

**Remarks by HE Khalid A. Al-Falih  
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Kingdom of Saudi Arabia  
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**Salutations**

Excellencies and distinguished ladies and gentlemen, let me welcome all of you here in Riyadh as we gather for the Ninth IEA-IEF-OPEC symposium. I want to acknowledge the presence of HE Shaikh Mohammad bin Khalifa Al-Khalifa, the Minister of Oil of the Kingdom of Bahrain; HE Manuel Quevedo, the Minister of Petroleum of Venezuela and the President of the OPEC Conference; HE Mohammad Barkindo, the Secretary General of OPEC; HE Sun Xiansheng, the Secretary General of the IEF; and Mr. Keisuke Sadamori, Director of Energy Markets and Security at the IEA.

It is wonderful to have here in Riyadh three of the world's premier energy institutions gather together, considering the influence they wield, the global energy knowledge they possess, and their ability to debate and advise on the divergent views that exist on the ongoing global energy transition.

But before we embark on predicting the future, I think it is instructive to look back at some relatively recent history.

**Changing forecasts of oil supply and demand**

Most of you will recall the big debate some two decades ago about peak oil supply, unabated and burgeoning oil demand, and the world running out of oil as a result. In fact, this debate lasted until a little more than a decade ago,

and prominent energy institutions were putting the call on Saudi oil production as high as 25 million barrels per day.

Fast forward to today, and the contradictory and more popular view is well known to you: oil demand will peak soon, supplies are and will remain plentiful, substantial oil resources will become stranded, and the petroleum industry is on an inevitable decline.

As history tells us, the first extreme scenario proved to be erroneous, and I'm confident that the second scenario will meet the same fate. Let me tell you why I believe that is so, by taking a broader perspective.

### **Energy transition is underway but it will be long and complex**

Similar to the peak oil supply and peak oil demand scenarios I just outlined, there is a significant difference of opinion about how the wider global energy transition will unfold in terms of its pace, scope, deployment difficulties, and difference across various regions of the world, especially the stark difference between rich nations and developing countries.

The popular narrative today asserts that electric vehicles and renewables are ready to dominate, while conventional vehicles and conventional power generation are on their way out. Some say that in 5-10 years most vehicles on the world's roads will be electric. In fact, this is the essence of the currently fashionable peak demand scenario.

But the technical hurdles are enormous, and affordability is a serious challenge. The future path could be tortuous with many false starts; the current and new sources will run in parallel for the foreseeable future; and an

orderly transition demands that we be cautious and avoid hasty decisions, including prematurely discontinuing investments in oil and gas. This likely and more realistic scenario falls somewhere between the peak supply scenario, which also included high oil demand forecasts, and the other extreme of demand peaking soon.

**Oil and gas will continue to dominate, must be environmentally friendly**

Given the uncertainty and complexity inherent in predicting the future (as your discussions of various scenarios later today will demonstrate), I think expectations of a rapid deployment of alternative energy sources are too idealistic and unrealistic, and need close scrutiny. Past energy transitions from wood to coal and from coal to oil—both of which occurred over long periods—prove this premise. Looking at just the past few decades, we see that a diverse global energy portfolio—including new sources—has been expanding, and yet the share of alternatives is still small.

At the same time, overall demand for energy will remain robust despite the global economy moving increasingly toward services and regardless of net efficiency gains—in part because there will be an estimated 9.5 billion energy consumers by 2050. So considering the exceptionally small base of alternatives existing today, and the early stage at which they sit, I believe oil and gas will continue to dominate the world energy scene for many decades to come—although the world will without a doubt need the contributions of a diverse and evolving mix of energy sources.

Besides oil, which will remain central in trucking, aviation, shipping, lubes and petrochemicals, cleaner natural gas will play an increasingly important role in power generation alongside renewables, taking over from coal—

which is one reason why Saudi Arabia and Saudi Aramco are expanding domestic gas supplies and creating a leading international gas business, and why the Kingdom has a program to produce 200 gigawatts of power from renewable sources by 2030.

I also want to stress that in a future where oil and gas will continue to be the dominant energy sources, their carbon footprint must be lightened. Our industry is committed to this goal, which I have been emphasizing since well before the Paris Accord was signed.

Technology will play an important role in this endeavor, and our industry has demonstrated its prowess in innovation. Perhaps the most recent example is the advent of the shale oil and gas industry in the US. The Kingdom's recently announced increases in its vast oil and gas reserves are also underpinned by the deployment of advanced technologies and top-notch reservoir management.

### **Ensuring adequate supplies**

But to develop adequate oil and gas supplies to meet the demand growth I foresee, we need to remember that these are highly capital intensive businesses, and capital is needed both to develop new capacity and to maintain and grow the infrastructure essential for system reliability. Yet such substantial investments will not come without predictability, a sufficiently healthy oil market, and adequate cash flows.

Regrettably, the energy policies of many consuming nations set unrealistic schedules for the deployment of alternative energy sources and enact measures that undermine oil and gas development. We find increasing

pressure—including governmental, financial and media factors—to prematurely cut investment in conventional energy. In such an environment, the trillions of dollars needed to grow vital conventional energy supplies, and to undertake the R&D needed to clean this energy, are unlikely to be forthcoming [*OPEC estimates \$11 trillion needed for oil alone by 2040*].

### **Injudicious energy policies will lead to unintended consequences**

Unfortunately, even the most well-meaning policies can have unintended consequences, and I would like to highlight two key possible pitfalls.

First, lack of adequate supply over time will give rise to energy security and energy poverty challenges. Experience tells us that *energy* poverty and *economic* poverty almost always go hand in hand.

Second, raising taxes on oil and gas in order to curb their growth, ostensibly to protect the environment and move the world toward alternatives, will make conventional fuels less affordable. Alongside *sustainability*, *energy affordability* assumes even greater importance during times of economic hardship, stagnating incomes and rising unemployment—a situation many parts of the world are facing, and which can be particularly devastating for people in less developed nations.

OPEC and our non-OPEC partners, led by Russia, continue to play their role in helping to balance the market. But sustaining that role requires timely investments, reliable supply, and appropriate spare capacity. In fact, with these considerations in mind, Saudi Arabia has continued to invest in excess capacity to help respond to unforeseen events, which has helped protect the global economy many times in the past. Imagine the chaos, though, if there

is no spare capacity, the industry is starved of investment, or lacks the institutional framework to take and coordinate decisive action to keep markets balanced, when the situation demands!

### **Collaboration is important for rational energy policies**

In the end, ladies and gentlemen, the world has two primary energy policy options. One is to ignore the situation on the ground, bet on idealism, move hastily, and take significant risks. Alternatively, we can adopt a more thoughtful approach, act pragmatically, and minimize those risks that could have grave implications for the world economy.

In my view, the latter is by far the better option, combined with our active efforts to reduce the carbon footprint of oil and gas, which will continue to serve as the bedrock of our energy future.

To succeed, though, we must further strengthen the capacity of our institutions, including those present here today; ensure that our deliberations are comprehensive and fact-based, and that they involve all major stakeholders; promote prudent planning; and emphasize risk mitigation in the interest of an orderly transition.

Fortunately, forums like this, with the participation of the IEA, the IEF and OPEC, as well as the many respectable think tanks, offer excellent opportunities to promote consumer-producer dialogue and to shape an environment in which well-considered and pragmatic policies flourish. Through greater cooperation, I am confident that we can concurrently balance the world's economic, energy and climate protection priorities. I urge all of you present here today to play your role in this endeavor.

Thank you.