



SECURITY THROUGH SHARING OF DATA, ANALYSIS AND VIEWS

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The IEA is a long-time supporter of the producer-consumer dialogue, and it goes without saying that the agency remains committed to playing its full part. Challenges, nevertheless, remain in the energy sector, and one of the significant benefits of such dialogue is that it enables us to tackle these issues together.

The producer-consumer dialogue is currently taking place in a very specific economic context. Given the turbulence brought on by the global economic crisis, and particularly the state of play in the eurozone, the focus in many capitals is unavoidably on short-term economic uncertainties. Over the medium to long term, however, there is one thing that we can be sure about: global economic growth and rising population will push energy demand higher. In our latest *World Energy Outlook 2011*, we see global energy demand rising by over one-third between 2010 and 2035.

Moreover, the direction and orientation of energy markets will be increasingly determined by the “emerging” rather than the “industrialised” world. Emerging economies are expected to account for more than 90 per cent of the growth in global energy demand.

One reason for higher energy consumption in many parts of the world is government subsidies to fossil fuels. We estimate that the value of these subsidies in 2010 amounted to over US\$400 billion, a significant economic liability. In 2009, the Group of 20 (G20) agreed to phase out subsidies that “encourage wasteful consumption, reduce our energy security, impede investment in clean energy sources and undermine efforts to deal with the threat of climate change.” Faster progress with this phase-out can bring benefits – such as improving energy efficiency and reducing strain on domestic budgets – to energy-importing and energy-exporting countries alike.

THE CHANGING ENERGY MIX

Indeed the age of fossil fuels is far from over, but there are some important shifts taking place in the energy

mix. Renewables and natural gas are set to experience the largest growth. Oil remains the largest fuel in the global energy mix, but gas will all but catch up with coal by 2035, and is the only fossil fuel to see an increasing share in the mix.

The growth in oil demand to 2035 comes entirely from the transport sector in non-OECD countries, where vehicle ownership grows dramatically. We expect that, by 2020, more cars will be built and sold in non-OECD countries than in the OECD – making fuel efficiency and other transport policies in these non-OECD countries key to global oil demand. Oil imports to the United States, currently the world’s biggest importer, drop as efficiency gains reduce demand and new supplies such as light tight oil are developed. However, increasing reliance on oil imports elsewhere can heighten concerns about the cost of imports and supply security.

On the supply side, we do not expect an increase in conventional crude oil production over the next two and a half decades: the rise in global demand is likely to be met by natural gas liquids and by non-conventional oil (Figure 1). But the investment challenge in this area is still immense. Output from currently producing conventional fields will decline by 47 million barrels per day by 2035. Making up for this decline will require new production capacity equal to twice the current total oil production of all OPEC countries in the Middle East – and this is just

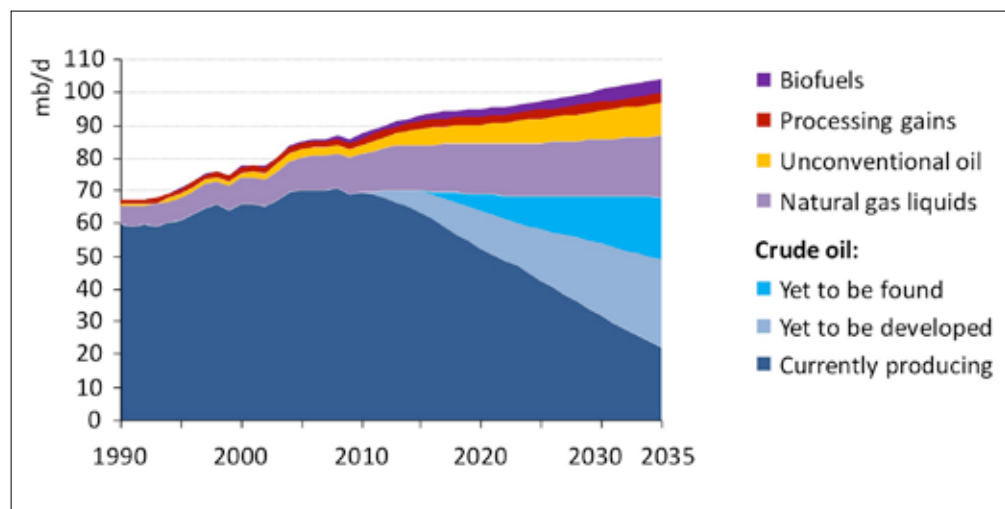


FIGURE 1: WORLD LIQUIDS SUPPLY BY TYPE IN THE NEW POLICIES SCENARIO

Source: World Energy Outlook 2011

to keep crude oil supply at current levels. Meanwhile the contributions of natural gas liquids and unconventional oil will expand to supply one-quarter of the market by 2035.

The world relies heavily on oil supply from the Middle East and North Africa to meet the increase in demand over the coming decades. The projected increase in production from this region is equal to around 90 per cent of the global increase in oil demand. The World Energy Outlook 2011 therefore analyses the implications of a shortfall in investment in the Middle East and North Africa in the period to 2015. Such a shortfall could result from increased political risk or a change in government spending priorities, and we found that it would have significant consequences for supply and prices. If investment falls one-third below the US\$100 billion that we think will be necessary each year, falling output from producers in the Middle East and North Africa would lead to a significant near-term rise in price, to as much as US\$150 dollars per barrel in today's money. This would likely be accompanied by a significant increase in price volatility.

That situation would clearly not be in the interests of oil consumers, but nor would it help Middle East and North African producers. We estimate that while these countries would gain in the short term from a higher price, they would lose out over the longer term as part of their market share would be taken by producers outside the region.

COMMON INTEREST IN SUSTAINABILITY

Another point of mutual interest among consumers and producers is the need to work toward sustainability. The international community agreed at Copenhagen and at Cancun the goal to limit the rise in average global temperatures to 2° Celsius. Our conclusion in the *World Energy Outlook* is that the door to achieve this objective is closing. The power plants, factories and other energy-using infrastructure in place today already uses up a significant share of the emissions that we can “afford” if we are to meet the 2 degree target. Without a major shift towards low-carbon technologies and greater efficiency, by 2017 we will be totally “locked-in”, with existing infrastructure emitting to the limit. This means that, in order to limit warming to 2°C, all additional energy-related infrastructure built from that point forward would have to be zero-carbon (Figure 2).

This is a major global challenge, and that is why the IEA is urging faster movement in the direction of a more efficient, low-carbon energy economy. Our projections

show that achieving the 2°C goal would without question have an impact on demand for oil and gas. But moving to a sustainable energy future in 2035 does not mean a future without fossil fuels – even in the 450 ppm Scenario, which plots a pathway to the 2°C goal, oil demand in 2035 is only marginally below today's levels, and gas demand is actually higher.

Energy security, investment, price volatility, sustainability, and climate change – as well as the critical issue of modern energy access – are all key issues for both producers and consumers, and they set an ambitious agenda for all of us.

The producer-consumer dialogue provides a unique forum in which to discuss, analyse and address these common challenges in a collaborative and joint manner. Its successes are worth noting.

As Dutch Minister of Economic Affairs in 2008, I participated in the landmark Jeddah Energy Meeting, where the Saudi Government and the IEF played a key role. Along with major producer and consumer governments, and other organisations including the IEA, we all helped to stabilise oil markets and to chart a way forward for better managing our shared challenges in the future.

The priorities which were highlighted then remain valid today. Those include:

- Adequate investment both upstream and downstream;
- Better market data and transparency;
- Collaboration between the IEA, IEF and OPEC staff to produce more consistent market data and analysis;
- Cooperation within the business sector on investment, technology and human resources;
- Access to energy for the world's poor;
- and improvements in energy efficiency.

It is notable how effectively the IEF has built these priorities into its work programme in the less than four years since then.

THREE PRIORITIES FOR FUTURE FOCUS

Three particularly important workstreams include JODI, work with business, and of course the facilitation of joint oil market analysis with OPEC.

We are celebrating in Kuwait the 10th anniversary of the Joint Organisations Data Initiative (2001-2011). From the start, the IEA has been a keen supporter of JODI. The 2011 World JODI Conference in Beijing highlighted the growing appetite for JODI data. But it also underscored the need to do more to establish JODI as a benchmark for oil statistics and as a key achievement of the producer-

consumer dialogue. This is imperative, as more transparency on oil market data has long been seen as a prerequisite for reducing volatility in oil markets. Increasing use of the data by business and industry customers is an encouraging sign of JODI's growing reputation. Therefore, all organisations and countries involved in JODI must work hard to further improve data quality to deliver what markets need.

The current IEF Ministerial Meeting in Kuwait gives us a key opportunity to do what needs to be done.

Extending JODI to gas and to upstream capacity data is now under way. These will be serious challenges for the coming years, but we are encouraged that the recent memorandum of understanding between the IEF and the Gas Exporting Countries Forum (GECF) will allow us to widen yet further the family of international organisations engaged in this important work.

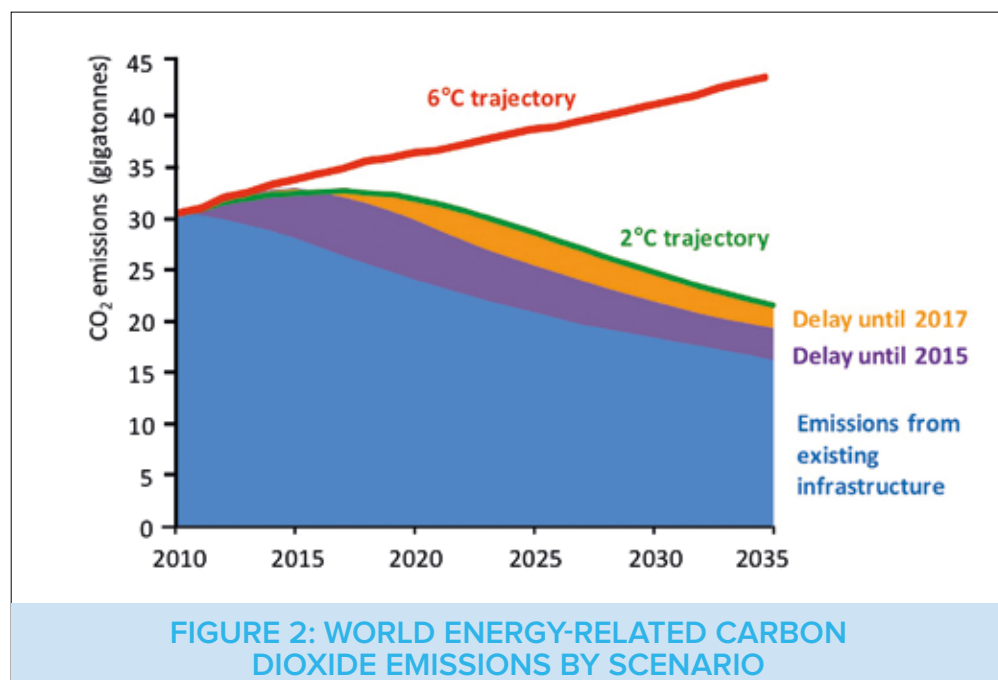
Second, it is notable how effectively the Business Forum has pursued its agenda, not only through the International Energy Business Forum (IEBF), which now regularly opens the biennial Ministerial – but also through the NOC-IOC Forum and working groups. There, we have taken a hard look at the practical issues of technology, human resources, and international cooperation. Mobilising adequate investment by both government and private sector in energy infrastructure and in future energy supplies will be key to maintaining stable energy markets and developing sustainable energy systems.

Finally, it is important to note the joint work on oil markets and energy forecasting between the IEA and our colleagues in the IEF and OPEC. Oil price volatility and market risks are issues which affect both investment decisions and supply security. Better understanding of the uncertainties inherent to both are in the mutual interest of producers and consumers. Recent workshops in Vienna in 2011, and Riyadh in January 2012, allowed us to jointly discuss the relationship

between the physical and financial markets for oil, and the variations in our short-, medium- and long-term energy outlooks. Discussing and comparing in depth the analysis of our *World Energy Outlook 2011* and that of the OPEC *World Oil Outlook* among an expert audience is a practical manifestation of the communication which underpins the producer-consumer dialogue.

The last two years have also seen work commissioned from our three organisations by the G20, the latest being a study on the role of the Price Reporting Agencies in the oil markets. These initiatives can all be traced back to the Jeddah Energy Meeting in June 2008, as well as subsequent meetings at London and Cancun which looked to strengthen the Forum, leading eventually to its new Charter. Negotiating the new Charter required hard and detailed work, and those who made it a success are to be commended. The fact that 86 countries signed the Charter at the Special Ministerial in Riyadh in February last year was a fitting reward.

In the past ten years, much progress has been made through the producer-consumer dialogue. I am confident that through continued close consultation and cooperation, we can make even more progress – and I can assure you that the IEA will remain a committed and integral part of that process. ■



Source: World Energy Outlook 2011