

***SHIFTING GEARS IN THE GLOBAL DIALOGUE ON ENERGY SECURITY  
AND CLIMATE CHANGE***

**An Address by Nobuo Tanaka, Executive Director,  
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Ladies and gentlemen, good morning. Let me begin by thanking the Brookings Institution - and in particular Charles Ebinger, Director of the Energy Security Initiative - for this opportunity to talk to you today.

What more fitting place and time to be giving a public address on the need to strengthen our global dialogue on energy security and climate change? Here at Brookings - with its solid expertise and history in energy, and here in DC - at a time when the new US administration has announced that energy security and climate change are among "the most pressing challenges facing the United States and the global community". We at the IEA certainly think this is so. And in this - the 35<sup>th</sup> anniversary year of the Agency's founding - we intend to work hard to address these very challenges.

Let me begin by noting how far the world and the IEA have come in the past 35 years. Founded during the oil crisis of 1973-74, the IEA's initial role was to co-ordinate measures in times of oil supply emergencies, like Hurricanes Katrina and Rita. As energy markets have changed, so has the IEA. Its mandate has broadened to incorporate the "Three E's" of balanced energy policy making: energy security, economic development and environmental protection. Now, in 2009, our core mission - helping governments to support their economies with secure, environmentally acceptable energy - remains the same. And our skills, experience, and ability to bring people together are more relevant than ever. But the landscape has shifted, and the cast of players is different.

The Member countries of the IEA no longer dominate world energy markets, as consumers or as producers, to the extent they once did. With great (and welcome) achievements in economic growth in many parts of the developing world, IEA Member countries no longer represent the bulk of global energy consumption. And their share will continue to diminish: our research shows that non-OECD countries will account for 87% of global energy demand growth between 2006 and 2030, taking their share of world primary energy demand from 51% to 62% over the same period. In particular, China, India and the Middle East have emerged as the regions with the most rapid growth in energy demand.

Alongside this, we are witnessing a shift in the sources and nature of production. The role of major international companies in oil production is declining alongside the rising role of national oil companies. Additionally, production in mature OECD oil provinces is declining and we now face the prospect of increased reliance on OPEC producers. Indeed, our projections show that OPEC's share of global oil output will rise from 44% in 2007 to 51% in 2030. In this context, security of energy supply represents a huge challenge as we move forward.

But on top of this, our very notion of "energy security" is broadening. In the past, we may have focused only on responses to oil supply disruptions - and this still remains vitally important of course. But we must also now consider gas security - as shown clearly by the recent Russia-Ukraine gas crisis, as well as the reliability of renewable energy sources and ensuring stable electricity markets. All of this requires enhanced transnational cooperation.

At the same time, we are today confronting a phenomenon that might barely have been thought possible 35 years ago. And one that is inextricably linked to our energy production and use - that of climate change. As part of this challenge, we see that an increasing share of energy-related CO<sub>2</sub> emissions will come from non-IEA Member countries. Coal in non-OECD countries - for example - is the single biggest contributor to CO<sub>2</sub> emissions and its share will increase considerably over time. More broadly, on current trends, China, India and the US together will account for more than half of total global emissions in 2030 - 20.8 Gt.

These developments highlight a growing global interconnectedness in the energy arena, and the need for an enhanced global dialogue to address this interconnectedness - including between IEA Member and non-Member countries. Of course, the ongoing dialogue between producing and consuming countries, already enhanced by the creation of the International Energy Forum, was taken forward in 2008 by the Ministerial meetings in Jeddah and London. And other forums and mechanisms also exist. But we can and must go a lot further.

I appreciate and welcome the fact that here in the US, the need for such an enhanced dialogue is being increasingly recognised by government and observers alike, particularly with regard to China. One need only look at recent statements by Secretary of State Clinton or at the release last week of two think-tank reports on US-China relations on climate change, including one by Brookings [other by Asia Society/Pew]. The path forward for a sustainable energy future requires enhanced engagement between developed and developing countries, including between the US and China. This can be achieved through a

greater focus on mutual areas of interest – such as energy efficiency, low carbon technologies and energy security measures, all areas in which the IEA has expertise and is already working with China.

Alongside the phenomena of energy security and climate change, there is a third and related factor that is vitally important to consider in the context of a global energy dialogue. And that is the need for continued investment in the energy sector. Looking to the medium and longer term, it is crucial that we have adequate investment: first, on the supply side to meet growing demand and production decline; and second, on both the supply and demand sides to properly address climate change.

Of course, I can go no further without mentioning current global economic conditions. Indeed, recent global events may be overshadowing our focus on longer term concerns about the investment needed for ensuring safe, secure and sustainable supplies of energy. The current downturn may be giving relief from the extraordinarily high oil prices that we saw last year. But while we may be seeing weaker demand and lower prices now, the medium to longer term picture clearly indicates continued energy demand growth alongside supply side challenges. As such, the current crisis threatens to derail the supply side investment needed for the future. This in turn could see us facing a supply crunch in the mid- term when the global economy picks up, thereby threatening energy security. Additionally, we need to maintain our focus on investment for a lower carbon future, by fostering energy efficiency, hydrogen technologies, renewables, Carbon Capture and Storage, nuclear power, alternative vehicles and other new technologies.

Let me note here that these two parts of the investment equation – traditional supply side investment and support for low carbon technologies – are not incompatible. Rather, *both* are needed. This is shown clearly in our latest World Energy Outlook, released last November. Even in our lowest carbon scenario of 450 ppm of CO<sub>2</sub> in the atmosphere, oil demand in 2030 will still be slightly higher than in 2007, and OPEC production may increase by another 12 mb/d – from 36 mb/d in 2007 to 48 mb/d in 2030.

As such, governments and the energy sector – across the globe – must maintain a focus on investment. We must view the financial crisis as an opportunity – more than a challenge – to move toward a cleaner, more secure energy future. This can be done by ensuring that sound energy investment strategies are at the heart of every economic stimulus package, as well as through greater global dialogue and cooperative efforts. We have been making recommendations on this for some months now, and we are calling it the “clean

energy new deal". The new Obama administration has just presented an excellent first example.

So here, ladies and gentleman, we have the basis for "shifting gears" in the global energy dialogue: 1) the widening notion of energy security; 2) the compelling need to address climate change; 3) and, alongside both of these, the great need to maintain energy sector investment, *even* in the face of a global economic crisis.

A common factor in all of these global developments is that the need to design energy policy in cooperation with other countries - both IEA *and* non-IEA - is increasing. Perhaps the best demonstration of this is that even if all OECD Member countries were to reduce their CO<sub>2</sub> emissions to zero by 2030, we would still not be on a path that adequately addresses climate change - unless non-OECD countries were also to reduce their emissions from current trends. Another example is that - with the vast majority of energy demand growth to come from non-IEA Member countries in the coming decades - IEA countries must work with non-Members to address energy security, in light of the interconnectedness of global markets. In the case of the US, for example, even if oil import dependency may decline slightly in the coming years, increasing import dependency in other major consuming regions - notably Asia - may well have knock-on effects for the US market in a crisis.

As such, many of the old artificial divisions of "us and them" are falling away. More than ever, governments around the world are facing the same critical energy challenges and pursuing the same energy policy objectives. G8 Summit leaders have noticed the high potential within the IEA and have tasked us with many challenges since Gleneagles in 2004. These include: reliable access to affordable supplies of energy; increased energy efficiency; the wider availability of advanced, clean energy technologies - including renewable technologies and CCS; enhanced capabilities for emergency response - including for gas as well as oil supply security; efficient and well-balanced energy markets to spur investment, economic growth, and development; improved data and analysis for policy making; and well focused energy R&D for the future. Such policies are essential building blocks for a revolutionary future of secure and sustainable energy. Recent G8 communiqués reflect many examples of our contributions.

So now, as humankind faces these urgent and unprecedented challenges in the energy sector, a genuinely global dialogue is needed. This dialogue should focus on energy security and climate change; *and*, in relation to both of these issues, must address the challenge of adequate investment.

It is my view that the IEA can and must remain at the centre of such a global dialogue. The IEA is the only international energy organisation with expertise across the entire energy field. We have a philosophy of open markets and diversity of supply. We have a reputation for objective and independent analysis. And we provide a range of forums in which governments - both IEA *and* non-IEA, as well as researchers and industry experts, can come together to solve common problems in a practical and co-operative environment.

The convergence around the world of policy objectives in the energy arena creates both the opportunity and the necessity for a genuinely global approach to energy policy co-operation. To achieve this we may need new institutional structures as some international leaders and observers have already suggested, such as Bob Zoellick of the World Bank. The IEA, with its extensive experience, existing capabilities and established relationships, is well qualified to play a key role in the search for such new structures without substantial additional costs - through utilising and building on existing mechanisms. The extreme urgency of today's energy challenges requires that this search begin at once.

Its urgency is another reason why the IEA is well suited for this task. The Agency has already changed markedly from the organization that was established in 1973. This pace of change has accelerated in recent years. A wide and growing range of collaborative activities with China, India, Russia and other developing countries hinges on recognition of shared areas of policy interest between Member and non-Member countries. The demand for these programmes has grown rapidly and we are seeking resources for a further expansion. Resources permitting, we are aiming to expand our contributions to training and capacity building in non-Member countries. We maintain a strong and close dialogue with OPEC and with leading producing countries. The internationally recognised success of the Joint Oil Data Initiative is a great example of the cooperation between the IEA, OPEC and several other key international organisations. Another example is that in 2007, the OPEC secretariat joined the IEA's co-operative programme on technologies for greenhouse gases from fossil fuel use - something that would have appeared unthinkable only a few years ago. These are but two examples.

Increasingly we are involving major developing countries in the work of the IEA's policy Committees and meetings of high-level energy officials. In that vein, our Members recently decided to invite China, India and Russia to attend - as full participants - the IEA's October 2009 Ministerial meeting. This and our myriad of other activities are helping to establish new and closer energy

relations - not only between the IEA Secretariat and these countries, but *also* between IEA Member countries themselves and non-Members.

Of course, how far we are able to take this will depend on the responses that we receive - it takes two to tango. But I am optimistic that these countries, like our own Members, will see the advantages, in terms of their own policy interests, of working with the IEA. And if that is the case, I think we should leave no stone unturned in seeking new and even more creative ways to nurture these relationships.

As we prepare to move forward, we should always ask ourselves what is our ultimate goal? Is it to expand the membership of the IEA? This is a profound and highly political question for IEA Members and potential candidate countries alike, and one that we know the new Secretary of State has said she wishes to address - at least in the case of China and India.

Members of the IEA are required to hold 90 days of oil stocks and to participate in the common emergency stock release mechanism. They share in the costs of the Agency and, of course, they have voting rights in our governance structure. Member countries must also subscribe to the "Shared Goals" of the Agency, which include the promotion of open and diverse energy markets. The question of membership must be considered in the context of these facts. Other possible changes in international economic structures should also be taken into account.

While it is not currently possible for a country that is not a member of the OECD to join the IEA, there is in fact a great deal of flexibility, short of full membership, to involve these countries more closely in all levels of the IEA's work. This means that - consistent with recent comments by Secretary of State Clinton - the IEA can explore a range of activities to "lay the groundwork now" for possible membership. Such involvement, may hold great interest for non-Member countries, and also give them time to assess the benefits and costs of eventual membership. Additionally, it can be of great benefit to the IEA's own Member countries - including the US - as they seek to enhance their *own* co-operation with countries like China on energy-related issues.

In fact, the IEA was always intended to be capable of a "variable geometry". Our founding document gives us very wide scope to initiate new structures. This has enabled us to create a network of more than 40 separate forums for collaboration on energy technologies in which China, India, Brazil, Mexico, South Africa, Russia and many other countries who are not Members of the IEA participate on a basis of equality with both IEA Members *and* with

industry partners. The fact that India is leading one of these - an important new activity for demand-side management - may be a sign for the future.

Another pioneering initiative that builds on the flexible nature of the IEA's structure and the growing desire for a global energy dialogue concerns energy efficiency. We are now in discussion with G8 countries, the European Community, Brazil, China, India, Korea and Mexico on the establishment of a high level International Partnership for Energy Efficiency Cooperation (IPEEC) with a permanent secretariat to be hosted by the IEA in Paris. This excellent new partnership not only recognises the shared importance of energy efficiency policy for IEA Member and non-Member countries alike, but also the flexible opportunities that exist for the IEA's own expertise to be utilised in this regard.

And in this context, I believe it would be well worth exploring whether there are other, perhaps wider areas of energy policy where a similar structure might enable us to engage all the leading players on a basis of equality. One example might well be the field of renewables or low carbon technologies, given the IEA's longstanding history of expertise in this area and its pre-existing network of energy technology cooperation with non-Members. Another might be some form of high-level dialogue on energy policy more broadly; as we do for the G8 on energy matters, the IEA could support such a framework. Another example already under way is the IEA's interactions with international negotiations on climate change under the UNFCCC. While in no way seeking to play any direct role in negotiations, the IEA provides data and undertakes analysis to help the negotiating parties make informed decisions. This role could be enhanced to provide further assistance as the negotiations move forward.

Ladies and gentlemen, the world has changed. The role of the IEA in helping governments to deliver national and global energy policy objectives is more important than ever. And the IEA is changing to enable its Member countries to engage, without pre-conceptions and on the basis of full equality, with leading players in today's global energy economy. We have the flexibility to efficiently and effectively adapt our structures to this need. The world needs global solutions on energy security and climate change, and the IEA is the right place to develop them.

Thank you.