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Chairman Murkowski, Ranking Member Manchin, and distinguished Members of the Committee, thank you for the opportunity to appear before you today to present the International Energy Agency's view on strategic petroleum reserves. Let me start by conveying his best regards from the Executive Director, Dr. Fatih Birol, to members of the Committee. We at the IEA have been delighted to have Chairman Murkowski as a member of the Global Commission for Urgent Action on Energy Efficiency, which will hold its first meeting on December 4<sup>th</sup>, immediately before the IEA Ministerial Meeting in Paris.

As recent events in Saudi Arabia remind us, oil supply security is as critical as ever and today's discussion topic is both vitally important and timely.

**Background**

I would like to begin by first introducing the IEA. I know that you, Madam Chair, and many of your colleagues know the IEA and its work, but I also appreciate that not everyone here will be fully familiar with the IEA.

The strong relationship between the United States and the International Energy Agency goes back to the founding of the IEA in 1974. For more than 45 years the United States has played a critical leadership role in the IEA. The IEA was created upon the initiative of the Secretary of State at the time, Dr Henry Kissinger. Over the years, support for the Agency's work has come from the White House, the Department of State and the Department of Energy, as well as from this Committee and other parts of Congress. Outside of government, the Agency has good relations with many US research institutes, think tanks and companies.

The IEA was founded by the United States and 15 other countries in the wake of the 1973/1974 oil crisis to promote energy security, cooperation and stable markets. Since then the Agency's role has expanded alongside developments in global energy systems and we have become the world's leading policy advisor across the entire energy mix. However the core mandate for the Agency continues to be to monitor the oil market and to coordinate collective responses to major disruptions in the supply of oil.

The IEA was established under the umbrella of the OECD in Paris, but it remains an autonomous organization with its own budget and governance structure. While being an OECD member is a requirement to join the IEA, not all OECD countries are IEA members. Today, of the 36 OECD member countries, 30 are IEA members, and 2 of the remaining 6 countries are candidates for IEA membership.

Recently, working with its member governments, the IEA has adopted a modernization strategy. This has three pillars: opening the IEA's doors to emerging economies; broadening our energy security mandate to include natural gas and electricity; and in addition to our pole position on fossil fuels, also becoming the global hub for clean energy technologies including energy efficiency.

## **Strategic oil stocks**

And now I turn to the matter at hand.

Strategic oil stocks, such as those held in the US SPR, are the cornerstone of IEAs coordinated emergency response system, which is designed to mitigate the negative economic effects of a sudden oil supply crisis by providing additional oil to the global market on a short-term basis.

Each IEA member country is required to have oil stocks, counting both crude oil and refined products, equivalent to at least 90 days of net imports, and have in place the procedures and framework necessary for swiftly contributing to an IEA collective action.

The IEA stockholding requirement is not a prescriptive one, and countries are able to choose a stockholding regime according to their national circumstances, where the total of dedicated emergency stocks, in addition to industry's commercial stocks, assure that the minimum 90-day level is met at all times. Consequently, the stockholding regimes vary across IEA member countries, reflecting differences in oil market structure, geography and national policy choices related to emergency response.

IEA countries today are holding a total of about 1.6 billion barrels of dedicated emergency oil stocks in government-controlled agencies, equivalent to about 15 days of total world oil demand. This is in addition to the substantial level of industry stocks held across IEA member countries, around 2.97 billion barrels as of the end of August 2019, a two-year high and which can cover more than a month of world oil demand. These industry stocks include about 650 million barrels of obligated emergency stocks, which can be made immediately available to the market when governments lower holding requirements of industry.

## **Collective action to release emergency oil stocks**

Thus when taken together, the emergency reserves held by government controlled agencies and by industry under obligations, of more than 2.2 billion barrels, can bring ample additional supply to the global market when needed. Determining the need for a collective action is one of the IEA's critical roles, and the IEA has a permanent framework for constantly monitoring the global oil market. Our team of expert oil market analysts, assisted by our statistics experts and their extensive data gathering systems, provide monthly assessments of oil market fundamentals, published each month in our closely watched *Oil Market Report*. This analysis, together with a broad network of contacts in major producer and consumer countries as well as industry representatives, makes it possible for the IEA to provide on short order an assessment of a disruption's impact on the global supply and demand balance, and to advise IEA member governments on the use of emergency oil stocks. The IEA has a standing procedure for very rapidly developing a response plan and building consensus among all member countries. A response plan can be agreed within 48 hours, after which each country activates national emergency response measures to make additional oil available in amounts equal to their share of the collective action, which is based on oil consumption.

This has been the case on three occasions since the creation of the IEA: in the build up to the Gulf War in 1991; after Hurricanes Katrina and Rita damaged offshore oil rigs, pipelines and refineries in the Gulf of Mexico in 2005; and in response to the prolonged disruption of oil supply caused by the Libyan Civil War in 2011. Yet even in instances where supplies were disrupted but emergency stocks were not used, their mere availability can provide substantial benefit by helping to reassure the market and avoid panic reactions. We believe this was the case after the attacks on Saudi facilities on 14 September.

## **Recent attacks on Saudi oil infrastructure**

The recent attacks on Saudi Arabian oil infrastructure provides a vivid example of how the IEA emergency response system works and how the emergency oil stocks can be beneficial to supply security even when these are not released. Already within hours of the attacks, our executive director was in contact with Saudi officials and several member countries; by Sunday evening, 36 hours after the attacks and ahead of markets opening in Asia, all IEA member countries received a situation report and a preliminary impact assessment, and the IEA issued a statement that for the time being markets would remain well supplied. The IEA continued to provide updates of its assessment in the days that followed.

The attacks struck at some of the world's most critical oil infrastructure, in what has been likened to a massive heart attack for the global oil market. The attack occurred in the context of a very well supplied market, with OECD commercial stocks above the 5-year average and at their highest level in nearly two years. Yet the magnitude and duration of outages to Saudi production was of critical importance for how the market would cope with the disruption, and with what economic impact. Early reassurances, by the US, Japan and the IEA, that emergency oil stocks would be employed if needed, were essential to help avoid a panicked market reaction.

Ultimately the exceptional resilience of the Saudi oil industry to bring production back on line so quickly has meant that the use of the emergency stocks has not been necessary. But this was not a foregone conclusion; had the damage been more extensive or beyond the ability of the Saudi's to quickly address, the use of emergency oil stocks would have been crucial in avoiding substantial economic damage by bridging the supply gap. At the same time, had the same scenario played out but in the absence of these robust levels of emergency stocks, I believe the market reaction would have been quite different, with potentially very economically damaging price spikes as the market speculated on how it would cope without the benefit of a safety net.

## **Trends in oil market will not lessen importance of emergency oil stocks**

This dramatically underlines the important role that emergency oil stocks continue to have today, and is a reminder that while we are making great strides to transition our energy systems to cleaner and more sustainable fuel sources, oil security still matters.

Oil as a share of the global energy mix has been reduced from the 45% it represented when the IEA was created in 1974, to 31% today; yet oil still represents the largest share of any fuel source. In volumes, oil consumption has been growing every year, and it is now over 100 mb/d.

And oil will continue to matter in the foreseeable future; while a peak in oil use for passenger cars may be on the horizon, this is not the case for other areas of oil demand such as shipping, aviation, freight trucks. Oil continues to be the dominant fuel for the transport sector. The petrochemicals sector will also lead oil demand growth. We are on a path for global oil demand growth of around 1 million barrels per day on average each year to 2025, and around 0.25 mb/d on average each year after that. Even in a scenario that meets the goals of the 2015 Paris Agreement on climate change there would still be an oil market of 67 mb/d in 2040. That is comparable in size to the oil market of the early 1990s.

As the US moves ever closer to being a net oil exporter, I would like to stress that oil security is not only an issue for net-importers, and security concerns such as regional extreme weather events and terrorist attacks can affect all countries. In a global market, even in net exporting countries, oil consumers will be economically harmed by spiking oil prices, and if a disruption tips the world

economy into recession, the pain will be felt by exporting and importing countries alike. And even for net-exporting countries, imports can still play a critical role, helping overcome issues related to crude qualities, differences in refined product demand and domestic refining capacities, or geographical mismatches between production and consumption. So achieving net exporter status shouldn't be seen as making strategic stocks no longer necessary, and the Congressionally mandated sales for the coming decade have raised concern for just how far down the US SPR might be taken. As highlighted by the IEA's recent in-depth review of US energy policy released last month, should the US further draw down its SPR levels, there could be a challenge to the future effectiveness of the IEA stock system. This is particularly the case in a large disruption, as the US share in an IEA collective action, based on consumption, would be over 40% of the total. As such, we encourage the US to maintain robust SPR volumes to uphold global energy security, even as it transitions to a net exporter of oil.

Recent events also highlight another important trend in the oil market, as an increasing share of Saudi exports is destined for countries outside of the IEA, primarily in Asia. While oil demand continues to grow, and thus the need for increased stock levels, a growing share of the total is in developing countries outside the IEA. Once representing around 75% of global oil demand, IEA countries' current share of less than 50% of global demand is expected to decline to 25% by 2040. As this shows, it is essential that the IEA emergency response system be expanded to countries beyond the current IEA membership, and that these countries build up emergency reserves and join the IEA in its efforts to ensure global oil supply security.

As I mentioned earlier, opening our doors is one of the main pillars of our modernization strategy, and since 2015 we have admitted 8 Association members: China, India, Brazil, Indonesia, South Africa, Thailand, Morocco and Singapore. Today, the IEA countries together with our Association countries once again account for three quarters of global oil use, the same level as when the IEA was created. The IEA is making outreach in the area of oil security one of its highest priorities, sharing knowledge and best practices on strategic oil stocks, and including as many countries as possible in our trainings and emergency exercises. The US, as the largest IEA member, and in particular our colleagues in the SPR office, have a substantial role in this outreach work. Efforts by the US SPR to open up available storage for use by other countries are very welcome, as this can provide cost effective options for countries wanting to build emergency stocks, and it sets the example for countries to consider the benefits of joint strategic stockpiling.

## **Conclusion**

I would like to conclude by underlining that, while the energy world has changed significantly in the 45 years since the IEA's creation, our founding mission to coordinate a collective response to major oil supply disruptions remains as relevant as ever. And even considering a greater emphasis on climate change policies around the world, oil will continue to matter as a critical economic commodity for the foreseeable future. The recent attacks in Saudi Arabia were a sharp reminder that the world can't take oil security for granted, even when markets are well supplied.

On behalf of everyone at the IEA, I wish to once again thank you for inviting me before your Committee. I am happy to answer any questions.