

Standing Together: A New Era of IEA-China Co-operation

Remarks by Dr. Fatih Birol to the Chinese Academy of Social Sciences

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Mr. Wang Weiguang, President of Chinese Academy of Social Sciences,

Mr. Cai Fang, Vice President of Chinese Academy of Social Sciences,

Members of the academy, representatives from the diplomatic community, distinguished guests, ladies and gentlemen:

It is a great pleasure to join all of you this morning in this distinguished forum.

First of all, let me thank Mr. Wang Weiguang and the Chinese Academy of Social Sciences for hosting this event and for offering me an opportunity to address our Chinese and international friends. The academy is known around the world for its leadership in the social sciences, and when Mr. Wang invited me in July to give my first public speech as Executive Director of the International Energy Agency at this institution, I immediately accepted with great pleasure.

It was just one week ago, on September 1st, that I started my new job as Executive Director. It is the privilege of a lifetime to be chosen to run the IEA, and I am honoured and humbled by the trust that each of our 29 member countries has placed in me.

My selection as Executive Director can be seen as a break with IEA tradition, for I am the first IEA employee to be chosen to lead the Agency. And my being here in Beijing also represents a break with IEA tradition. Instead of using my first official visit as Executive Director to travel to an IEA member country, I decided to make China my first official destination. This is no coincidence. By almost any measure, China is the most important player in the global energy market. China enjoys that position thanks to an impressive set of achievements. And yet China also faces significant energy challenges in the coming years.

China already lies very much at the centre of nearly every work stream in the IEA, and co-operation between China and the IEA stretches back nearly 20 years. But I believe we must and can deepen this partnership. Why? It's very simple: if China and the IEA work closely together,

everybody benefits. The IEA can serve as an invaluable resource to China as it pursues the goals of greater energy security, economic prosperity and environmental sustainability. In return, the IEA and its members can learn much from China's rich experiences.

And so my mission in China is twofold. First, to listen and learn from all of you, what are your principal energy-related challenges, what tools you have available to meet them, and what areas you see of greatest potential co-operation with the IEA.

Secondly, to signal both politically and tangibly the importance to both China and the IEA of forging closer and more concrete ties in the coming years. My visit here this week follows the generous invitation from His Excellency Mr. Nur Bekri, the Administrator of the National Energy Administration. I believe that he shares my view that China and the IEA should achieve concrete, tangible outcomes during my stay. I can assure you that, working together with our dedicated IEA staff who are accompanying me to Beijing – I would like to ask them to stand – we are fully committed to following through on this ambitious goal.

This visit to Beijing is a tangible demonstration of my personal vision to modernise the IEA. A key part of that vision is to develop a truly *International Energy Agency* during my tenure. China is a great nation with a leading role in many aspects of world energy. For China's sake, and also for the sake of the rest of the world, it is vitally important that China be a full participant in the international energy debate. During my visit I am aiming to persuade Chinese colleagues that China, along with other major developing nations, should become not just a partner but a full participant in the work of the IEA. That may take time, but now is the moment to start working on the process.

Now that I hope you have a better sense of the significance of this visit, here are the four issues I am going to address during my time with you today:

- What is the International Energy Agency?
- From the IEA's unique perspective, what are the energy challenges facing China and the world?
- What should policy makers do to address these challenges?
- And, finally, how can the IEA and China build on their shared experiences and create a new era of co-operation?

What is the International Energy Agency?

Very simply, we are an international organisation, founded in 1974, originally with the goal of enhancing energy security among our members. While this remains key to our work, the IEA has evolved and expanded over the last four decades. Today, the IEA examines the full spectrum of energy issues and recommends policies to ensure the reliability, affordability and sustainability

of energy in our member countries and beyond. We are at the heart of the global dialogue on energy, providing authoritative research, statistics, analysis and policy guidance.

The IEA serves at least two other important functions. First, it provides a platform for countries to discuss the best ways to address complex energy-policy issues. The other key role of the IEA has to do with global energy governance. The IEA

- collects and publishes data to improve market transparency;
- monitors closely developments in global energy markets: oil, gas, coal, electricity, and renewables; and
- helps promote the deployment of advanced energy technologies and efficiency measures.

When you consider all of our activities and responsibilities, as well as the wide-ranging energy expertise of our staff, I believe you will agree that the IEA is the world's leading energy authority.

From the IEA's unique perspective, what are the challenges facing China and the world?

For more than a quarter of a century, I have been working in the energy sector. I began in Vienna for the Organisation of Petroleum Exporting Countries (OPEC), where I worked exclusively on oil markets. And then, exactly 20 years ago this month, I joined the IEA, where I started as a junior energy analyst.

As I review the energy landscape today, I can hardly recall a period in which the pace of change has been as rapid, the uncertainty over the future so high, or when the pressures on the energy sector – and on energy policy makers – have been as intense. Especially today, those who anticipate global energy developments successfully can derive an advantage, while those who fail to do so risk making poor policy and investment decisions. These decisions will have ramifications for years or decades to come – for national economies and for businesses.

Why am I speaking about uncertainty today when oil prices are around USD 50 per barrel? After all, this is a level that provides welcome relief to the world's oil consumers. Global supply remains impressively strong, even in the face of today's prices: unconventional oil production in the United States remains quite resilient; output in Iraq remains strong; and Iran is on course to re-join international oil markets. And although global consumers are responding to lower prices by picking up their consumption, it will take time for the markets to absorb the current excess in supply.

But the eased market conditions that we see today are no reason for us to be relaxed or complacent on energy security. The road ahead for oil markets remains difficult. We are also watching closely what is happening to investment, especially in key non-OPEC countries such as

the United States, Canada and Brazil. Before the summer, we had estimated that globally, companies would cut their 2015 spending on new oil and gas production projects by more than \$100 billion, a decline of over 20% compared with 2014. With the recent dip in oil prices, we see oil companies preparing for further cuts as they revisit their spending plans. It may take time for reduced investment to feed through into production levels. But the effect on oil production will not be delayed forever. If investment cuts go too deep, we also face the risk of locking in another period of market tightening and higher prices down the road.

The market for natural gas is subject to many of the same dynamics and uncertainties. From the perspective of a gas-importing country, such as China, the short-term outlook is one of ample availability as some importers struggle to find consumers for all of the gas that they have contracted to buy. This situation is set to continue for some time, as gas supply will be boosted over the next few years by the start of long-awaited LNG projects in Australia and then by gas exports from the United States. But this rosy picture of ample supply and lower prices also needs to be considered alongside the recent announcements from LNG project developers about postponements, delays and cancellations. There is a risk here too of a cycle of tighter markets and higher prices as we move into the 2020s.

Against this backdrop, consider geopolitical risks in key producing countries as well as in key transit countries. These risks are especially high in the Middle East and North Africa, a region that is and will remain at the heart of the global oil outlook. Just look at what is happening in parts of Iraq, Syria, Yemen and Libya. Some of these risks are being reinforced by the collapse in oil export revenues of certain producing countries, jeopardising their economic and social prospects. When I look at this whole picture, I am convinced that energy security will move much higher on the international agenda in the years to come.

When we speak of energy security, we must not forget that hundreds of millions of people around the world still suffer from the most extreme form of energy *insecurity*: lacking access to the energy services that you and I take for granted. Every advanced economy has required secure access to modern forms of energy to enable its development and growing prosperity. Emerging and less developed economies are no different, and delivering this should be an urgent priority both within the countries themselves and within the international community. IEA analysis shows that 1.2 billion people – close to one-fifth of the world's population – have no access to electricity. We also estimate that more than 2.7 billion people do not have access to clean cooking facilities. Instead, they rely on fuels like wood and charcoal. This creates a huge problem with indoor air pollution that leads to more than 4 million premature deaths a year. The fact that such a large part of the world's population does not have access to modern energy acts as a severe brake on the global economy. More importantly, it is morally unacceptable.

The IEA, through the flagship *World Energy Outlook* publication, has for many years been pushing energy access to the forefront of the international energy agenda. Over this period, we have also documented the huge contribution made by China to the resolution of this major

problem. China can rightly claim to have successfully brought electricity to more people than any other country in the world – and to around half a billion people in a short period of time. This is an extraordinary achievement. As China has demonstrated, the barriers to delivering large-scale access to electricity can be overcome, and the benefits of success are immense.

China is also helping improve energy access beyond its own borders, with supportive investments in energy projects in Africa and other regions. On this issue, the way forward is challenging but clear: we must re-double our collaborative efforts to ensure that the goal of universal access to energy is achieved. Fortunately, China has set a bold example on this issue. We hope that during its presidency of the G20 next year, China will seize the opportunity to share its experience and provide leadership in tackling this problem in Africa, Asia and elsewhere.

In addition to energy security, there is another critically important challenge facing the world – that of climate change – that also requires concerted global action and leadership. The energy sector is at the core of this debate. Two-thirds of the greenhouse-gas emissions that cause climate change come from the energy sector, as a result of burning fossil fuels. Without deep cuts in these emissions in the energy sector, we have no chance of finding a solution.

There are some hopeful signs, among which I would underline the bold climate announcement made by Chinese President Xi Jinping and US President Barack Obama last November. That joint announcement represented more than the simple sum of its parts: it was a watershed moment for the UN climate negotiations and created much-needed political momentum for developed and developing countries alike.

Signs of hope also include the accelerating expansion in the use of low-carbon energy sources worldwide, and some indications that growth in the global economy and in emissions may be starting to decouple. The role of China in these areas is profoundly important. Last year, investment on new renewable electricity capacity in this country was the same as in the European Union and the United States *combined*. China is the world's largest wind power market and the world's largest producer of hydroelectricity. China is also adding more solar PV capacity each year than any other country. By the end of this year it will overtake Germany as the country with the most installed solar PV panels in the world.

No discussion of low-carbon energy would be complete without a mention of nuclear, and China has huge ambitions for its nuclear sector. Right now, of the 67 reactors being built globally, more than one-third are here in China. This expansion is contributing to a more sustainable energy system, especially as we know China places great emphasis on nuclear safety issues.

The implications of the expansion of low-carbon energy around the world are impressive. We all have heard a lot about how the recent shale gas revolution in the United States has helped to drive down carbon dioxide emissions in that country by replacing coal. This is definitely very

good and welcome news for the United States and for the world. But another story that is less well-known is China's expansion of hydropower and its impacts. According to IEA analysis, in fact, the emissions avoided in China over the last 10 years thanks to its increase in hydropower capacity alone are greater than all the emissions avoided in the United States as a result of the switch from coal to natural gas during the same time.

We also recognise and applaud the steps taken by China, not only to lower its reliance on coal, but also to improve the efficiency of its coal use. Again, according to IEA analysis, thanks to tighter domestic regulation, the efficiency of the coal-fired power fleet in China is now higher than that of the OECD average. Another very impressive achievement.

But there is still a long way to go, in China as elsewhere, before we are on a pathway towards a more sustainable energy future. We have shown that – even though China has pledged to achieve a peak in its carbon dioxide emissions around 2030, if not earlier – the world as a whole is not on track to replicate this achievement, with global emissions still projected to be on an increasing trend by that date. We need to do more than weaken the link between economic growth and greenhouse gas emissions: we need to harness technology and policy in a united effort to break this link completely. In this area, China is one of the leaders of global efforts. This country has created significant, positive political momentum ahead of the climate negotiations in Paris later this year. As I wrote in the *People's Daily* newspaper back in July, China's constructive leadership deserves applause.

So what must Chinese policy makers do to address the challenges they face in this fast-changing energy world? And how is the IEA already supporting their efforts?

While there is no easy answer to the first part of this question, I believe that China stands among the global leaders in seeking to address these multiple challenges within a co-ordinated policy framework. In a speech in June 2014, President Xi Jinping specifically called for four domestic energy “revolutions” and greater international “co-operation” on energy issues. Given that the IEA plays a global co-ordinating role in international energy policy, we very much welcome President Xi's appeal. In this regard, let me reiterate that the IEA stands ready to support China as it carries out these “revolutions” and this “co-operation”, which will be essential to making progress on energy security, economic growth and environmental sustainability challenges.

And I very much hope that China will work in close partnership with us as your esteemed country advances. Indeed, standing together is at the heart of the IEA's success as an organisation: there are many energy challenges that can be addressed effectively only if they are addressed collectively. And China's involvement in that collective is essential. The truth at the heart of this statement – and at the core of the IEA's mission – is that today we are all connected. In today's energy world, no country is an energy island. Energy markets, and especially the oil and gas markets, are global: a big event in any one location can send

shockwaves through the rest of the world. Think back to 1990, when Kuwait was invaded. Or consider in 2005, when Hurricane Katrina halted most U.S. oil and gas production in the Gulf of Mexico. On these occasions, oil prices spiked around the world, not just locally. The IEA and its members provided crucial assistance in both of these cases by making available oil supplies to markets, and we stand ready to do so again should the need arise. Likewise, when it comes to climate change, no country is immune to the threats of extreme weather events and higher temperatures.

It is in this spirit that the IEA and China have been working together for nearly 20 years. During this time, we have laid the foundations for a strong partnership. The IEA and the State Development Planning Commission, which is now called National Development Reform Commission, signed our first Memorandum of Policy Understanding back in 1996. Since then, IEA-China co-operation has progressed rapidly across a wide range of areas including energy data and statistics, energy market analysis, energy technology, clean coal, carbon capture and storage, energy efficiency and others.

To date, the IEA has published more than 20 studies of China's energy challenges and opportunities. Several Chinese nationals are currently working at the IEA as secondees from the government, industry and research institutions. The IEA makes it possible for experts around the world to come together and share knowledge on a variety of energy technologies; China is involved in many of these so-called Energy Technology Initiatives. This year alone, the IEA and the National Energy Administration jointly organised:

- an oil emergency response exercise in Ningbo in January, aimed at highlighting the importance of maintaining oil stocks and increasing transparency; and
- the third IEA Unconventional Gas Forum in Chengdu in April, which looked at the overall context for gas market development in China as well as the social and environmental aspects of unconventional gas production.

Additionally, the IEA provided policy recommendations for China's next Five Year Plan, and the IEA stands ready to support China's G20 presidency. Later this year, the IEA and NEA will jointly organise a policy dialogue on oil and gas development in Beijing, which we hope will become an annual event.

We work together and learn from each other in numerous areas, from renewables to energy efficiency to natural gas and oil. From an IEA perspective, this is a pivotal relationship. But we have achieved only a small part of our huge potential. We recognise that – in order to fulfil effectively our mandate to promote secure and sustainable energy – we have to forge stronger, organic ties with the countries that are the most influential in shaping our global energy system. China is at the very top of this list.

So how can the IEA and China build on their shared experiences and create a new era of co-operation?

I am firm in my conviction that this is a vital partnership for China. And I am also firm in my conviction that this is a vital partnership for the IEA. I have listed many of your country's achievements in energy and environmental policy – and I could list many more. But China still has many important policy challenges ahead, on which the IEA Secretariat and IEA member countries have valuable experience to share. For example, one such area is air pollution as a result of coal combustion, vehicle exhaust, industrial operations and construction, which is now a serious problem affecting many Chinese cities. IEA members have faced similar problems in the past, and so we have an opportunity to draw on these experiences and find solutions together.

There are also questions of efficient market operation and design, as well as deployment of low-carbon technologies and designing energy efficiency policies. We have much to gain from working together in these areas. For instance, I have no doubt that in China, natural gas will play an increasing role in a cleaner energy system. But there is work to be done. This includes upstream policies that enable the utilisation of China's massive shale resources, as well as infrastructure and market regulation that creates an efficient and resilient gas market. As the reforms continue, we are pleased to work together to provide specific policy recommendations.

The global transition to cleaner energy is going to require a kind of teamwork the world has never seen, and this argues for greater IEA-China partnership. For instance, no country – not even China – has yet solved the problem of how electricity markets and infrastructure should operate in a seamless way as renewables capacity expands. This is a new problem for the world, and I believe China and the IEA together can and must work towards solutions. In some fields, such as ultra-high-voltage electricity transmission, China is leading and IEA members can benefit. In others, the experience of IEA members could provide insights for China.

We also have a strong convergence of interest in the core area of energy security. China is in the process of overtaking the United States as the world's largest importer of crude oil. According to IEA projections, China becomes the world's largest oil consumer in the not-too-distant future. This shift in global trade brings with it new vulnerabilities and risks, pointing to the need to reappraise oil security and how best to achieve it.

At the IEA, we have long-established tools that we can use to mitigate the harmful effects of disruptions in the supply of oil. The most well-known of these tools is our oil stocks. In the event of a severe supply disruption, as I touched on earlier when I mentioned the invasion of Kuwait or the devastation caused by Hurricane Katrina, the IEA can recommend and co-ordinate the release of these emergency reserves. The goal is to keep markets supplied, thereby mitigating the economic damage of price spikes.

As China's appetite for oil has increased, it has made the wise decision to build its own strategic oil reserves in preparation for the inevitable rainy day. The IEA and our members strongly support this initiative, because it enhances energy security here in China and around the world. But simply having oil reserves is not enough; if they are to be effective in dealing with a global supply disruption, there needs to be some mechanism for their co-ordinated release. I believe that the IEA oil supply security system must be not only vigorously maintained but also gradually broadened to reflect the shifting centre of gravity of global oil demand. In short, we must make room for China under the IEA umbrella in order to safeguard and extend the benefits of collective energy security.

We are also prepared to work to support China's constructive perspective in leading global energy discussions. During its G20 presidency next year, China will be in a position to propose an ambitious energy agenda. Improving energy efficiency, renewable energy, global energy governance and energy access – in addition to other energy topics to be agreed by the G20 – are among the issues that the world will benefit from during China's G20 presidency.

For ultimately all of this benefits the world. You will recall I started my remarks today by saying that if China and the IEA can work together, the world benefits. This is central to my vision for modernising the IEA. As part of this vision, you can count on my determination to explore every opportunity to build closer and stronger institutional ties between the IEA and China. This will require flexibility and careful discussion, but – with goodwill on all sides – we can definitely find a way.

To conclude, our interests are increasingly aligned when it comes to energy security, sustainability and prosperity. Together, we can transform our words into actions, and can have great achievements. And so I repeat my call for the start of a new era:

If China and the IEA can work together, China benefits.
If China and the IEA can work together, the IEA benefits.
If China and the IEA can work together, the world benefits.

This is my appeal to you today. Let's start a new era. Let's work together. Together – and very closely.

Thank you very much. Xièxiè.

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