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**07:30 AM EDT**

Jeanine Wai:

All right. Well, good morning, everyone. It's so nice to see so many faces today bright and early. Today, it is very much our privilege to have Mr. Darren Woods here with us, Chairman and CEO of ExxonMobil.

Born in Wichita, Kansas, Darren Woods is a graduate of Texas A&M University where he earned a Bachelor of Science degree in Electrical Engineering. He also holds a Master of Business Administration degree from Northwestern's College School of Management - or sorry, Kellogg School of Management.

Mr. Woods joined Exxon Company International in 1992 as a planning analyst in Florham Park, New Jersey. He progressed through a number of domestic and international assignments for Exxon Company International, ExxonMobil Chemical Company and ExxonMobil Refining and Supply Company.

In 2005, Mr. Woods was appointed Vice President of ExxonMobil Chemical Company. In 2008, he was named ExxonMobil Refining and Supply Company's Director of Refining in Europe, Africa and the Middle East, followed by Vice President of Supply and Transportation in 2010.

Mr. Woods was then appointed President of ExxonMobil Refining and Supply Company and Vice President of ExxonMobil Corporation in 2012. From here, he progressed to being elected Senior Vice President in 2014 and President of ExxonMobil Corporation and a member of the board of directors in 2016. Effective January 1, 2017, Mr. Woods became the Chairman and Chief Executive Officer, which is his current position.

Outside of ExxonMobil, Mr. Woods is a Chairman of the American Petroleum Institute and a member of its executive committee. He is also a member of the National Petroleum Council, the Business Roundtable, the Business Council and the Texas A&M University Engineering Advisory Council.

So without further ado, it is my pleasure to turn it over to Mr. Darren Woods.

Darren Woods:

Thank you, Jeanine, and good morning, everyone. Great to be here. I'm really pleased to have this opportunity to talk about ExxonMobil's business.

Some of you will recall that for the first time in 2018, we've publicly laid out an 8-year plan. And over the past 18 months, we've tried to keep the investment community updated on our progress. The last update was with Neil Chapman in early August as part of our earnings call.

I have to say that I feel real good about the progress we are making. And my sense is that generally there's a good understanding of our plans and progress. However, as the world

looks to lower their carbon emissions in response to the risk of climate change, there is a desire to better understand how robust our plans are to evolving policies and changing market trends. And today, I'll address this and demonstrate how ExxonMobil's strategy and plans capitalize on the industry fundamentals to grow long-term shareholder value.

Of course, we can't begin this discussion without the appropriate cautionary statement. I'll give you some time to read this. Basically it says we can't predict the future, but I will tell you, it doesn't stop us from trying. Our view of future demand has been reasonably good over time. However, the path to realizing it has been anything but a straight line. It's difficult to predict how the fundamentals of long-term demand will manifest themselves in the short term. There are just way, way too many variables. Which is why we instead focus on building a business that is robust to a range of short-term outcomes that are all consistent with long-term fundamentals.

On the supply side, advances in technology play a critical role. These are also very difficult to predict and can lead to a future very different than today, which is why we put such an emphasis on R&D and in understanding the technology landscape. And I'll talk more about this as we move through the presentation.

Let me begin by outlining the topics I'll cover. I'm going to focus my comments on energy, but most of my points are also applicable to our chemical business. I'll discuss what drives demand, what determines supply, and how we are working to meet demand for both additional energy and lower CO<sub>2</sub> emissions while delivering growth and shareholder value.

Let's look first at what drives demand, and that begins with people. People trying to improve standards of living for themselves and for their families. Starts with the basics: access to food, water and housing; then moves to light and heat for homes and schools; access to medical treatment; transportation; and modern conveniences like refrigeration and air conditioning. This then leads to higher levels of education and income, as well as improved living conditions, longer lives and a number of other advantages that, frankly, we sometimes take for granted.

The United Nations has attempted to characterize people's wellbeing with the Human Development Index. This index measures achievements in 3 key dimensions: first, gross national income per capita as a proxy for a standard of living; second, longevity as a proxy for health; and third, years of education. It is encouraging to see the progress made over time in these 3 areas. On average, the global population is better educated, earning more and living longer. At the same time, it is sobering to see how far some societies have yet to go. The drive to improve living standards will continue, particularly for those less well-off. This, in turn, will drive the demand for energy.

We can use the development index to help us project future demand for global energy. This chart links the index for a country shown on the y-axis with its energy consumption shown on the x-axis. The size of the bubble represents population size. As you can see, there is a clear correlation. As standards rise, so does consumption of energy. This makes sense if you think about the conveniences of modern life. For us here in the United States and much of the western world, shown in the upper right of the chart, it's difficult to imagine that half the world's population, roughly 4 billion people, have a life expectancy of 10 years less than ours, receive a third less education, and 1 in 4 don't have access to electricity. In fact, today, about 13% of the global population still don't have access to electricity. This has enormous implications for future energy demand.

Let me use China and India as examples. In 1990, both were low on the index and consumed less than 100,000 BTUs of energy per capita. By 2017, the living standards of

people in both countries had significantly improved, which also drove a significant increase in energy demand. China's demand tripled and India's nearly doubled.

The relationship between societal progress and energy consumption is indisputable. Access to reliable and affordable energy is essential to modern life. As billions of people strive for better living conditions, the world's need for energy will continue to grow. This relationship is very important and underpins the future of our business.

It's fair to ask, though, what form will future energy take? No one can say with absolute certainty. Society wants less carbon emissions, but to be broadly accepted, sources of new energy must be reliable and affordable. Given today's alternatives, that means technology has a critical role to play.

Over 90% of global energy emissions come from 3 sectors: power generation, transportation, and the industrial sector. Today, hydrocarbons meet more than 85% of the energy needs from these sectors. Hydrocarbons are energy dense, they work at scale, are globally available and easily transported, which makes them affordable and reliable, and hence, the fuel of choice. However, we know that their use contributes to global CO<sub>2</sub> emissions, which is driving the need for alternative sources of energy.

To successfully compete, though, these alternatives will require similar attributes. Unfortunately, existing alternatives don't consistently provide them. As such, today they offer only a partial solution. A comprehensive solution will require advances in technology and in some cases a breakthrough.

Let me illustrate the point starting with power. Solar and wind offer lower emissions, however, they are limited to areas with enough sun and wind. They require significant land area and are intermittent with no practical storage solutions that work at scale. Natural gas works at scale, but requires advances in carbon capture to compete on emissions with solar and wind. Additionally, in some markets such as India and China, the cost of natural gas compared to coal is higher.

Lithium ion batteries provide an alternative to fuel light duty vehicles, albeit with trade-offs on range and refueling times. For heavy duty vehicles and aviation, existing battery technologies lack the energy density needed.

Finally, energy solutions in the industrial sector must be reliable and cost competitive. This substantially limits their use -- the use of solar and wind. Similar to power, the industrial sector requires advances in carbon capture to effectively reduce emissions.

Now, in pointing these deficiencies out, I'm not arguing against the alternatives. I'm arguing for additional research and development. Fortunately, there are many organizations doing this, including ExxonMobil. We are optimistic that these collective efforts will result in advances that address the deficiencies. We don't believe it's a question of if, but when. However, once solutions are developed, time will be needed to fully penetrate the world's global energy system. Let me give you a sense for this on the next chart.

Throughout time and across industries, we see the same trend. After initial discovery, technologies can take decades to fully develop and gain widespread adoption. This can be seen in the U.S. as an example. The chart shows the time it took to fully adopt a sample of technologies. Technologies that met an unfilled need with no real switching costs, like the internet, cell phones and personal computers were adopted relatively quickly, but still took up to 50 years. In other areas, adoption is impacted by available substitutes, perceived benefits, affordability, switching cost and government policies.

Wind is a good example. First commercialized for utilities in the 1980s, today they're used by less than 10% of U.S. households. And as you can see, despite the perception, penetration of lithium batteries to transportation remains low, even after decades of development. Bottom line, when you think about adoption of new technologies in the context of the global energy system, think in multiples of decades. Society's experience to date illustrates this and you'll see this on the next chart.

Oil was first used as an energy source in the 1870s. It took roughly 100 years to replace coal as the world's dominant form of energy. And while coal has been recognized for decades as a carbon-intensive, particulate-laden energy source, it continued to grow until 2013. Today, it makes up 26% of the global energy mix and is expected to maintain a 20% share in 2040. Wind and solar today represent about 1% of the global energy mix and by 2040 are projected to make up 4%. And despite its many deficiencies as a fuel and its impact on health, traditional biomass remains an important source of energy in many societies. This chart illustrates a fundamental reality. Energy transitions take a long time.

Another fundamental reality seen in the persistent use of biomass is that a society's choice of energy is primarily driven by availability and affordability, which brings us back to the role of technology: to develop a source of energy that is affordable and widely available with lower global emissions. This is where we will make a difference. ExxonMobil has a deep competency in fundamental science, extensive R&D capabilities and over 100 years of experience in the global energy business. We are actively investing in the development of lower emissions technologies that have the highest potential for large scale deployment.

We are progressing advanced algae and cellulosic biofuels as potential solution for commercial transportation. Unlike first-generation biofuels, these technologies have the potential to provide a renewable source that does not compete with supplies of food or fresh water. Biofuels emit about half as much greenhouse gas as petroleum-derived fuel and have the potential for large scale production. They also provide the energy density required for planes and trucks.

To address power in industrial uses, we are pursuing a number of options to make carbon capture technology more economic. In manufacturing, we are working on new plant configurations, processes and catalysts to reduce energy use and lower emissions. Our efforts include working with a variety of external organizations, pursuing a range of potential solutions. We collaborate across a broad spectrum of science-based organizations in both the public and private sector, including aiding universities around the world, the U.S. national labs, technology venture funds and partnerships with private companies. Our research organization also maintains a broad aperture on external developments, monitoring all relevant advances and discoveries. So while we can't predict advances in technology, we won't be surprised by them.

In the meantime, the world's rising demand for energy must be met. Over the next 2 decades, the world's population is expected to grow by 20% and the middle class to nearly double. This is expected to result in a 20% increase in global energy demand. In OECD countries, energy demand declines with improved efficiencies. Coal use is expected to shrink, while oil and gas continue to meet the majority demand with a shift towards gas.

India and China account for half of the new global demand, resulting in increases across most energy sources. Let me pause here for a moment because this is important. To successfully reduce global emissions, given their growth, the world needs affordable solutions for India and China. In other words, if we don't solve this problem for India and

China, we don't solve the problem.

Finally in Africa, a significant amount of demand is expected to come from biomass, while the demand for oil and gas grows. As you can see, oil and gas will continue to play a critical role in meeting society's needs.

This is our view of the long-term fundamentals and it's consistent with independent assessments by both the IEA and the EIA. Our outlook is also in line with the commitments made under the Paris Agreement. This view underpins our strategies and plans.

Given its significance, I'll spend a little more time on the industry fundamentals with some additional context. Our outlook projects oil demand to grow at 0.6% a year and gas demand to grow by 1.3%. When you factor in depletion rates, new oil production needs to increase by nearly 8% per year and natural gas by 6%. You can see this when we overlay our demand charts with the depletion charts. The dark blue areas on the chart show existing supplies that decline over time. The light blue areas show additional supplies needed to meet expected demand.

Under any demand scenario, including 2-degree scenarios shown by the red diamond, depletion in and of itself supports the need for significant industry investments. The IEA estimates that approximately \$21 trillion of additional industry investments are needed by 2040. This is a compelling investment case for the industry. It's an even more compelling case for ExxonMobil. We are creating industry-leading value through unique set of competitive advantages, leading to large scale businesses with low cost supply and higher performing products. This allows us to successfully compete across a range of price cycles.

I've spoken about these 5 advantages many times: our technology, scale, integration, functional excellence and world-class people. Each of these advantages are significant in their own right. Taken together, they create unparalleled organizational strength, adaptability and capability. We use them to capture and develop high return, resilient opportunities, leveraging our strong balance sheet across a range of price environments. Good examples of this are the Permian, InterOil and Mozambique acquisitions, all undertaken during the last down cycle.

Currently, we have the best portfolio of investment opportunities since Exxon and Mobil merged. Each project in our portfolio is evaluated for advantages relative to competition and against our other opportunities. Their returns are stress tested across a range of price scenarios. The chart in the upper left provides a perspective of the value of these projects over time in a range of price environments and the value they bring to our business. While we are happy with the projects we have in our portfolio, we continue to look for additional opportunities. In a depletion business, to sustain long term-value, you have to.

As new opportunities are captured, we have the option to reprioritize capital, putting a priority on investments with the highest NPV. Existing projects in the portfolio have to compete with every new opportunity. This allows us to high grade our portfolio through selective divestments and was the primary driver of the \$15 billion program we announced earlier this year. The size of this program could grow if we continue to capture more attractive opportunities, which is exactly what we are working to do through active exploration and evaluation of potential acquisitions.

We feel very good about our opportunity set. We have lots of options and the flexibility to optimize on value and mitigate risk as circumstances change. And if there's any sure thing in this business, it's that circumstances will change. We don't need to look any

further than the first half of this year to see that play out. Current market conditions highlight the benefits of our strategy and competitive advantages, particularly our scale and the size and strength of our balance sheet.

The chart in the top left provides the range of commodity prices and margins over the past 10 years compared to the prices and margins experienced in the first half of 2019. As you can see, all of our businesses are below the median with 2 at or near historic lows. Now while I won't say we predicted this, I can say that we anticipated it. Today's levels are consistent with our historical experience, and importantly, consistent with the scenarios that we use to evaluate our businesses and investments. Even with the extreme weakness in both the downstream and chemical sectors, the projects we recently started up in both these businesses are earnings and cash accretive, demonstrating their advantages.

Also want to use the current price environment to highlight the financial strength of our company. The line in the chart at the bottom left shows an estimate of our debt to capital ratio over time, assuming that current market conditions persist through 2025 and the continued execution of our existing plans. As you can see, even in a prolonged bottom-of-the-cycle margin environment in 2 of our sectors, we continue to fund our current investments, maintain a reliable and growing dividend, and retain the capacity for a sizeable acquisition without compromising the financial capacity of the company.

Now while history tells us that bottom-of-the-cycle conditions like this don't persist for a long time, it's a good test of our businesses' investment portfolio and financial strength. It also gives us the confidence to continue to pursue our advantaged investments.

So with that, let me turn to the investments that underpin our plans to grow value. The status of each of these was shared by Neil Chapman during our recent earnings call. I'll reiterate some of the key points. We have made significant progress on all projects across all of our businesses. The schedules remain consistent with the plans we've shared and they continue to look attractive even in current market conditions. Our investment philosophy remains centered on competitiveness rather than price. Each project leverages critical elements of our unique advantages and are expected to grow earnings, cash flow and returns across a wide range of price environments.

Let me conclude by summarizing a few key points. Demand for energy is tied to economic activity and people's desire to improve their standards of living. So long as economies grow and people's lives improve, the demand for affordable and reliable energy will remain.

Meeting the growing need for energy and addressing the risk of climate change are not mutually exclusive. They represent industry's dual challenge and will require additional solutions and technology breakthroughs. But it's always been this way. As society's needs evolve, so do we, typically through technology. This is why over the years we have been steadfast in our commitment to technology and investments in research and development. We leverage our research to develop new technologies to meet new needs and improve the returns of projects that meet existing needs. Aspects of all of our advantages -- technology, scale, integration, functional excellence and people -- come together to deliver industry-leading projects and ultimately growth and shareholder value.

I'll end where I started today. We have an outstanding portfolio of investment opportunities. We have a solid plan to deliver those investments and feel real good about the progress we are making. With that, I want to thank you for your attention and I'll hand it back to Jeanine for Q&As. Thank you.

Jeanine Wai: Thank you so much, Darren, for your comments. We really appreciate it. It was very insightful.

So we're going to spend about the next 20 minutes doing a fireside chat. And we've got a bunch of questions, so I hope we can get through a lot of them. And I think I'll just start off more broadly fundamentally. In your view, do you think the industry is under investing relative to the supply required to meet demand? And if that is your view, when do you think it's going to show up in the oil balances?

Darren Woods: Well, we looked at this earlier this year as part of the March analyst investment. And I mentioned IEA's estimate of the amount of investments needed by the industry through 2040. We looked at allocating that to the existing competitors on a share basis and basically concluded that ExxonMobil's investment levels were in line with the IEA's estimate. Most of our competitors and peers were investing at levels that were below their historical investment rates and below what would be required based on the IEA estimate. So we concluded from that that there probably was some underinvestment in the market at the time.

With respect to when that kind of manifest itself in the broader markets, I think it's very difficult to tell. We, and I think the industry in general, have struggled to really ever predict exactly how the supply and demand balances will kind of manifest themselves in short term, so we don't really focus on when we're going to see that. Instead, we focus on making sure that we're ready for it when it comes. And we think that what we're doing today with our investment profile that if that impact comes and supply-demand balances open up and there's a shortage of supply, we'll be in a position to meet a lot of that demand.

Jeanine Wai: Okay. In your prepared remarks, you mentioned that there are a number of factors related to the oil price environment. And from our perspective, investors seem to really value flexibility these days, given volatility in oil prices. So, when we look at your portfolio, is there a flexibility to cut back on CapEx if the current market conditions persist? Maybe what would trigger that and where would you cut back first?

Darren Woods: I think there's always flexibility to cut back, but there's a level of inefficiency and higher cost that goes with any of that cutback. The short cycle investments obviously carry less cost. Although I would say, people talk a lot about the shale and the unconventional plays as being short cycle and therefore a lot more flexibility, which is true. But I would tell you, with the work that we're doing in technology and the work that we're doing in terms of getting the organization focused on this manufacturing mode of driving efficiencies and improving, that any short-term disruption in that is going to have an impact on our ability to kind of drive that progress. So I would tell you that it would be -- we would look at reluctantly pulling back on CapEx if we felt like we needed to.

But our strategy has always been and continues to be to invest in projects that are competitive in a range of price environments. And if you look at what we're doing with our short cycle investments in the unconventional space, that has strong returns even at low oil prices below \$40, \$35 a barrel. So our view would be with a robust return even at lower prices that we would continue to invest through the cycle because we have the financial capacity to do that and we generate good returns with it.

Jeanine Wai: Okay. So you walked into this one. You mentioned short cycle and Permian. How do you think about short cycle versus long cycle? We hear a lot of this when people talk about ExxonMobil and your peers. And so is short versus long a consideration that you have when evaluating opportunities in your portfolio? And again, back to the flexibility. Is the thinking that short cycle investments such as the Permian, that's easier to pull back in

CapEx, like you said, but you've often talked about investing for the future and needing to do longer cycle, major capital projects. So how are you thinking about short versus long, especially in the current environment?

Darren Woods: I would tell you that the primary criteria that we use to evaluate investments is on their competitiveness and the ability to generate industry-leading returns. So all of our investments across the upstream and the short and long cycle, as well as chemical and refining sectors, we look at whether or not those investments are advantaged versus the rest of the industry. And one dimension that we look at is our cost to supply with respect to the rest of industry. And we insist that the investments that we're making are advantaged versus industry and on the very far left of the cost of supply curve. So, as the supply and demand balances fluctuate, and as you see price cycles come off and prices drop, we want to make sure that our investments are positioned on the far left hand side and so continue to make earnings and cash, even in the low parts of the cycle.

And we see that today demonstrated in our downstream and chemical business. So I showed you the charts that kind of depict how challenged those two industries are right now. If you look at the investments that we made and just brought on, they're all cash positive and earnings positive, even in these very low cycle conditions. So we feel real good about those projects, and we see the same with our investments in the upstream.

Jeanine Wai: Okay. So I guess sticking to the projects that are cash positive, earnings positive. Free cash flow; definitely a key topic in energy right now. Can you talk about when you see ExxonMobil's inflection in free cash flow? And what factors do you think would either pull that forward or enhance it?

Darren Woods: Well, the factors I would tell you will be primarily market-driven. Since we don't try to predict where the margins and prices are going, as those move around, we'll generate more revenue potentially, or less, and that will move the free cash flow around.

And again, and I come back to we've looked at that profile of spend and we've tested it around a range of environments. And one of the advantages of having a strong balance sheet is to make sure that we are not whipsawing our businesses around with the volatility in the markets. I think that's one of the advantages that the scale that we have brings to this business. And that constancy of purpose of investing in advantaged projects over the long term I think delivers over the medium term and long term greater shareholder value than trying to chase the price cycles.

And I think you can see that today with kind of the volatility of the marketplace. Imagine trying to run your business, a capital-intensive, long-term investment with the changes that we're seeing every day in the market out there. I think that would be a very difficult proposition. So instead, if you're convinced that you can run and be successful at the bottom end of the marketplace, we pay a lot of attention to it and make sure that the dynamics that we're seeing don't change our thinking about some of these fundamentals. But as you heard in the presentation, the way we look at the business is tied to some very basic fundamentals that haven't changed for decades, if not hundreds of years.

Jeanine Wai: Okay. So in terms of not trying to whipsaw the program, not chasing price, investing on fundamentals, maybe just a question on capital allocation. Relative to your peers, you're spending more and you're doing it counter cyclically and you're not doing any buybacks right now. So, could you share with us what the first call is on free cash flow, whether it's a dividend, buybacks or reinvestment, and kind of what your thought process is on all of those?

Darren Woods: Sure. Let me first just start and make the point about our level of investment. I think one



of the things that isn't always done when people talk about the level we're investing at is normalize it for our size. So if you look at our investment level compared to the size of our business, we use cash flow from operations as a proxy for size. The level that we're investing at today is pretty consistent with the level that we've invested at historically, and we think it's what's required to drive and sustain the long-term value of the business. So we don't think of where we're at today as being necessarily a higher level of spending. Our peers are at lower levels than they've historically spent at, which comes back to this question that you asked earlier about if the industry is under investing.

With respect to how we choose to allocate our capital, I think the first priority for us is investing in projects that are advantaged versus industry and will continue to grow value for the company. The point I made in the presentation is this is a depletion business. So you're on this treadmill. If you're not investing for the future, you're attriting. And that's certainly true in the upstream. And in the chemical business with the growth market, if you're not investing, you're losing market position.

So from our perspective, to be a long-term viable company, and that's the way we think about it, we have to make sure that we're continuing to invest in attractive and advantaged projects. So that's the first priority because it will underpin the ability for our company to do anything else going forward in the future.

The second priority is we feel like we've had a commitment to our shareholders to pay a reliable and growing dividend. So that's pretty high on our priority list. And then we want to make sure that we maintain the financial capacity to transact at the bottom-of-the-cycle conditions. And so one of the things that we're constantly stress testing as we look at where we want to take dividends, as we look at our capital investment program, is do we have the capacity for an acquisition when prices come off and the market's depressed? Because we think those are where we'll see value opportunities and so we maintain a buffer. And that would be the priorities of our capital allocation.

Jeanine Wai: Okay. So switching gears, if you don't mind, to the Permian.

Darren Woods: Sure.

Jeanine Wai: We think that there's just a ton of buzz and questions on what we've called kind of, quote, major mojo in the Permian. If you don't mind, why exactly is your development plan in the Permian unique? And what exactly is differentiated about it that'll lead to higher returns than what we've historically seen in some of the independent E&Ps, which is historically, to be fair, kind of destroyed value. Are there certain parts of the development process where ExxonMobil's advantage is just more pronounced? And I'm specifically thinking about drilling, completions and what people commonly refer to as the ExxonMobil machine with procurement, supply and just bringing big scale into the Permian.

Darren Woods: Well, I think as we look at ourselves in the Permian and our approach to the Permian unconventional space versus maybe some of the independent E&Ps, for some, I think our objectives are somewhat different. We're not focused on short-term production, getting volumes up to try to in the short term quickly raise the value of our company. That's not an objective statement for us. We think about this as part of a long-term portfolio like we do the other resources that we're trying to develop. And so our focus is on maximizing NPV of those developments and recovering the most resources in the most competitive way, cost competitive way.

But that's the objective, and we're not trying to drive short-term volume through the rest of it. In fact, what I would tell you is that we don't start off with any volume targets. We

start off with understanding those reservoirs and figuring out how to develop them effectively. And I think that's a big difference in terms of how we think about the approach there.

I think the other big differentiation is if you look at the size and the scale and the history of our company, we're very different than a lot of the other independent E&Ps. And I think what we've been very focused on and started talking about pretty explicitly in March is what does a company like ExxonMobil, with the scale that we have and the experience that we have and the technology and the advantages that I talked about, what does that look like in the unconventional space? And my view was from the very beginning, the way we develop those resources should look different than some of the smaller E&Ps because we have more to bring to that.

And you see that today with the investments that we're making where we're thinking about all the horizons in a particular play and developing those in a way that maximize the recovery and the value of that resource. That means you have to be a little bit more patient and you have to spend capital out front to put in the infrastructure, to lay out the corridors that we've talked about in March to effectively develop that resource. So it takes you a little longer, takes a little more capital, but you get a higher return and a better recovery. And that's one of the things that we've been doing in the Permian which is different than a lot of the others.

The other thing I would tell you is if you look at unconventional in the shale, we're very early in the technology cycle. In fact, while the industry has made great progress, and mainly independents have driven that, it would be -- I would characterize it as more of an empirical process of trial and error and kind of testing and evolving, which has been very effective.

But what we haven't seen a lot of is, what I would say is fundamental science and technology looking at unlocking more of those resources. And that's one of the things we feel very strongly that we can bring to this game and will be very different than what others can because of the R&D capacity that we have within our company. So one of the big drives that we have today is really focusing our technology and our researchers on better understanding the fundamentals of unconventional resources and figuring out how to unlock more of those resources and raise recovery.

You've got a huge resource base, very low recovery rates today. If you can improve your recovery rates through technology, you can unlock a lot of resource instantly. You don't have a discovery risk. You don't have those challenges of going out and finding the resource. It's really a function of figuring out how you more effectively develop that resource. That's where technology will play a role. I'm convinced of that. And if you go back in time and look at our industry over time, technology has always led to better recoveries and improved economics for developing resources, and I think we're going to see that play itself out. And I would say that is a big difference that we can bring.

And the final point I will make is if you look at the capabilities of our organization, take drilling as an example that you mentioned, all around the world, we've tried to take the best technical competencies and capabilities we have in the organization and put them on the challenges of driving improvements in the unconventional drilling. And so I think we've got the opportunity with our scale and size and the capabilities that I've talked about to change the way that unconventional space is developed.

Jeanine Wai:

I wanted to maybe continue on that thought. You talk about hitting all the different horizons, unlocking value. I think spacing has -- the industry's learning, but spacing has become an issue over and over and over again. So you mentioned technology and looking

at the reservoir and all this. How are you planning on avoiding some of the spacing issues that we've seen, especially since you're talking about hitting all the zones and really maximizing the value versus maybe an ROR versus NPV approach?

Darren Woods:

This idea that spacing is -- that the industry has kind of discovered this challenge or issue, our view is we've always recognized these parent-child relationships, the communication between different areas. And so what I think has been missing is the characterization of that, and maybe some of the broader industry hasn't recognized that potential. And I think the drive to bring production on and get high IP has led to kind of this very short-term approach to taking in a horizon and drilling that very quickly.

As I said before, we're stepping back and looking at the play in its entirety. One of the things that we've brought to the work that we're doing in this space is we've taken what we think are some advantaged reservoir modeling and adapted that to work in unconventional. And we're using that then to look at all these horizons and understand how best to develop all the horizons and how they interact with one another.

So I think we've got some pretty good modeling of the horizons and how they interact, and the development plans that we're putting together comprehend all that. And so what it's doing is drilling a number of the horizons and making sure that we do that in a manner that's consistent, and don't start to bring production on until we have the full development laid out the way we want it to. So again, it takes a little more time. You spend a little more capital upfront, but you get much more efficient production.

Jeanine Wai:

Okay. So inventory goes hand in hand with spacing. And I think there is some thought out there that people are drilling their best inventory first because of returns and the core inventory in the Permian is shrinking. So, in terms of your production target of achieving over 1 million barrels a day by 2020, do you have enough inventory to achieve that? And what does the inventory look like after that in terms of are you high grading or anything?

Darren Woods:

Yes, so let me just make the point. We didn't have a production target. We didn't go out and say how do we achieve a million barrels a day and then go figure out if we've got inventory to go drill that. What we ended up saying is develop the resource in a way that we think maximizes the recovery. It's a very grassroots buildup from the beginning of the fundamentals. And then once we figured out what was the optimal development of that, we stacked up the volumes to see what it came out to be, and that was what it came out to be. And so the inventory, we've got 6,500 wells or something that we've drilled 100. So we've got a pretty big inventory that exists today.

But again, I think this idea that somehow we're developing that resource to get to a volume number is, I would just tell you that is not the way that we're thinking about it. We're looking at it on a returns basis and how you develop that resource and get a high return for the dollars that you spend.

A lot of people will ask questions about the depletion rates and what does it mean after you hit this 1 million barrels. And my view is we're not trying to sustain a particular volume. We're trying to sustain an economic return. And so our investments that will continue past the profile that we've provided will be a function of what we see the economics being for further development. And if that means sustaining the million barrels, we'll do that. If that means coming off a million barrels, we'll do that as well. Because ultimately, it's going to be a value proposition, and that's the way we're looking at it.

My sense is that by that time, we will have unlocked some of these technology advantages that I've talked about and that will start to have implications and impact on

what we've already done. So, my sense is there are things today that we don't know that will have implications there, but only time will tell.

Jeanine Wai: Okay. We've got now one minute left. And I can't help myself; consolidation. Extremely topical right now in energy in general. Can you share with us your broad thoughts on consolidation in the Permian basin, and how does ExxonMobil fit in with that?

Darren Woods: Well, I think if you look at what I would say are the historical trends of developing industries, you have this period of a lot of independents, a lot of small players that eventually all consolidate. I don't see any dynamics that would make that different or that historical model play out differently in the unconventional space. So I expect consolidation to happen over some period of time. And we -- I wouldn't say that we're predicting when it will happen.

What our focus is on is understanding what the value opportunities out there are and making sure that we're aware of and participating in the valuation so that if there is an opportunity to acquire something that brings value, unique value to ExxonMobil, we'll be in a position to transact on that. But I think right now, there's some time. I think time's on our side to let that kind of play itself out.

And I think people need to recalibrate kind of what they're experiencing in that unconventional space, and that will have an impact on how people value companies and understand what the value proposition is. And we'll continue to develop our thinking. And I think as we advance some of these technologies that bring us even greater advantages there, that increases the value opportunities with respect to maybe some other companies that don't have those advantages. So, we're keeping a watchful eye and I think we're there for the long term. And as opportunities present themselves, we'll take advantage of them.

Jeanine Wai: Well, time flies when you're having fun, and we're just about out of time. So, it's really been our privilege. Thank you so much, Darren, for your time.

Darren Woods: Sure. Thank you, Jeanine. Thank you.