Speech by Maria van der Hoeven, IEA Executive Director, for the 13th International Energy Forum, Kuwait, 14 March 2012.

- Honourable Ministers, Ladies and Gentlemen,
- I would like to share with you the IEA’s views on energy, and particularly oil market, volatility.
- Volatility itself has often been a poorly defined concept:
  - In economics and finance it measures how much a price changes compared to its constant long-term level or trend;
  - all too often however, in politics it is tempting to confuse this economic definition with a simpler observation that prices are moving sharply in an inconvenient direction!

![Image of World: Oil Burden & Price](image)

- However, I do not wish to trivialise the very real economic threat posed by the increase in prices we have seen in 2011 and early 2012.
- On average last year, global oil expenditures again breached 5% of GDP, as they did in 2008 and during previous periods of sharp economic slowdown.
  - Just as the world was beginning to pull out of the 2008/2009 recession, the pressures deriving from higher crude prices have re-emerged.
Timing is important - the global economy can arguably better withstand commodity price inflation during times of robust growth than during periods of gradual or sluggish growth.

- Nor is this simply a case of richer countries grumbling about high oil prices. The emerging markets are also vulnerable.
  - Terms of trade and current account imbalances are exacerbated, inflation increases, and the fiscal burden rises in those countries which subsidise energy.

- So we should all be worried about recent increases in prices.
- That said, although volatility in oil prices did increase again in 2011
  - ...it has not regained the peak levels seen back in autumn 2008 or in the early 1990s. Some oil price volatility will always be with us. That is particularly true for a commodity like oil that is characterised by supply and demand which are price-inelastic in the short term. Demand or supply shocks will therefore tend to produce a particularly sharp price response.

**Joint Outlooks**

- Before we start to look at the growing links between the physical and financial markets for oil and other commodities, we need to take a long and hard look at a number of policy choices affecting the physical markets.
  - Those choices will be key if we wish to make demand and supply more responsive to international prices...
  - ...and by implication, make prices less prone to exaggerated fluctuations.

- One initiative that we think will help in this regard is the vital joint work being undertaken by the IEF, OPEC and the IEA on market outlooks.

- Expectations about the physical state of the market shape price expectations.
  - Reducing uncertainties about the future should help limit the degree to which misperceptions or confusion about future market fundamentals lead to price volatility.

- The aim is not to force consensus or identical outlooks...
...but rather to see where there is definitional ambiguity between our projections...
• ...or sectors in the outlook which we can agree need further study.
• In as much as our organisations’ outlooks influence those produced by industry, the financial sector, and government, this can help to reduce uncertainty in the market.

**JODI**

• One initiative among our organisations that has made a difference is JODI – the Joint Organisations Data Initiative.
• Having begun life as an oil database, JODI has grown in coverage and reliability, and is now widely used by analysts across the industry.
• JODI is evolving into a database which will also cover gas, and capacity investments.
• As you all know, we are celebrating the 10th Anniversary of the JODI initiative – and there is good reason.
• In 2001, there were only a handful of countries who could report monthly oil data for the previous month;
  • ...now there are over 70 countries which can do so, and more than 90 countries which can report data with two months’ delay.
• In 2005, King Abdullah of Saudi Arabia launched the JODI database live on Internet.
  • The database is now updated monthly, and users increasingly access the database as soon as it is updated.
• Definitions of oil flows and products have been harmonised between organisations.
• JODI Gas has been launched, and JODI capacity is about to be launched.
• Broadly, JODI has contributed to strengthening the producer-consumer dialogue and the IEF Secretariat.
• However, after 10 years of hard work...
  • there are still some flows and products which are not being reported by some countries;
  • there are clear flaws in some time series.
• At the IEA we are strong believers in data transparency and in cooperation.
  o But transparency can only happen if all countries and organisations are fully committed to achieving this goal.
• May I call on the IEF Secretariat to further strengthen its coordination effort and also to encourage IEF Member countries in their full engagement.
• May I call on my colleagues in the JODI partner organisations, and on the Ministers directly, to make JODI a priority in terms of reporting and resources.
  o Be assured that we will do the same at the IEA among the OECD countries.
• At the end of each IEF Ministerial meeting there is a call for smiley faces for all countries; I look forward to seeing all smiley faces at the next IEF Ministerial in Moscow.

**Policy (investment, subsidies, taxes)**

• So much for the way we **analyse** the physical markets, but are there also improvements that can be made by industry and government to the way physical markets **operate**?
  o Governments need to work harder to ensure that stable, flexible and consistent investment terms are in place, whether for the drilling of an oil well, or the construction of a power grid.
• Environmental policies and targets need to be predictable, practical, economic and internationally coordinated.
• And we need a level playing field that ensures investment in natural resources is open to all -
  o ...national oil companies, multinationals and the independents alike.
• World Energy Outlook 2011 estimates that upstream oil and gas investment between now and 2035 needs to average $619 billion per year, compared with over $550 billion spent in 2011.

• Governments also need to think carefully about price subsidies and taxes.
  o End-user subsidies, while carrying noble social objectives, are often economically inefficient and distort price signals to consumers.
  o The public will not respond to triple digit international prices if it is paying only a fraction of that at the pump.

• Our analysis has estimated that global oil demand in 2035 might be some 4.4 mb/d lower if all of today’s end-user price subsidies (amounting to $409 billion in 2010) were dismantled.

• Finally, we will see further progress this year on studies requested by the G20 into how international physical prices are reported by the Price Reporting Agencies.
  o The IEA is pleased to be playing a role in that work.

• There is no suggestion that these bodies contribute to increased volatility, but shining a light on the methodologies and activities of these Price Reporting Agencies can help to boost transparency across the physical and financial spheres.

**Physical/Financial Interdependence**
• I want to move on now to discuss the growing interdependence between the physical and financial markets for oil and other commodities. It is an area in which the IEA has put a lot of emphasis in recent years and deepened its analysis.
• A simple look at crude prices and equities is persuasive in suggesting co-movement between the two – but not necessarily causality.
• Shifts in the crude price since 2008 have tended to track fairly closely perceptions and expectations of economic growth.
  o That is not surprising given the close linkage between growth and oil demand.
• But moving further away from the purely physical sphere, much has been made of the huge influx of capital in the last decade into crude oil and other commodity derivatives.
  o In 2011 that influx breached $430 billion, compared to only around $55 billion in late-2004.
• Commodities emerged as a distinct asset class based on the observation that returns on commodities were inversely related to those for other assets.
  o They represented a good hedge against underperforming equities or dollar depreciation.
• Interestingly however, since 2008 commodity returns have tended to move much more closely in sync with equities and other assets.
  o That may ultimately dampen investors’ enthusiasm for commodities as a way of diversifying their portfolios.
• In any case, the huge influx of capital into crude and other commodity derivatives has caused some analysts to suggest that the “financialisation” of commodities must therefore has underpinned the concurrent general price rise.

Speculation?
• However, few of the many studies examining futures market activity and crude oil prices have found any meaningful causality between so-called ‘speculative’ activity and prices.
- In addition, some of our own analysis at the IEA tends to cast doubt on the ill-defined concept of ‘excessive’ speculation within the crude market.
- The ratio of speculation to hedging demand in the crude futures market, though generally on the rise in the past decade, is both...
  - consistent with that for other commodities...
  - and has in fact flattened off or declined since 2008.

- Finally, we have noted that the supposed ‘smoking gun’ (of speculation underpinning higher crude prices) is much less evident if we consider other commodities not traded on futures exchanges.
- Both the pace and scale of price rises for non-exchange traded commodities during 2006-2008 exceeded that for crude oil.
  - And indeed price volatility during 2000-2010 for most non-exchange traded commodities either matched or exceeded that for crude oil.
- Moreover, the IEA concluded that the general lack of liquid risk hedging mechanisms in these fuel markets, makes them more prone to extreme price swings.
- None of this is to suggest that speculative activity has no role in energy price formation, or makes no contribution to price volatility.
  - Clearly it does. But the joint workshops held by the IEF, OPEC and IEA over the last two years, suggested that the price influence of derivative market activity is largely confined to the very short term.
- Over longer time spans, the complex web of interactions between...
• supply and demand;
• inventories and spare capacity;
• refining and transportation;
• crude and products qualities;
• and expectations of how these physical parameters will develop in future...
• ...play a much greater price determining role than derivative market activity itself.

• That said, we wholeheartedly support the efforts of regulators worldwide to enhance market transparency in commodity derivative markets.

• Even if financial market influences are less evident than those from the physical side, that does not mean they should be ignored.
  o ‘Absence of proof’ on linkages between speculation and prices is not the same as ‘proof of absence’.

• It is important that we understand better the role of the less visible ‘over-the-counter’ derivatives markets.
  o ...How large they are, and whether changes in Over-the-Counter trading activity are more influential on prices than shifts on futures exchanges.

• Moves to make commodity financial markets more transparent, more liquid, and more efficient - including better and more consistent international regulation - will help everyone in the energy business.

• But we must avoid moves that excessively restrict the ability of participants on the physical side of the business from hedging their price risks.

• After all, the speculator in the market is simply taking an equal and opposite position to that of the bona fide commercial participant...
  o ...while at the same time performing essential liquidity and price discovery roles.

**Conclusion**

• To sum up:-
• We need well regulated and transparent platforms on which to hedge price risks.
• We need to better understand how the physical and paper markets come together via arbitrage.
• And we need to promote a steady and increasing flow of investment in physical markets, to ensure that the world’s energy needs for the 21st century and beyond are met in an affordable, clean and sustainable way.
• A major step toward more predictable markets is the regular contact and cooperation among the IEA, OPEC, and IEF which we see today and which must continue.
• We look forward to further enhancing JODI, and to ensuring that our analysis, forecasts and policy recommendations provide a framework for market stability in the years ahead.

Thank you for your attention.