

**OPEC's 4<sup>th</sup> International Seminar on Petroleum: Future Stability and Sustainability  
"Technology and Environment"  
Vienna, 19 March 2009**

**Address by Yvo de Boer, Executive Secretary  
United Nations Framework Convention on Climate Change**

Excellencies, ladies and gentlemen,

The Secretary-General of the United Nations has termed this year the "year of climate change". The reason is obvious: Copenhagen. December. 2009. The 2009 United Nations Climate Change Conference in Copenhagen will be the moment in history in which humanity has the opportunity to rise to the challenge and decisively deal with climate change.

The Intergovernmental Panel on Climate Change told the world in 2007 that greenhouse gas emissions have to be radically reduced to keep climate change from sliding into climate chaos.

Across the globe, people are demanding a decisive and clear political solution to one of the world's most pressing problems. A political solution is critical for humanity's further development as a whole and especially critical for the world's poorest and most vulnerable people, who have the least ability to cope.

In the long run, climate change impacts are a massive threat to human and economic development. A successful fight against climate change needs to entail transitioning the global economy onto a low-emissions pathway. At the same time, a political solution to climate change should not threaten economic development either.

This is of course especially important for countries that depend on oil as their largest source of income. And given that the world's economy would come to a grinding halt in the absence of oil, fighting climate change cannot realistically mean fighting oil. Fighting climate change means fighting emissions.

***Oil is projected to remain the dominant fuel in the world's primary energy mix***

In the International Energy Agency's World Energy Outlook for 2008, its Reference Scenario estimates that fossil fuels will account for 80% of the world's primary energy mix in 2030. Global oil demand is set to continue to expand up to 2030 on current trends.

At the same time, warnings that peak oil may be reached in the next 30 to 50 years abound. Depletion analysts continually point out that the world's dependence on vanishing, non-renewable energy resources will constitute a real dilemma for the global economy in the not too distant future. If true, this will simply push more coal into the energy mix.

There is thus clearly a need to secure additional energy sources to power economies in the long-term. But given that oil will remain dominant in the world's energy mix in the medium term, coupled with the urgent need to reduce emissions, mean that the introduction of climate-friendly technologies is crucial.

***Emission-reducing technologies are a safe ticket into the transition towards a low-emissions economy***

The rise in global consumption of fossil fuels up to 2030 will continue to impact greenhouse gas emissions. Global energy-related CO<sub>2</sub> emissions are projected to increase by 45% from 28 gigatonnes in 2006 to 41 gigatonnes in 2030.

The IPCC has identified carbon dioxide capture and storage (CCS) as one of the most promising technologies for the rapid reduction of global emissions. The further development and uptake of CCS is recognized by the IPCC as one of the innovative supply-side technologies which may enhance access to clean energy, improve energy security and promote environmental protection.

CCS pilot projects are promising. The oldest project off the coast of Norway has been running for 13 years without any sign of CO<sub>2</sub> leakage. Last year, the Swedish utility Vattenfall opened the first power plant to incorporate CCS in Germany. Several other firms hope to start similar pilot projects this year. OPEC's initiative to establish a CCS research and development fund is encouraging.

Institutional advances for the introduction of CCS are also being made. Last year, the European Union passed a law requiring its members to draw up rules and regulations for CCS.

Carbon capture is also not new to the oil industry. Oil firms have long experience of pumping carbon dioxide into reservoirs to increase their pressure and so extract more oil. Exxon Mobile currently runs the world's largest carbon capture facility.

However, CCS is still expensive. If CCS is to be employed at a large scale it requires funding that closes the cost-gap between energy production with and without CCS. Discussions are under way on whether the continuation of the carbon market beyond 2012 could enable CCS to be included in the Kyoto Protocol's Clean Development Mechanism (CDM). The Executive Board of the CDM has been tasked with assessing the implications of including CCS under the CDM. This could enable market-based funding for CCS. This could be further enhanced by expanding the CDM and developing new market mechanisms under an agreed outcome at Copenhagen.

There are other technologies too, such as CCS and enhanced oil recovery, hydrogen production and increased opportunities for natural gas usage, as well as other non-fuel uses of oil, that will maintain oil's position as an important international commodity well into the future. Non-fuel uses include the production of lubricants, sulphur, plastics or paraffin wax.

***At the same time, addressing climate change can contribute to addressing peak oil***

Fears regarding stable revenue from oil stem both from enhanced climate change action, and peak oil projections. Due to climate change, the world urgently needs to move away from its emissions-intensive dependency on fossil fuels. But any declining ability to supply could outstrip demand, forcing at first a huge price rise but a painful longer-term collapse in oil-producer revenues.

Yet fears could be turned to advantages – renewable energy diversification coupled with clean fossil-fuel technology could address climate change. At the same time, this could help smooth out the future oil supply-demand curve for more stable, longer-lived oil revenues. Both peak oil and climate change scientists point to the urgent need to expand the use of renewable energies. Oil-rich Abu Dhabi, for example, is seizing the opportunity and constructing the world's first renewable energy city.

OPEC members have an important role to play in investing in research and development of clean sources of energy. This would yield win-win solutions for both climate change and peak oil concerns. It would also put OPEC at the cutting edge of the transition to a low-emissions economy.

Constructive involvement in economic transitions can give groups a powerful place in designing the transformation. At the same time it can enable them to simultaneously manage the environmental, economic and strategic risks of the transition.

***A successful climate change deal at Copenhagen can ease the transition to a low-emissions pathway***

A successful deal at Copenhagen needs to significantly contribute to managing the transition to a global low-emissions economy.

Within the negotiations, the potential consequences of mitigation actions - including for oil-exporting countries - have gained importance. Parties are currently discussing ways to minimise negative consequences of mitigation actions. This includes cooperation in the development and transfer of less greenhouse gas emitting advanced fossil fuel technologies, as well as technologies that capture and store greenhouse gases.

***A successful deal at Copenhagen can also contribute to the world's economic recovery***

The world has changed since the negotiating process on strengthened climate change action was launched in Bali in 2007. We are now in the clasp of a global economic crisis. The poorest and most vulnerable are already the hardest hit by the global economic woes.

Encouragingly, the economic crises is being used by some, for example China and the US, as an opportunity to redirect energy policies into a greener future. One of the elements of the US economic stimulus package, relates to setting aside USD3.4 billion for CCS. Linking economic recovery to ambitious climate change policies translates into seizing the opportunity.

Copenhagen 2009 has an important role to play in the global economy by further strengthening and extending the opportunities inherent in “going green”.

*To my mind, there are four political prerequisites that have to be resolved in order to reach success in Copenhagen.*

1. The **first** essential relates to clarity on ambitious targets for developed countries.
  - The European Union has firmly committed to -20% over 1990 levels by 2020 and is putting in place policies to achieve that goal;
  - President Obama's intention to reduce the US' emissions to 1990 levels by 2020, and by 80% by 2050 translates into a good first offer;
  - Additionally, a number of other industrialised countries including Australia and Norway have already announced their level of ambition. Others, including Japan, are in the process of setting a target.
  
2. The **second political essential** relates to clarity on nationally appropriate mitigation actions by developing countries.

A host of developing countries have indicated their willingness to move beyond current efforts to limit emissions and implement nationally appropriate mitigation actions, enabled with international support.

Nationally appropriate mitigation actions - or NAMAs - could potentially take the form of policies and measures, low-carbon development plans and strategies, market-based mitigation actions, including CDM, or technology deployment programmes, to name just a few.

Copenhagen 2009 needs to ensure that NAMAs support developing countries' long-term economic growth objectives. The opportunity of a successful deal in Copenhagen lies in making mitigation actions and economic growth mutually supportive across the board and across the globe. As per the Bali Road Map, developing countries need measurable, reportable and verifiable financial and technological support to implement NAMAs.

3. This leads to the **third political essential**, which relates to clarity on how sufficient financial and technological support both for mitigation and adaptation will be generated.

Multilateral and bilateral sources of public funding represent a key component. However, such public sources are unlikely to provide sufficient support.

The current carbon market represents a promising first step towards generating such support. The higher the level of ambition of industrialised countries, the higher the level of technology transfer - possibly including CCS - or funds generated for adaptation through the Kyoto Protocol's Clean Development Mechanism.

Overall, it will be important to create a mix of financial instruments with effective disbursement.

4. This leads to the **fourth political essential**, which relates to clarity on the institutional framework to deliver support for mitigation and adaptation

It is critical that the funds that are agreed as part of the Copenhagen outcome have governance structures that are founded in equity, and respect the interests and needs of developing countries.

***The year of climate change is also the year of opportunity***

The final year in the two-year negotiating process under the Bali Road Map has begun. The year ahead has been clearly mapped out: three two-week negotiating sessions have been dotted throughout the year, with the possibility of a fourth session before Copenhagen, if needed.

I urge OPEC member states to seize the opportunities that strengthened climate change action will bring to the world. The options that I have outlined would allow you to use the efforts to address climate change to drive a global transformation away from emission-based development in your economies.

I encourage OPEC members to contribute to the climate change negotiations towards Copenhagen. You have the opportunity to play an important role in history and drive forward sound solutions to a global problem.

Thank you

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