a minor decline of 20,000 b/d from last year and a downward revision of 10,000 b/d from the previous month.

“Latin America remains the region with the highest expected growth in 2012 in the Developing Countries group, supported by Brazil and Colombia ...”

Middle East oil supply is slated to drop by 180,000 b/d in 2012 to average 1.51m b/d, representing a downward revision of 30,000 b/d from the previous month.

This revision comes from Oman and Yemen, while other producers' supply forecasts remain steady from the previous month.

Oman's production is expected to see the only increase in the region, of 30,000 b/d to average 91,000 b/d in 2012, representing a downward revision of 15,000 b/d from the previous report.

Yemen's oil supply is expected to decline by 60,000 b/d in 2012 to average 160,000 b/d, indicating a downward revision of 15,000 b/d from the previous month.

Africa's oil supply is forecast to decrease by 240,000 b/d to average 2.34m b/d in 2012, representing a downward revision of 100,000 b/d from the previous report.

This revision has come from former Sudan, while the supply outlook for the other producers remains steady from a month earlier.

Former Sudan's oil supply is predicted to decline by 280,000 b/d in 2012 to average 150,000 b/d, indicating a downward revision of 100,000 b/d from the previous month.

On a quarterly basis, Africa's oil supply this

“Total OPEC crude oil production averaged 31.62m b/d in April, according to secondary sources, indicating an increase of 320,000 b/d from the previous month.”

year is seen to average 2.41m b/d, 2.30m b/d, 2.32m b/d and 2.33m b/d, respectively.

Total FSU oil production is expected to increase by 120,000 b/d to 13.37m b/d in 2012, indicating a downward revision of 20,000 b/d from the previous report.

The FSU's forecast supply growth is the third-largest among all non-OPEC regions in 2012, following North America and Latin America.

On a quarterly basis, total FSU oil supply this year is expected to stand at 13.38m b/d, 13.31m b/d, 13.36m b/d and 13.44m b/d, respectively.

For the first quarter of the year, preliminary data indicates that the FSU's oil supply increased by 60,000 b/d, compared with the same period of 2011.

Russia's oil supply is forecast to grow by 70,000 b/d to average 10.34m b/d in 2012, indicating a minor downward revision of 10,000 b/d, compared with the previous month.

On a quarterly basis, Russia's oil supply this year is seen to average 10.34m b/d, 10.32m b/d, 10.34m b/d and 10.36m b/d, respectively.

According to preliminary data, April supply averaged 10.31m b/d, a decrease of around 30,000 b/d from the previous month, but representing growth of 80,000 b/d compared with the same period of 2011.

Oil production from Kazakhstan is forecast to average 1.62m b/d in 2012, an increase of 20,000 b/d over the previous year and showing a minor downward revision of 10,000 b/d from the previous report.

On a quarterly basis, Kazakhstan's oil supply this year is expected to stand at 1.62m b/d, 1.60m b/d, 1.61m b/d and 1.65m b/d, respectively. According to preliminary data, during the first quarter of 2012 Kazakh oil production decreased by 40,000 b/d, compared with the same period in 2011.

Azerbaijan's oil supply is forecast to average 970,000 b/d in 2012, a minor increase of 10,000 b/d over 2011 and unchanged from the previous month.

On a quarterly basis, Azerbaijan's oil supply this year is estimated to average 970,000 b/d, 950,000 b/d, 960,000 b/d and 980,000 b/d, respectively.

According to preliminary data, Azeri oil supply declined by 50,000 b/d in the first quarter, compared with the same period a year ago.

Turkmenistan's oil supply is expected to increase in 2012 and help offset the decline from mature production in Other FSU (not including Russia, Azerbaijan and Kazakhstan).

Other Europe's oil supply is anticipated to increase by 10,000 b/d to average 140,000 b/d in 2012, unchanged from the previous month.

China's oil production is expected to increase by 80,000 b/d to average 4.22m b/d in 2012, unchanged from the last report.

During the first quarter of this year, the country's oil supply declined by 90,000 b/d, compared with the same period of 2011.

On a quarterly basis, China's oil supply this year is forecast to average 4.16m b/d, 4.17m b/d, 4.22m b/d and 4.30m b/d, respectively.

In March, oil supply averaged 4.14m b/d, a m-o-m decline of 40,000 b/d, according to preliminary data.

OPEC oil production

Total OPEC crude oil production averaged 31.62m b/d in April, according to secondary sources, indicating an increase of 320,000 b/d from the previous month.

Iraq, Libya, Saudi Arabia, Nigeria, and Angola crude oil production experienced increases in April, while Iran's crude output decreased.

OPEC crude oil production, excluding Iraq, stood at 28.60m b/d in April, up by 105,000 b/d from the previous month.

Output of OPEC NGLs and non-conventional oils are expected to increase by 360,000 b/d over 2011 to average 5.67m b/d this year.

Output of OPEC NGLs and non-conventional oils are estimated to have averaged 5.31m b/d in 2011, representing growth of 330,000 b/d over the previous year.

Oil trade

Preliminary data indicates that US crude oil imports declined in April by 263,000 b/d, or 2.9 per cent, to average 8.71m b/d. On an annual basis, they were marginally lower than the previous year's level, when they stood at 8.72m b/d.

US product imports decreased in April for the third consecutive month since January to 1.79m b/d. They decreased by 56,800 b/d, or by 3.1 per cent, from the month before. Y-o-y, a drop of around 1.09m b/d, or 37.4 per cent, was noted.

Year-to-date, US crude oil imports have declined by a marginal 0.2 per cent, or 17,000 b/d, to 8.7m b/d, while product imports have declined by 26.8 per cent to 1.98m b/d.

US product exports decreased to 2.69m b/d in April, representing a fall of 134,000 b/d, or 4.7 per cent m-o-m, and 173,000 b/d, or six per cent, y-o-y.

As a result, US net oil imports increased in April by 187,000 b/d, or 2.35 per cent, m-o-m

to 7.78m b/d. However, they remained 912,000 b/d, or 10.5 per cent, below the level of a year ago.

The US imported around 3.79m b/d of crude oil from OPEC Member Countries in February, constituting a 44.26 per cent share of total imports.

M-o-m, there was a slight decrease of 71,000 b/d, or 1.84 per cent.

Canada remained the main supplier, with 2.52m b/d, or 29.4 per cent, followed by Saudi Arabia with 1.41m b/d, or 16.4 per cent, Mexico with 1.01m b/d, or 11.8 per cent, Venezuela with around 890,000 b/d, or 10.4 per cent, and Colombia with 450,000 b/d, or 5.2 per cent.

US imports of oil products from OPEC Member Countries decreased by 147,000 b/d, or 42.6 per cent, to average around 198,000 b/d in February, with OPEC holding a share of 10.4 per cent of total US product imports.

Canada and Russia remained the main suppliers, accounting for 531,000 b/d, or 27.9 per cent and 256,000 b/d, or 13.4 per cent, respectively. They were followed by Algeria with 130,000 b/d, or 6.8 per cent, the UK with 109,000 b/d, or 5.7 per cent, and Norway with 104,000 b/d, or 5.5 per cent.

Japan's crude oil imports rebounded in March. They increased to 4.21m b/d, representing a rise of 357,000 b/d, or 9.3 per cent, from the previous month. Y-o-y, the March level represented an increase of 427,000 b/d, or 11.3 per cent.

Japan's oil product imports, including liquefied petroleum gas (LPG), decreased to 1.09m b/d, which meant a decline of 120,000 b/d, or 9.9 per cent, m-o-m and an increase of 109,000 b/d, or 11.2 per cent, y-o-y.

Product exports, including LPG, increased by 53,000 b/d, or 15 per cent, in March, to average 410,000 b/d. Y-o-y, there was a decrease of 12,000 b/d, or 2.8 per cent.

As a result, Japan's net oil imports increased in March by 183,000 b/d, or 3.9 per cent, to 4.9m b/d. Y-o-y, there was an increase of 548,000 b/d, or 12.6 per cent.

The increase can be attributed mainly to the net trade in crude oil, which was up by 357,000 b/d, or 9.3 per cent, m-o-m and by 427,000 b/d,

or 11.3 per cent, y-o-y, offsetting the decline in products.

China's crude oil imports declined in March by 406,000 b/d, or 6.8 per cent, to 5.57m b/d. Y-o-y, they increased by 444,000 b/d, or 8.7 per cent.

China's oil product imports fell in March by 67,000 b/d, or 6.5 per cent, to 964,000 b/d. Y-o-y, they declined by 230,000 b/d, or 19.3 per cent.

China's crude oil exports decreased in March by around 60,000 b/d, or 55.2 per cent, to 49,000 b/d. Y-o-y, this meant a decline of around 31,000 b/d, or 39 per cent.

The country's oil product exports fell by 56,000 b/d, or around ten per cent, to 505,000 b/d. Y-o-y, they were down by 242,000 b/d, or 32.4 per cent.

As a result, China's total net oil imports fell by 357,000 b/d, or 5.6 per cent, in March to 5.98m b/d. This decrease can be attributed mainly to net crude imports, which fell by 346,000 b/d, or 5.9 per cent, to 5.52m b/d.

The top five suppliers to the Chinese market were ranked as Saudi Arabia with 930,000 b/d, or 16.8 per cent, Angola (860,000 b/d or 15.4 per cent), Russia (550,000 b/d or 9.8 per cent), Venezuela (460,000 b/d or 8.3 per cent) and Oman (390,000 b/d or 6.9 per cent).

India's crude oil imports declined by 227,000 b/d, or six per cent, to 3.53m b/d in March. However, y-o-y, they were up by 37,000 b/d, or 1.1 per cent, from the 2011 level.

The country's oil product imports in March fell by 25,000 b/d, or 8.3 per cent, to average 276,000 b/d. Y-o-y, product imports were 112,000 b/d, or 28.9 per cent, lower this year.

India's oil product exports decreased by 64,000 b/d, or five per cent, in March to 1.22m b/d. Y-o-y, product exports fell by 200,200 b/d, or 14.1 per cent, in March.

As a result, India's net oil imports in the month decreased by 187,000 b/d, or 6.7 per cent, to average 2.60m b/d. Y-o-y, however, they rose by 125,000 b/d, or 5.1 per cent.

FSU crude oil exports fell by 1.4 per cent to 6.35m b/d in March, while total oil product exports in the month rose by 136,000 b/d, or 5.2 per cent, to 2.74m b/d.

Stock movements

US total commercial oil stocks reversed the build of the previous month and declined by 4.3m b to end April at 1,069.6m b.

Despite this drop, inventories were 20.1m b, or two per cent, above the year-ago level, while the surplus with the five-year average stood at 30.8m b, or three per cent. The drop was attributed to products, which decreased by 17.5m b, while crude commercial stocks rose by 13.5m b.

US commercial crude stocks continued their upward trend of the last four months in April, increasing by a considerable 13.5m b, for a cumulative build since the start of this year of around 45.0m b.

At 375.9m b, they stood at their highest level since September 1990, widening the surplus with the five-year average to 23.3m b, from 16.3m b a month earlier.

This build came from continued strong crude imports and domestic production. Indeed, US crude imports averaged 8.7m b/d in April, reflecting strong OPEC crude oil production and rising levels of Canadian crude, while domestic production reached 6.1m b/d, roughly 500,000 b/d above levels from the same period last year.

An increase in crude oil refinery input in April from the previous month, averaging 14.5m b/d, limited the gains in crude oil stocks.

US crude runs rose by more than 400,000 b/d over a year ago. In April, US refineries operated at 84.8 per cent of their capacity, which was one per cent higher than in the previous month and 2.4 per cent above the same month last year.

Adding to the bearish sentiment for the US crude market, Cushing stocks rose by 3.4m b in April to reach an all-time high of 43m b.

The approaching Seaway reversal will start to ease Cushing stocks, but not for several weeks; consequently, crude stocks in Cushing are expected to continue rising.

US crude inventories should also continue building in other areas, since there is no sign of slowing US production and crude imports also keep rising, reflecting higher OPEC production.

In contrast with the steady build in US crude inventories, oil product stocks declined

for the third consecutive month, dropping by 17.7m b in April to end the month at 693.7m b, the lowest level for a year.

Despite this drop, they showed a surplus of 13.5m b, or two per cent, over the same time last year, and were 7.5m b, or 1.1 per cent, higher than the five-year average.

Within products, the picture was mixed. Gasoline, distillates, jet fuel stocks and residual fuel oil saw falls, while other unfinished products experienced a build in April.

The bulk of the overall drop was in gasoline and distillate stocks, which fell by 12.2m b and 11.9m b, respectively.

Gasoline stocks fell for the third consecutive month, ending at 209.7m b. Despite the stock-draw, gasoline stocks remained 5.0m b, or 2.4 per cent, below the same period last year and showed a surplus over the seasonal norm of 1.1m b, or 0.5 per cent.

The stock-draw in gasoline came from higher demand, which averaged 8.7m b/d, and this was around 90,000 b/d more than a month ago, but much lower than during the same period last year, when demand was almost 9.1m b/d.

Continued strong exports also contributed to the build in gasoline, while steady gasoline production and a high level of imports limited the fall in gasoline stocks.

Gasoline output averaged 8.8m b/d, around 30,000 b/d above the previous month, and imports were just below 800,000 b/d in April.

Distillate stocks also saw a substantial fall – of 11.9m b – in April, losing almost 26m b since the beginning of this year.

At 124.0m b, they were 18.8m b, or 13.2 per cent, below the same period last year and 9.2m b, or 6.9 per cent, below the seasonal norm.

The fall came on the back of relatively high demand, averaging 3.8m b/d in April, which was nearly 260,000 b/d above the same period a year ago.

Strong distillate exports supported the decline in inventories. Preliminary data for April put distillate exports at 950,000 b/d, but this figure could decrease in the coming months on the back of a weaker European market.

Jet fuel oil stocks continued their downward

trend and fell for the third consecutive month – by 500,000 b – to end April at 39.7m b, the lowest level for almost a year.

At this level, they were 1.2m b, or 3.1 per cent, higher than the same month a year ago, but they remained 1.5m b, or 3.6 per cent, below the latest five-year average.

Residual fuel oil stocks fell for a second consecutive month – by 2.9m b – to stand at 32.6m b, showing deficits of 6.6m b and 6.4m b with a year ago and the seasonal norm, respectively.

In Japan, in March, commercial oil stocks reversed the downward trend observed over the past five months and increased by 6.6m b to 164.4m b.

With this build, they switched the deficit incurred the previous month to stand in line with a year ago at the same time. However, they remained 5.2m b, or 3.1 per cent, below the five-year average.

The total stock-build was concentrated on crude, which increased by 8.5m b, while product stocks countered this build, declining by 1.9m b.

Japan's commercial crude oil stocks reversed the declines incurred over the last four months and rose by 8.5m b, ending March above 100m b for the first time since October.

With this build, they widened the surplus with a year ago to 1.5m b from 0.3m b a month earlier. This build came mainly from higher imports, which increased by almost 360,000 b/d, or 9.3 per cent, from the previous month to average 4.2m b/d.

This level represented an increase of around 430,000 b/d, or 11.3 per cent, from the same period the previous month.

Crude imports for direct burning in power plants continued to surge in the aftermath of last year's Fukushima nuclear crisis, increasing by 124.3 per cent y-o-y to hit nearly 281,000 b/d. However, March's figures saw a drop of 22.6 per cent from February's level of about 363,000 b/d.

Japanese demand for crude declined as the country emerged from the winter season. The build in crude oil stocks came despite higher crude throughput, which increased by about 30,000 b/d, or 0.8 per cent, to average 3.7m b/d.

This level corresponded to a refinery utilization rate of 81.8 per cent, which was 0.7 per cent lower than in the previous month, but seven per cent higher than the same period last year.

Japan's total oil product inventories fell for the second consecutive month – by 2.0m b – to end March at 63.5m b.

At this level, they were 1.5m b, or 2.3 per cent, below the same time last year, while the deficit with the latest five-year average remained at 6.9m b, or 9.8 per cent.

This stock-draw for total products came on the back of weaker product imports, which declined by about 200,000 b/d, or 27 per cent, combined with stronger exports, which increased by 60,000 b/d, or 16 per cent, from the previous month.

The stock-draw in Japanese products came despite lower refined oil product sales, which declined by almost 350,000 b/d, or 8.5 per cent, from a month earlier to average 3.7m b/d.

However, this level was 8.3 per cent above the same period a year ago and represented a fourth straight month of gains, due partly to weak demand last year in the wake of the country's triple catastrophe.

Within products, and with the exception of gasoline, all products saw a drop, with naphtha declining the most.

In Singapore, oil product stocks at the end of March reversed the build incurred over the past two months and fell by 1.8m b to end the month at 42.8m b. At this level, Singapore product stocks stood 1.3m b, or three per cent, below the same period last year.

Within products, the picture was mixed. Light and middle distillates saw a drop, while fuel oil continued the builds of the last two months.

Oil product stocks in and Amsterdam-Rotterdam-Antwerp (ARA) area at the end of March saw a reversal of the draw that occurred the previous month and increased by 0.4m b, ending the month at 34.6m b.

Despite the build, they were still 5.6m b, or 13.9 per cent, below the same period last year.

Within products, the picture was mixed; gasoline, gasoil and fuel oil saw builds, while naphtha and jet fuel oil went down. ■■

Table A: World crude oil demand/supply balance															m b/d
World demand	2006	2007	2008	2009	2010	1Q11	2Q11	3Q11	4Q11	2011	1Q12	2Q12	3Q12	4Q12	2012
OECD	49.5	49.3	47.6	45.6	46.2	46.3	44.5	45.9	45.7	45.6	45.8	44.5	45.8	45.6	45.4
North America	25.4	25.5	24.2	23.3	23.8	23.8	23.3	23.6	23.4	23.5	23.2	23.3	23.6	23.4	23.4
Western Europe	15.7	15.5	15.4	14.7	14.6	14.2	14.1	14.7	14.1	14.3	13.9	13.9	14.4	13.9	14.0
Pacific	8.5	8.4	8.0	7.7	7.8	8.3	7.1	7.7	8.3	7.9	8.8	7.3	7.8	8.3	8.0
Developing countries	23.6	24.8	25.6	26.2	27.0	27.3	27.7	28.0	28.0	27.8	27.8	28.2	28.7	28.6	28.3
FSU	4.0	4.0	4.1	4.0	4.2	4.1	4.0	4.4	4.6	4.3	4.2	4.1	4.5	4.8	4.4
Other Europe	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7
China	7.2	7.6	8.0	8.3	9.0	9.1	9.5	9.4	9.6	9.4	9.5	10.0	9.8	10.0	9.8
(a) Total world demand	85.2	86.5	86.1	84.8	87.0	87.6	86.4	88.4	88.7	87.8	88.0	87.5	89.5	89.7	88.7
Non-OPEC supply															
OECD	20.1	20.0	19.5	19.7	20.0	20.1	19.7	19.8	20.7	20.1	20.8	20.4	20.5	20.7	20.6
North America	14.2	14.3	13.9	14.4	15.0	15.2	15.2	15.4	16.1	15.5	16.3	16.0	16.1	16.2	16.2
Western Europe	5.3	5.2	4.9	4.7	4.4	4.3	4.1	3.9	4.1	4.1	4.1	3.8	3.8	3.9	3.9
Pacific	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
Developing countries	11.9	11.9	12.2	12.4	12.7	12.8	12.5	12.7	12.6	12.6	12.5	12.4	12.5	12.6	12.5
FSU	12.0	12.5	12.6	13.0	13.2	13.3	13.3	13.2	13.2	13.3	13.4	13.3	13.4	13.4	13.4
Other Europe	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.7	3.8	3.8	3.8	4.1	4.2	4.2	4.1	4.0	4.1	4.2	4.2	4.2	4.3	4.2
Processing gains	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Total non-OPEC supply	49.9	50.4	50.3	51.1	52.3	52.7	52.0	52.0	52.8	52.4	53.2	52.7	52.9	53.4	53.0
OPEC NGLS and non-conventionals	3.9	3.9	4.1	4.3	5.0	5.1	5.3	5.5	5.4	5.3	5.5	5.6	5.7	5.9	5.7
(b) Total non-OPEC supply and OPEC NGLS	53.8	54.4	54.4	55.5	57.3	57.8	57.3	57.5	58.2	57.7	58.7	58.3	58.6	59.2	58.7
OPEC crude supply and balance															
OPEC crude oil production¹	30.6	30.2	31.3	28.8	29.2	29.6	29.2	29.9	30.4	29.8	31.1				
Total supply	84.4	84.6	85.7	84.2	86.5	87.4	86.4	87.4	88.6	87.5	89.8				
Balance²	-0.9	-2.0	-0.4	-0.5	-0.5	-0.1	0.1	-1.0	-0.1	-0.3	1.8				
Stocks															
OECD closing stock level^{m b}															
Commercial	2,655	2,554	2,679	2,641	2,670	2,630	2,677	2,665	2,603	2,603					
SPR	1,499	1,524	1,527	1,564	1,561	1,558	1,561	1,526	1,532	1,532					
Total	4,154	4,079	4,206	4,205	4,231	4,188	4,238	4,191	4,136	4,136					
Oil-on-water	919	948	969	919	871	891	853	835	825	825					
Days of forward consumption in OECD															
Commercial onland stocks	54	54	59	57	59	59	58	58	57	57					
SPR	30	32	33	34	34	35	34	33	33	34					
Total	84	86	92	91	93	94	92	92	90	90					
Memo items															
FSU net exports	8.1	8.5	8.5	9.0	9.0	9.2	9.3	8.8	8.6	9.0	9.1	9.2	8.9	8.7	9.0
[(a) – (b)]	31.4	32.2	31.6	29.3	29.7	29.7	29.1	30.9	30.5	30.1	29.3	29.2	30.9	30.5	30.0

1. Secondary sources.

2. Stock change and miscellaneous.

Note: Totals may not add up due to independent rounding.

Table A above, prepared by the Secretariat's Petroleum Studies Department, shows OPEC's current forecast of world supply and demand for oil and natural gas liquids.

The monthly evolution of spot prices for selected OPEC and non-OPEC crudes is presented in Tables 1 and 2 on page 66, while Graphs 1 and 2 on page 67 show the evolution on a weekly basis. Tables 3 to 8 and the corresponding graphs on pages 68–69 show the evolution of monthly average spot prices for important products in six major markets. (Data for Tables 1–8 is provided courtesy of Platt's Energy Services.)

Table 1: OPEC Reference Basket crude oil prices

\$/b

Crude/Member Country	2011					2012					Weeks 13-17/12 (week ending)							
	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mar 30	Apr 6	Apr 13	Apr 20	Apr 27
Arab Light – Saudi Arabia	118.27	110.08	109.37	111.61	106.43	107.72	106.40	110.59	107.96	112.82	118.01	123.43	118.94	122.94	122.74	119.77	117.18	117.02
Basrah Light – Iraq	117.05	107.93	106.65	109.87	105.07	106.68	105.00	108.47	106.06	110.21	116.21	121.96	116.26	121.35	120.17	117.18	114.29	114.38
Bonny Light – Nigeria	127.12	118.88	117.27	119.69	112.41	115.63	113.09	114.21	110.71	113.08	122.36	127.98	122.36	127.06	126.70	123.69	119.67	120.48
Es Sider – SP Libyan AJ	124.52	115.90	114.84	117.69	111.26	113.93	110.24	111.46	108.66	111.28	120.26	126.03	120.71	125.11	125.05	122.04	118.02	118.83
Girassol – Angola	123.74	114.91	114.07	116.63	110.60	111.59	110.26	111.73	109.07	113.01	120.51	126.30	121.32	125.79	125.07	122.29	119.39	119.56
Iran Heavy – IR Iran	116.27	108.28	107.39	110.34	104.90	105.54	104.83	109.20	106.83	111.77	116.51	122.46	117.78	122.04	121.56	118.64	116.02	115.87
Kuwait Export – Kuwait	115.64	107.59	106.65	109.33	104.51	105.16	104.09	109.46	107.06	112.00	116.79	122.32	117.53	121.79	121.42	118.43	115.75	115.49
Marine – Qatar	116.41	109.10	107.83	110.34	105.14	106.46	104.68	109.14	107.36	110.65	116.99	122.80	117.39	122.02	121.39	118.36	115.59	115.24
Merey* – Venezuela	104.44	98.44	99.92	103.26	99.81	99.12	99.24	105.05	101.44	107.77	109.26	112.07	108.62	111.01	110.67	108.90	107.55	107.83
Murban – UAE	119.95	113.37	112.06	114.33	108.92	109.57	107.51	111.92	109.49	113.03	119.31	125.61	120.44	125.14	124.30	121.45	118.68	118.32
Oriente – Ecuador	112.82	104.63	98.87	103.46	97.91	103.82	103.69	105.75	100.99	104.11	112.44	118.26	113.86	117.12	115.56	113.87	113.79	112.66
Saharan Blend – Algeria	126.57	116.80	115.74	117.29	111.16	115.03	112.74	112.41	108.56	111.43	120.36	126.13	120.81	125.21	125.15	122.14	118.12	118.93
OPEC Reference Basket	118.09	109.94	109.04	111.62	106.32	107.61	106.29	110.08	107.34	111.76	117.48	122.97	118.18	122.37	121.92	119.08	116.34	116.35

Table 2: Selected OPEC and non-OPEC spot crude oil prices

\$/b

Crude/Member Country	2011					2012					Weeks 13-17/12 (week ending)							
	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mar 30	Apr 6	Apr 13	Apr 20	Apr 27
Minas – Indonesia ¹	127.19	119.69	116.28	121.71	117.03	113.32	110.01	117.85	114.35	120.41	126.31	133.85	130.15	134.36	133.66	130.53	128.65	128.66
Arab Heavy – Saudi Arabia	113.74	105.56	104.34	107.55	103.23	103.18	102.40	108.67	106.61	111.73	116.21	121.84	116.62	121.27	120.58	117.59	114.83	114.49
Brega – SP Libyan AJ	125.62	117.00	115.94	118.79	112.36	115.03	111.34	112.56	109.76	111.18	119.86	125.73	120.11	124.81	124.45	121.44	117.42	118.23
Brent – North Sea	123.72	115.10	114.04	116.89	110.46	113.13	109.44	110.66	107.86	110.58	119.56	125.33	119.71	124.41	124.05	121.04	117.02	117.83
Dubai – UAE	116.01	108.76	107.77	109.99	104.96	106.31	104.13	108.94	106.43	109.86	116.17	122.47	117.30	121.97	121.14	118.29	115.55	115.20
Ekofisk – North Sea	124.98	116.34	116.01	118.49	112.22	114.27	111.42	111.76	109.01	112.25	121.02	126.48	120.59	125.82	125.05	121.64	118.31	118.77
Iran Light – IR Iran	118.93	109.86	110.45	113.78	107.28	108.47	107.12	109.42	107.06	109.76	117.05	122.83	117.35	122.51	122.18	118.02	115.25	115.35
Isthmus – Mexico	117.90	109.62	106.30	108.62	101.06	104.05	105.18	111.54	110.27	110.02	114.42	120.46	116.04	119.60	117.59	116.15	115.42	115.36
Oman – Oman	116.56	109.25	107.90	110.41	105.30	106.65	104.96	109.30	107.28	110.91	117.15	122.92	117.44	122.28	121.52	118.38	115.60	115.28
Suez Mix – Egypt	116.50	108.06	108.81	112.08	106.33	107.56	104.96	107.73	104.15	106.91	115.60	119.34	114.58	118.60	118.31	115.08	112.44	113.42
Tia Juana Light ² – Venez.	115.31	107.97	104.28	106.66	99.24	102.17	103.40	109.64	108.28	108.04	112.36	118.41	114.07	117.56	115.59	114.18	113.46	113.39
Urals – Russia	119.60	111.50	111.68	114.90	109.25	110.39	108.10	110.54	107.31	109.91	118.50	122.41	117.69	121.58	121.26	118.48	115.41	116.45
WTI – North America	109.89	101.19	96.21	97.14	86.30	85.60	86.45	97.11	98.58	100.30	102.35	106.31	103.35	105.20	103.69	102.57	103.18	103.75

Note: As per the decision of the 109th ECB (held in February 2008), the OPEC Reference Basket (ORB) has been recalculated including the Ecuadorian crude Oriente retroactive as of October 19, 2007. As per the decision of the 108th ECB, the ORB has been recalculated including the Angolan crude Girassol, retroactive January 2007. As of January 2006, monthly averages are based on daily quotations (as approved by the 105th Meeting of the Economic Commission Board). As of June 16, 2005 (ie 3W June), the ORB has been calculated according to the new methodology as agreed by the 136th (Extraordinary) Meeting of the Conference. As of January 2009, the ORB excludes Minas (Indonesia).

* Upon the request of Venezuela, and as per the approval of the 111th ECB, BCF-17 has been replaced by Merey as of January 2009. The ORB has been revised as of this date.

1. Indonesia suspended its OPEC Membership on December 31, 2008.

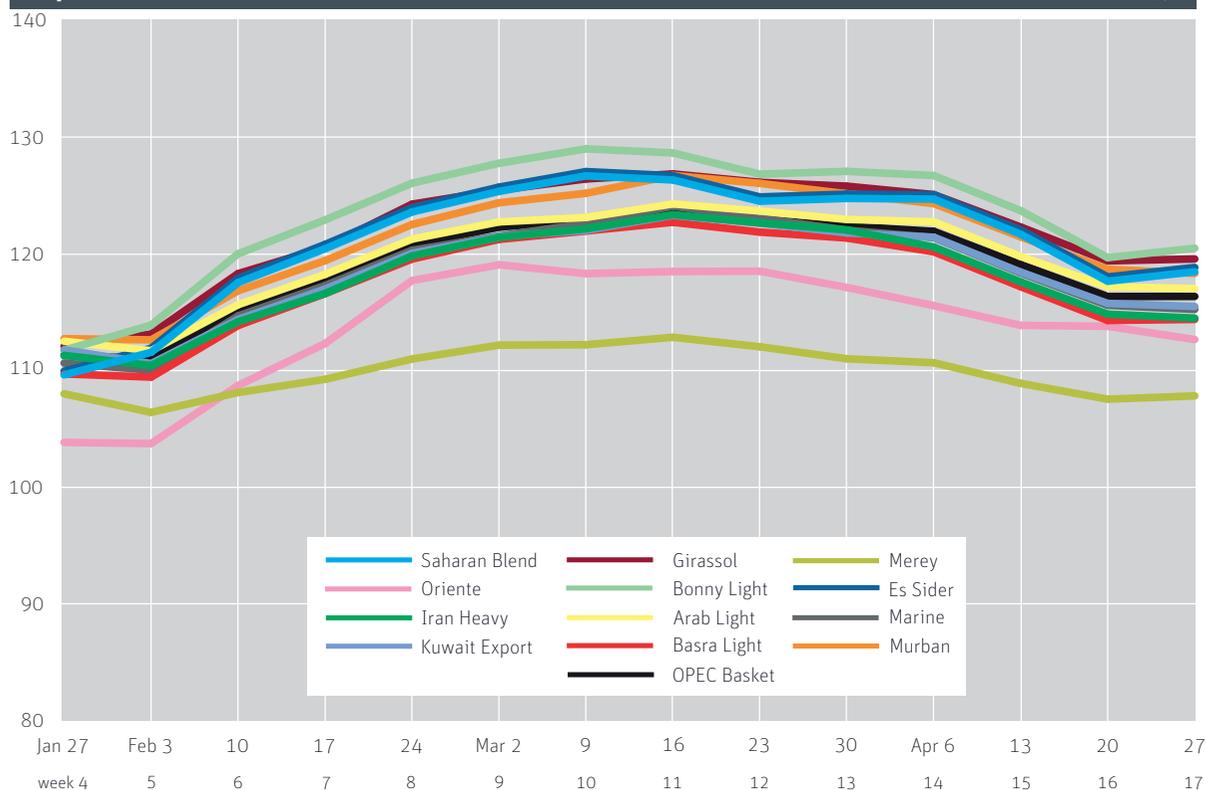
2. Tia Juana Light spot price = (TJL netback/Isthmus netback) x Isthmus spot price.

Brent for dated cargoes; Urals cif Mediterranean. All others fob loading port.

Sources: The netback values for TJL price calculations are taken from RVM; Platt's; Secretariat's assessments.

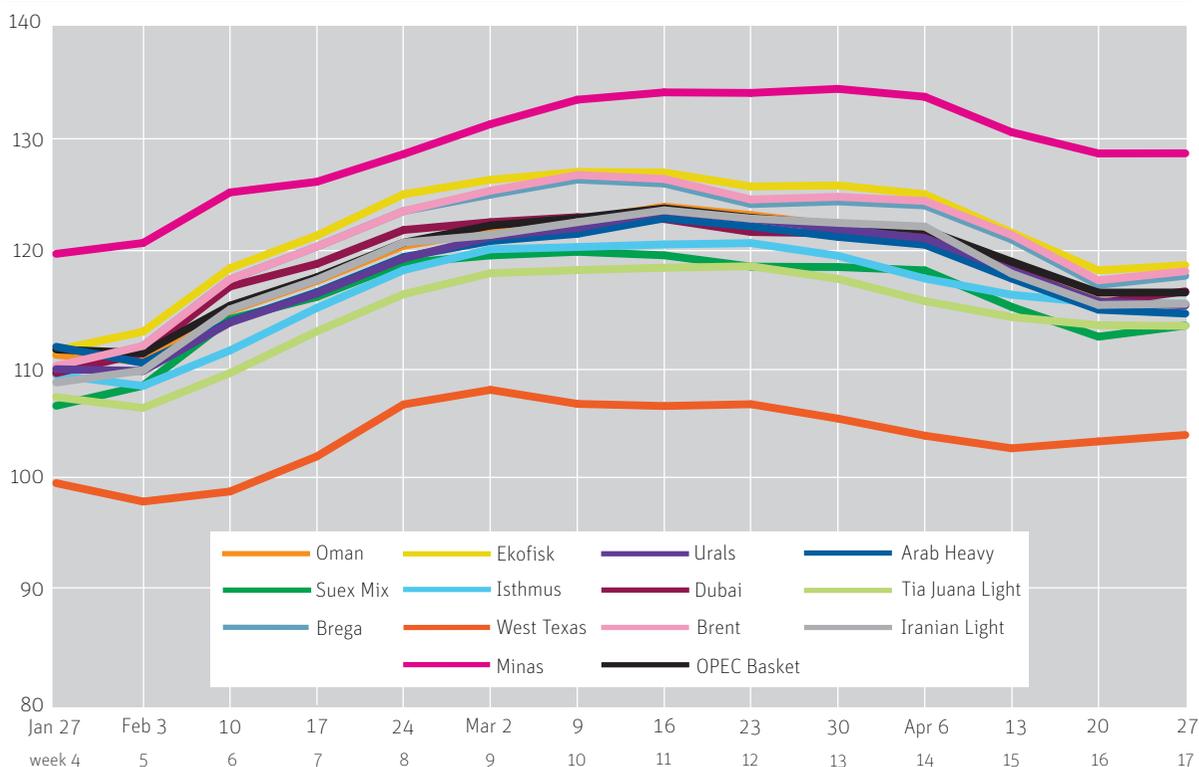
Graph 1: Evolution of the OPEC Reference Basket crudes, 2012

\$/b



Graph 2: Evolution of spot prices for selected non-OPEC crudes, 2012

\$/b

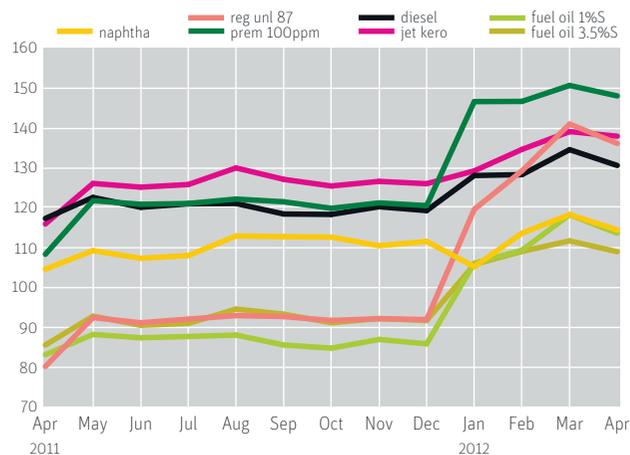


Note: As per the decision of the 109th ECB (held in February 2008), the OPEC Reference Basket (ORB) has been recalculated including the Ecuadorian crude Oriente retroactive as of October 19, 2007. As per the decision of the 108th ECB, the basket has been recalculated including the Angolan crude Girassol, retroactive January 2007. As of January 2006, monthly averages are based on daily quotations (as approved by the 105th Meeting of the Economic Commission Board). As of June 16, 2005 (ie 3W June), the ORB has been calculated according to the new methodology as agreed by the 136th (Extraordinary) Meeting of the Conference. As of January 2009, the ORB excludes Minas (Indonesia). Upon the request of Venezuela, and as per the approval of the 111th ECB, BCF-17 has been replaced by Merey as of January 2009. The ORB has been revised as of this date.

Table and Graph 3: North European market – spot barges, fob Rotterdam

\$/b

		naphtha	regular gasoline unleaded	premium gasoline 50ppm	diesel ultra light	jet kero	fuel oil 1 per centS	fuel oil 3.5 per centS	
2011	April	116.52	137.85	155.11	136.52	140.71	110.48	101.85	
	May	109.16	129.85	140.87	126.08	130.18	100.90	97.12	
	June	103.26	122.89	142.97	127.63	130.51	104.58	98.87	
	July	108.51	129.13	144.91	131.17	133.69	107.87	102.35	
	August	104.01	123.58	140.81	125.79	127.58	101.09	98.83	
	September	104.01	123.64	141.87	126.27	126.83	100.41	99.27	
	October	97.59	117.08	141.74	129.10	127.57	100.41	99.30	
	November	95.62	112.81	147.62	131.75	131.30	103.47	100.69	
	December	96.97	112.46	141.25	124.00	124.89	102.11	97.12	
	2012	January	105.24	119.63	146.65	128.11	129.31	106.12	105.81
		February	113.65	129.29	147.70	126.21	134.66	112.44	109.08
		March	118.32	141.01	150.70	134.60	139.12	118.27	111.72
April		114.47	136.16	148.07	130.63	137.97	113.63	109.00	



Note: Prices of premium gasoline and diesel from January 1, 2008, are with 10 ppm sulphur content.

Table and Graph 4: South European market – spot cargoes, fob Italy

\$/b

		naphtha	premium gasoline 50ppm	diesel ultra light	fuel oil 1 per centS	fuel oil 3.5 per centS	
2011	April	113.49	75.51	75.15	110.39	100.30	
	May	106.06	85.08	82.59	100.93	96.87	
	June	101.18	84.23	81.28	105.06	97.87	
	July	106.54	84.41	82.14	108.16	101.55	
	August	102.08	88.62	85.53	101.24	97.69	
	September	102.04	88.35	85.50	111.51	99.63	
	October	95.47	87.79	83.52	115.30	100.19	
	November	93.51	86.41	83.43	119.66	103.15	
	December	94.06	87.10	83.47	112.24	102.06	
	2012	January	102.08	87.88	83.81	116.29	107.13
		February	111.13	88.75	84.68	115.17	108.85
		March	115.82	90.56	88.34	120.25	111.81
April		114.59	88.65	85.23	115.51	107.89	

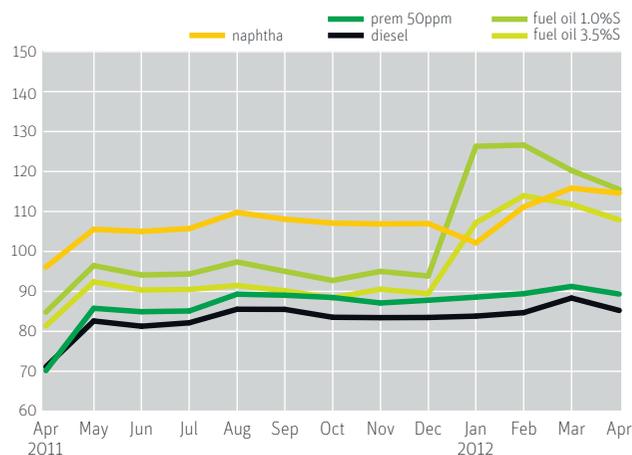
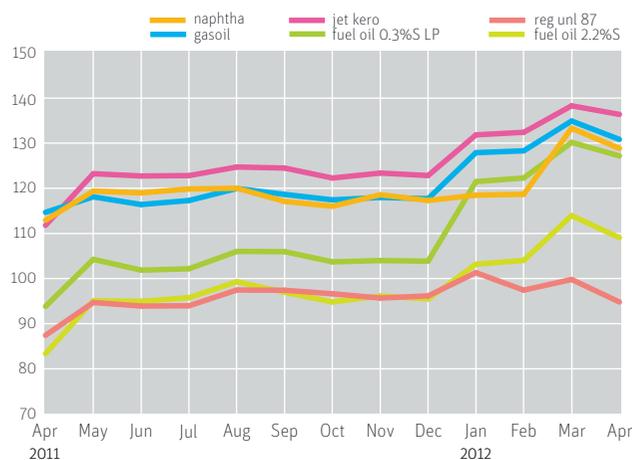


Table and Graph 5: US East Coast market – spot cargoes, New York

\$/b, duties and fees included

		naphtha	regular gasoline unleaded 87	gasoil	jet kero	fuel oil 0.3 per centS	fuel oil 2.2 per centS	
2011	April	89.00	133.14	133.78	139.06	123.61	104.49	
	May	94.69	126.78	123.58	131.82	113.33	97.33	
	June	93.90	118.83	124.10	128.57	119.48	101.18	
	July	93.96	126.99	128.47	132.28	123.81	102.17	
	August	97.45	119.58	123.15	127.25	114.16	97.80	
	September	97.40	116.67	122.21	125.13	113.68	98.26	
	October	96.62	115.80	123.52	125.48	117.07	99.30	
	November	95.67	110.87	128.14	129.71	118.84	100.94	
	December	96.15	110.58	120.86	122.78	113.50	96.31	
	2012	January	96.59	118.47	127.88	131.82	121.47	103.16
		February	97.42	127.49	134.42	136.97	123.49	110.21
		March	99.79	133.29	134.89	138.26	130.15	113.94
April		94.80	128.82	130.82	136.35	127.16	109.04	



Source: Platts. Prices are average of available days.

Table and Graph 6: Caribbean market – spot cargoes, fob

\$/b

	naphtha	gasoil	jet kero	fuel oil 2 per centS	fuel oil 2.8 per centS
2011					
April	120.30	74.09	138.77	97.49	96.44
May	109.81	77.26	130.94	90.33	89.28
June	101.92	76.07	129.32	94.18	93.13
July	107.88	76.88	132.92	95.17	94.12
August	102.33	78.98	127.84	90.80	89.75
September	99.67	77.25	125.50	91.26	90.20
October	99.12	76.12	125.80	92.24	91.19
November	94.19	77.10	129.69	93.92	92.61
December	96.65	76.61	121.94	89.31	87.86
2012					
January	105.30	77.10	131.13	96.27	94.62
February	112.09	72.09	136.24	103.16	101.52
March	116.41	72.79	138.38	106.94	105.16
April	115.28	71.94	135.75	102.52	103.23

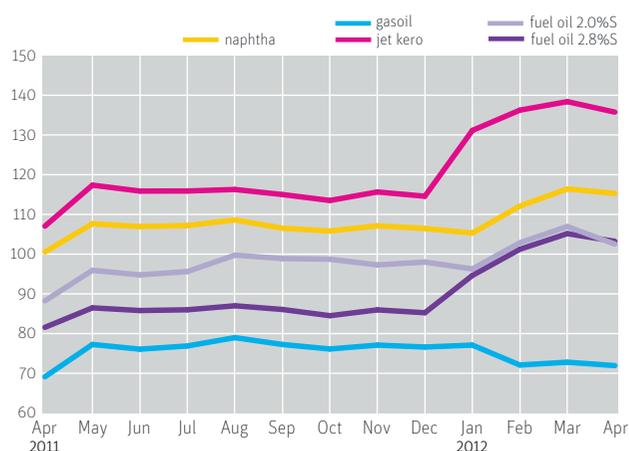


Table and Graph 7: Singapore market – spot cargoes, fob

\$/b

	naphtha	premium gasoline unl 95	premium gasoline unl 92	diesel ultra light	jet kero	fuel oil 180 Cst	fuel oil 380 Cst
2011							
April	115.38	129.97	127.86	139.96	138.69	106.62	104.86
May	108.34	124.82	121.68	128.26	127.76	101.39	99.56
June	101.90	120.33	117.76	127.73	126.89	103.62	101.33
July	105.97	126.01	123.27	129.83	129.24	107.26	103.78
August	103.00	122.85	119.75	125.29	124.89	105.51	101.08
September	103.49	124.36	122.06	124.38	123.53	105.42	101.23
October	96.19	121.93	119.90	122.89	123.25	105.82	102.08
November	95.25	112.86	111.17	129.39	127.99	110.76	105.89
December	98.61	113.86	111.51	125.12	122.87	105.72	102.52
2012							
January	104.82	123.99	120.80	129.98	126.70	114.37	110.79
February	114.29	130.70	128.63	134.55	132.46	115.93	112.87
March	119.33	136.64	134.48	138.08	136.18	117.85	114.99
April	115.70	135.35	130.22	134.55	132.98	116.60	110.57

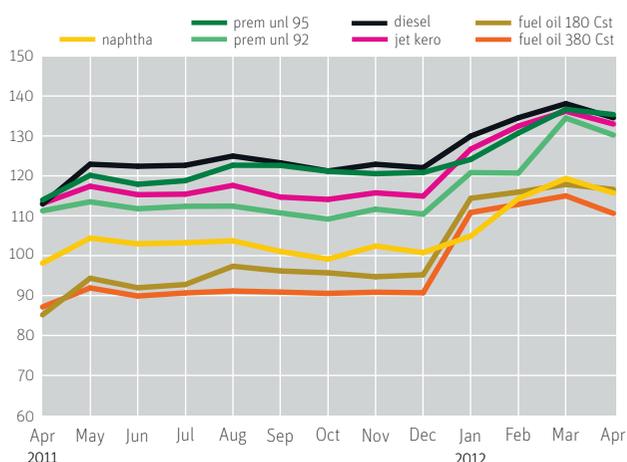
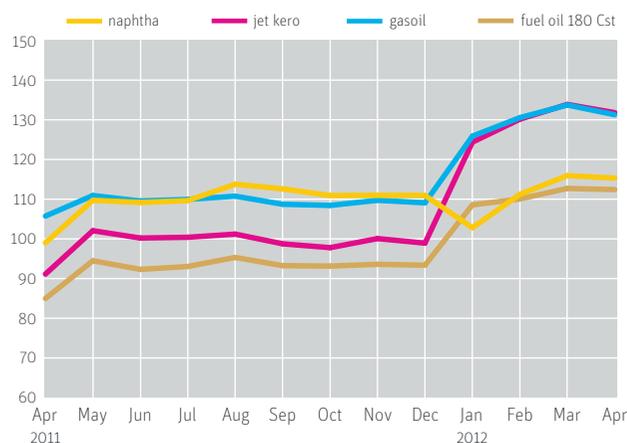


Table and Graph 8: Middle East Gulf market – spot cargoes, fob

\$/b

	naphtha	gasoil	jet kero	fuel oil 180 Cst
2011				
April	112.76	135.31	136.15	102.61
May	105.71	123.85	125.15	97.47
June	100.74	123.44	124.53	98.88
July	104.65	125.94	126.89	100.74
August	101.06	120.24	122.28	98.27
September	101.31	120.02	120.98	98.84
October	94.85	118.99	121.06	99.33
November	94.18	125.59	125.77	103.97
December	96.76	121.12	120.59	100.74
2012				
January	102.73	125.92	124.40	108.57
February	111.22	130.54	130.15	110.05
March	115.92	133.72	133.87	112.71
April	115.31	131.27	131.80	112.41



Source: Platts. Prices are average of available days.

Forthcoming events

Offshore safety summit, June 11–13, 2012, Houston, TX, USA. Details: IQPC Ltd, Anchor House, 15–19 Britten Street, London SW3 3QL, UK. Tel: +44 207 368 9300; fax: +44 207 368 9301; e-mail: enquire@iqpc.co.uk; website: www.iqpc.co.uk.

7th Annual conference FLNG 2012, June 11–13, 2012, London, UK. Details: IBC Global Conferences, The Bookings Department, Informa UK Ltd, PO Box 406, West Byfleet KT14 6WL UK; Tel: +44 207 017 55 18; fax: +44 207 017 47 15; e-mail: energycust-serv@informa.com; website: www.ibcenergy.com.

8th Asia aromatics and derivatives, June 12–13, 2012, Singapore. Details: Centre for Management Technology, 80 Marine Parade Road #13-02, Parkway Parade, 449269 Singapore. Tel: +65 6345 7322/6346 9132; fax: +65 6345 5928; e-mail: cynthia@cmtsp.com.sg; website: www.cmtevents.com.

International refining and petrochemicals conference, June 12–14, 2012, Milan, Italy. Details: Gulf Publishing Company, 2 Greenway Plaza, Suite 1020, Houston, TX, 77046 USA. Tel: +1 713 529-4301; fax: +1 713 520-4433; e-mail: store@gulfpub.com; website: www.gulfpub.com.

Energy markets and energy derivatives, June 13–15, 2012, London, UK. Details: International Faculty of Finance, 8th Floor, 29 Bressenden Place, London SW1E 5DR, UK. Tel: +44 207 017 7190; fax: +44 207 017 7802; e-mail: enquiries@iirltd.co.uk; website: www.iff-training.com.

Iraq petroleum 2012, June 18, 2012, London, UK. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.thecwcgroup.com.

World national oil companies congress 2012, June 18–22, 2012, London, UK. Details: Terrapinn Holdings Ltd, First Floor, Modular Place, Turnberry Office Park, 48 Grosvenor Road, Bryanston 2021, South Africa. Tel: +27 11 516 4000; fax: +27 11 463 6000; e-mail: enquiry.za@terrapinn.com; website: www.terrapinn.com.

Latin American oil and gas 2012, June 20, 2012, Miami, FL, USA. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.thecwcgroup.com.

World NOC deepwater congress 2012, June 21–22, 2012, London, UK. Details: Terrapinn Holdings Ltd, First Floor, Modular

Place, Turnberry Office Park, 48 Grosvenor Road, Bryanston 2021, South Africa. Tel: +27 11 516 4000; fax: +27 11 463 6000; e-mail: enquiry.za@terrapinn.com; website: www.terrapinn.com.

Gas storage, June 25–26, 2012, London, UK. Details: SMI Group Ltd, Unit 122, Great Guildford Business Square, 30 Great Guildford Street, London SE1 OHS, UK. Tel: +44 207 827 6000; fax: +44 207 827 6001; e-mail: client_services@smi-online.co.uk; website: www.smi-online.co.uk.

Global unconventional gas 2012, June 25–27, 2012, Istanbul, Turkey. Details: Praxis Global Research, PO Box 94134, Dubai, UAE. Tel: +971 4 884 1110, ext 118; fax: +971 4 884 7140; e-mail: info@praxis-global.com; website: www.praxis-global.com.

Global E&P data and knowledge management 2012, June 25–27, 2012, Istanbul, Turkey. Details: Praxis Global Research, PO Box 94134, Dubai, UAE. Tel: +971 4 884 1110, ext 118; fax: +971 4 884 7140; e-mail: info@praxis-global.com; website: www.praxis-global.com.

Oil and gas project finance, June 25–27, 2012, London, UK. Details: International Faculty of Finance, 8th Floor, 29 Bressenden Place, London SW1E 5DR, UK. Tel: +44 207 017 7190; fax: +44 207 017 7802; e-mail: enquiries@iirltd.co.uk; website: www.iff-training.com.

17th Asia oil week, June 25–27, 2012, Singapore. Details: Global Pacific Partners, Suite 7, 4 Montpelier Street, Knightsbridge, London SW7 1EE, UK. Tel: +44 207 589 7804; fax: +44 207 589 7814; e-mail: babette@glopac.com; website: www.petro21.com.

14th International trade fair equipment and technologies for the oil and gas industries, June 25–29, 2012, Moscow, Russia. Details: ITE Group plc, Oil and Gas Division, 105 Salusbury Road, London NW6 6RG, UK. Tel: +44 207 596 5233; fax: +44 207 596 5106; e-mail: oilgas@ite-exhibitions.com; website: ite-exhibitions.com.

Nigeria oil and gas technology exhibition, June 26–28, 2012, Lagos, Nigeria. Details: CWC Associates Ltd, Regent House, Oyster Wharf, 16–18 Lombard Road, London SW11 3RF, UK. Tel: +44 207 978 000; fax: +44 207 978 0099; e-mail: sshelton@thecwcgroup.com; website: www.thecwcgroup.com.

10th Russian petroleum and gas congress, June 26–28, 2012, Moscow, Russia. Details: ITE Group plc, Oil and Gas Division, 105 Salusbury Road, London NW6 6RG, UK. Tel: +44 207 596 5233; fax: +44 207 596 5106; e-mail: oilgas@ite-exhibitions.com; website: ite-exhibitions.com.



Call for papers

We invite you to submit a well researched scholarly paper for publication in OPEC's relaunched quarterly academic journal, the OPEC Energy Review, which specializes in the fields of energy economics, law, policy, the environment and international relations.

The OPEC Energy Review, which is prepared by the OPEC Secretariat in Vienna, is distributed to universities, research institutes and other centres of learning across the world.

The criteria for publication in the OPEC Energy Review are that the material is the product of research in an area of interest and value to the readership, and that it is presented in an objective and balanced manner. Submission of a paper will be held to imply that it contains original, unpublished work and is not being submitted for publication elsewhere. Manuscripts are evaluated by referees.



Abstracts of up to 150 words should be included. In the covering letter, or on a separate sheet, the following details of the principal author should be given: full name (and, if different, desired name for publication purposes), title, affiliation, full postal address, e-mail address and telephone numbers. Similar details should be provided for all co-authors. Authors will retain copyright to their papers, while giving the Publishers' Exclusive Licence to publish.

Manuscripts should be written in clear English and not exceed 8,000 words. Submissions should be done electronically either via e-mail attachment or compact disc (CD). Tables and figures should carry titles, relate directly to the text and be easily comprehensible. Mathematical expressions should be clearly presented, with equations numbered.

Endnotes should be indicated in the text consecutively, with superscript numbers, and should be explained in a list at the end of the text. Reference citations in the text should be by last name(s) of author (s) and date (for joint authorship of three or more names, the words 'et al' should be inserted after the first name); references should be spelt out and listed in alphabetical order at the end of the paper (after the endnote listings). For more details of style, please refer to a recent issue of the OPEC Energy Review.

Submissions should be made to: Executive Editor, OPEC Energy Review, OPEC Secretariat, Helfferstorferstrasse 17, 1010 Vienna, Austria (tel: +43 1 211 12-0; e-mail: prid@opec.org).

OPEC Energy Review
Editor-in-Chief/Chairman, Editorial Board: Dr Hasan M Qabazard
General Academic Editor: Professor Sadek Boussena
Executive Editor: Angela U Agoawike

OPEC Bulletin

is published ten times/year and a subscription costs \$70. Subscription commences with the current issue (unless otherwise requested) after receipt of payment.

I wish to subscribe to the OPEC Bulletin for a one-year period

OPEC Monthly Oil Market Report

Published monthly, this source of key information about OPEC Member Country output also contains the Secretariat's analyses of oil and product price movements, futures markets, the energy supply/demand balance, stock movements and global economic trends. \$525 for an annual subscription of 12 issues.

I wish to subscribe to the MOMR for a one-year period

Please send me a sample copy

OPEC Annual Statistical Bulletin 2010/2011

This 104-page book, including colour graphs and tables, comes with a CD-ROM featuring all the data in the book and more (for Microsoft Windows only). The book with CD-ROM package costs \$85.

Please send me copies of the OPEC Annual Statistical Bulletin 2010/2011 (book plus CD-ROM)

OPEC Energy Review

contains research papers by international experts on energy, the oil market, economic development and the environment. Available quarterly only from the commercial publisher.

For details contact: Blackwell Publishing Ltd, 9600 Garsington Road, Oxford OX4 2DQ, UK. Tel: +44 (0)1865 776868; fax: +44 (0)1865 714591; e-mail: jnlinfo@blackwellpublishers.co.uk; www.blackwellpublishing.com. Subscription rates for 2011: **Europe**, print €493, online €493, print and online €567; **UK**, print £388, online £388, print and online £447; **rest of world**, print \$761, online \$761, print and online \$876; **Americas**, print \$652, online \$652, print and online \$750.

Shipping address (please print in block letters):

Name: _____
 Address: _____

Invoicing address (if different from shipping address):

Name: _____
 Address: _____

How to pay:
 Invoice me Credit card (Visa, Eurocard/MasterCard and Diners Club)
 Credit card company: Credit card no: _____

Expiry date: _____

Holder: _____

Signature: _____

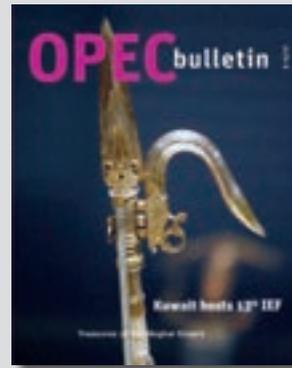
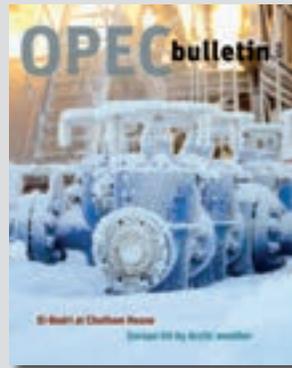
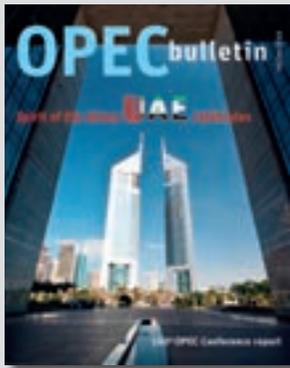
Please mail this form to:
 PR & Information Department
 OPEC Secretariat
 Helfferstorferstrasse 17, A-1010 Vienna, Austria

or telefax to:
 PR & Information Department
 +43 1 211 12/5081

All prices include airmail delivery.

OPEC offers a range of publications that reflect its activities. Single copies and subscriptions can be obtained by contacting this Department, which regular readers should also notify in the event of a change of address:

PR & Information Department, OPEC Secretariat
Helferstorferstrasse 17, A-1010 Vienna, Austria
Tel: +43 1 211 12-0; fax: +43 1 211 12/5081; e-mail: prid@opec.org



OPEC Bulletin
 Annual subscription \$70

To order, please fill in the form

OPEC Annual Statistical Bulletin 2010/2011



104-page book with CD
 Single issue \$85
 The CD (for Microsoft Windows only) contains all the data in the book and much more.
 • Easy to install and display
 • Easy to manipulate and query
 • Easy to export to spreadsheets such as Excel

OPEC Monthly Oil Market Report



- Crude oil and product prices analysis
- Member Country output figures
- Stocks and supply/demand analysis

Annual subscription \$525 (12 issues)

OPEC Energy Review

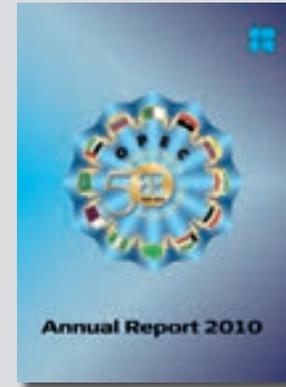


(published quarterly) annual subscription rates for 2011:

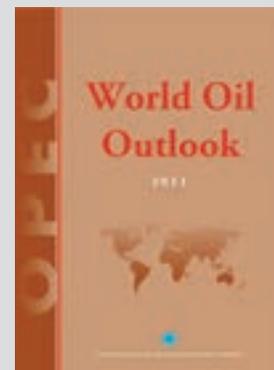
	Print	Online	Print & online
Europe €	493	493	567
UK £	388	388	447
Rest of world \$	761	761	876
Americas \$	652	652	750

Orders and enquiries:
 Blackwell Publishing Journals,
 9600 Garsington Road,
 Oxford OX4 2DQ, UK.
 Tel: +44 (0)1865 776868
 Fax: +44 (0)1865 714591
 E-mail: jninfo@blackwellpublishers.co.uk
 www.blackwellpublishing.com

Annual Report 2010
 Free of charge



World Oil Outlook 2010
 Free of charge



www.opec.org 