

INTERVIEW

The Large Oil and Gas Exporters in the Middle East Now Have a Double Incentive to Remove Fossil-Fuel Subsidies,

Fatih Birol, the **International Energy Agency** Chief Economist, Tells AOG

- ▶ **COP21:** there are a number of reasons for optimism
- ▶ Measures which would lead to **emissions peaking around 2020** are based on current technologies
- ▶ A number of countries have taken the positive steps of **reducing fossil fuel subsidies** since the fall of the oil price last year
- ▶ I do not believe that a sustainable energy future necessarily hinges on the **banning of fossil fuels**

(Below is the text of an **Arab Oil & Gas** interview with Mr. Fatih Birol, the **International Energy Agency** Chief Economist, after the publication, on 15 June 2015, of a new IEA report on *Energy and Climate Change* – see Mr. Birol's CV on the following page. Mr. Birol will be the next Executive Director of the IEA).

Arab Oil & Gas (AOG): *Are you optimistic about the future results of the 21st Conference of the Parties (COP21) in Paris in December 2015? How do you assess the political willingness of the key players as far as the climate change issue is concerned?*

■ **Fatih Birol:** One cannot underestimate the importance of the upcoming COP21 summit - it comes at a critical juncture when we can still make the changes to put our energy system on a more sustainable footing. But time is running out, and clear, actionable policies must be announced by world leaders at the summit if we are to stand any chance of avoiding catastrophic climate change.

There are a number of reasons for optimism. Firstly, last year signalled the first instance in modern history in which the world's economy grew, while carbon emissions did not. This decoupling of emissions from economic growth is precisely what we need to strive for on a sustained basis. Secondly, I am buoyed by the commitments that the world's two largest emitters, the US and China, have given in the lead up to this summit. Both have made positive announcements on their targets, and this alongside the EU, which has long been a leader in promoting the climate agenda, could provide the leadership necessary to steer global policy dialogue towards this agenda. So far, countries that account for more than a third of global energy related emissions have submitted their Intended Nationally Determined Contributions (INDCs)



Photo AIE.

in the run up to COP21 - the fact that countries from Russia, Mexico and Norway, to Gabon, Morocco and Ethiopia have done so reflects the truly global nature of this challenge.

The dangers of climate change are now well understood, and the need for serious action is increasingly being appreciated. I was happy to read, for instance, Pope Francis' encyclical, which in my mind reflects the increasing degree to which this issue is being taken up in public discourse.

AOG: *In the recent IEA report on "Energy and Climate Change", published on 15 June, the Agency is telling us that a **peak in global energy-related emissions** could be achieved as early as 2020 at no net economic cost. Is the IEA preaching voodoo economics?*

■ **F. B.:** The Bridge Scenario proposed in our recently released special report, Energy and Climate Change, is based on five measures: increasing energy efficiency in the industry, buildings and transport sectors; reducing use of the least-efficient coal-fired power plants and banning their construction; increasing investment in renewable energy technologies in the power sector by 50% by 2030; gradually phasing out fossil-fuel subsidies, which encourage their inefficient use; and reducing methane emissions in oil and gas production. None of these measures involve any fundamentally radical change. These measures, which would lead to emissions peaking around 2020 and then set the path to their decline, are based on current technologies and commonly-accepted wisdom, so they can be realistically pursued if there is the political will to do so.

These measures also, crucially, help establish the market signals necessary for investment

> Dr. Fatih Birol

Chief Economist, Director, Global Energy Economics, International Energy Agency, Paris

Dr. Fatih Birol is the Chief Economist of the **International Energy Agency** in Paris. He is responsible for the IEA's flagship *World Energy Outlook* publication, which is recognized as the most authoritative source of strategic analysis of global energy markets. He is also the founder and chair of the **IEA Energy Business Council**, which provides a forum to enhance cooperation between government and industry.

Dr. Birol has been named by *Forbes Magazine* among the most powerful people in terms of influence on the world's energy scene. He is the Chairman of the **World Economic Forum's** (Davos) **Energy Advisory Board** and has served as a member of the UN Secretary-General's 'High-level Group on Sustainable Energy for All'. He is the recipient of numerous awards from government and industry for his contribution to energy and climate economics. Most recently, in 2013, he received the Japanese Emperor's Order of the Rising Sun, the country's highest honour. He has also been decorated by the governments of Austria (Golden Honour Medal), France (Chevalier dans l'Ordre des Palmes Académiques), Germany (Federal Cross of Merit), Iraq, Italy (Order of Merit of the Republic), the Netherlands, Poland, Turkey, the United States and the Russian Academy of Sciences. He is a past winner of the **International Association of Energy Economics'** award for outstanding contribution to the profession.

Prior to joining the IEA in 1995, Dr. Birol worked at the **Organisation of the Petroleum Exporting Countries** (OPEC) in Vienna. A Turkish citizen, Dr. Birol was born in Ankara in 1958. He earned a BSc degree in power engineering from the **Technical University of Istanbul**. He received his MSc and PhD in energy economics from the **Technical University of Vienna**. In 2013, Dr. Birol was awarded a Doctorate of Science honoris causa by **Imperial College**, London. He was made an honorary life member of Galatasaray Football Club in 2013.

Source: IEA.

into a new energy system: the removal of subsidies to fossil fuels, for instance, corrects a long-established market distortion and increases the attraction of renewables. In the roadmap outlined in our report, higher investment in renewables is offset by lower investment in fossil-fuels, while increased efficiency reduces the energy intensity of the economy (meaning that less energy is needed for every additional unit of economic output).

That is how a path to a more sustainable energy future can be attained by sound, logical economics.

AOG: *One of the IEA's new proposals is to **ban the construction of the least efficient coal-fired power plants**. Could you elaborate on this point?*

■ **F. B.:** This is one of the measures we put forward in our new report. Coal plants accounted for around 40% of the world's total electricity generation last year, more than any other fuel. Any increase in efficiency here has major implications on emissions, and there is a clear blueprint to make this happen. A newly commissioned ultra-super-critical plant, for instance, consumes 15% less coal in generating a unit of electricity than a new low-efficiency sub-critical plant. If the efficiency of all subcritical coal-fired power plants were 2% higher on average than they are currently, the cumulative emissions savings would be equal to those achieved by the EU INDC to 2030.

AOG: *The IEA is stressing once more that **fossil fuel subsidies to end users** should be gradually phased out by 2030. These subsidies were recently estimated at about **\$550 billion per year** by the IEA. Do you have some material elements showing that these subsidies are being significantly reduced due to the fall in oil prices since last summer?*

■ **F. B.:** A number of countries have taken the positive, necessary steps of reducing fossil fuel subsidies since the fall of the oil price last year. Since late 2014, Indonesia, where fossil fuel subsidies cost the government around \$30 billion a year, has removed its subsidies for gasoline, India has deregulated its diesel price, and Malaysia has removed subsidies for gasoline and diesel. The fall in the oil price in effect moderated the potential difficulties faced with removing subsidies, and these countries all capitalized on the opportunity.

The large oil and gas exporters in the Middle East, which heavily subsidize energy, now have a double incentive to remove this support: firstly, many rely on revenue from these exports to fund their fiscal spending, and with lower oil prices internationally, this has caused a significant strain on budgets. Secondly, lowering the subsidy will at once reduce this strain and, given the increasing efficiency in their use, free up more oil and gas for exports.

AOG: *It clearly seems that **carbon capture and storage (CCS)** is not among the priorities of the international community. Don't you think that CCS remains and will remain a key aspect as far as the issue of climate change is concerned?*

■ **F. B.:** In the longer term, CCS may well play a significant role if we are to see the type of decarbonising of the energy system that is consistent with limiting the global temperature rise to 2 degrees. Apart from a few pilot projects, there is little to point to in terms of CCS development today, but in a policy environment where low-carbon operations are incentivized, investments could increase from the few billion dollars today, to the \$70 billion per year required in the 2020s.

AOG: *Should the **production and use of fossil fuels** be banned? Are oil companies future dinosaurs?*

■ **F. B.:** In our work at the IEA, we always seek to map out possible blueprints for a sustainable energy future that take into consideration the impact on the global economy, on livelihoods and on the modern lifestyles many of us have come to enjoy. I do not believe that a sustainable energy future necessarily hinges on the banning of fossil fuels, but on their more rational use, and on the strong increase of the use of low-carbon technologies alongside them. If we ban the use of these fuels outright, with no viable alternative, the world as we know it would cease to exist.

Instead, what we are advocating is for changes across the energy system, both in the way it is supplied and the way that it is used. For example, we want to see renewables playing an increasing role, and at the same time, we want to ensure that when fossil fuels are burnt to generate power, they are done so in the most efficient way possible, whether in cars, where fuel efficiency standards have already made considerable gains, or as I mentioned before, in the power sector, with a move from sub-critical to ultra super-critical plants.

AOG: *You recently said that companies which do not anticipate stronger energy and climate policies risk being at a **competitive disadvantage**. Could you develop this statement?*

■ **F. B.:** Policymakers across the world are increasingly coming to terms with the necessity to re-orientate the global energy sector. To do this, there will need to be a change in the market dynamics, and reforms enacted that incentivise low-carbon energy production and use, and discourage polluting. Companies that do not anticipate this change, and do not take the actions necessary to ensure their operations remain competitive in this new environment, may well risk being left behind.

AOG: *Is it realistic to think that the international community will really and effectively cope with the climate change challenge without high oil prices? According to the IEA 60% of the expected savings of greenhouse gas emissions by 2030 could come from greater energy efficiency (49%) and fossil-fuel subsidy reform (10%).*

■ **F. B.:** In a sustained period of lower oil prices, it is easy to become complacent on the issue of sustainability. This is an unfortunate truth - it is more difficult to make the financial and economic case for low-carbon energy at a time when fossil fuel prices are relatively low, particularly in the absence of a carbon pricing mechanism. That being said, policymakers should not fall into a false sense of security, and must be aware that the market dynamics point to much higher oil prices in the longer term.

☞ *See also in this issue on page 40 the **Document** section with the presentation of the 2015 edition of the **BP Statistical Review of World Energy**.*

