

# 2019 Security Analyst Meeting Edited Transcript

Tuesday, March 5<sup>th</sup>, 2019



#### CAUTIONARY STATEMENT RELEVANT TO FORWARD-LOOKING INFORMATION FOR THE PURPOSE OF "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

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This transcript has been edited by Chevron Corporation. It is generally consistent with the original 2019 Security Analyst Meeting transcript. For a replay of the 2019 Security Analyst Meeting, please watch the webcast presentation posted on chevron.com under the headings "Investors," "Events & Presentations."

# Transcript

# Wayne Borduin (General Manager, Investor Relations, Chevron Corporation):

Good morning. I'm Wayne Borduin, General Manager of Investor Relations for Chevron. I'd like to welcome those of you in the room and those joining us by webcast to Chevron's 2019 Security Analyst Meeting.

Before we begin, a few important reminders. First, please take a moment to locate the nearest exit. In the event of an emergency, the hotel staff will provide further instructions. And please silence all cellphones and other devices.

Today's presentation will begin with a corporate overview by our Chairman and Chief Executive Officer, Mike Wirth, followed by a review of our upstream business by our Executive Vice President of Upstream, Jay Johnson. We'll end the morning with a Q&A session, where Mike and Jay will be joined by Pat Yarrington, Vice President and Chief Financial Officer; and Mark Nelson, Executive Vice President of Downstream & Chemicals.

Before we begin, a reminder that today's presentation contains estimates, projections and other forward-looking statements. These statements are subject to certain risks, uncertainties and other factors that may cause actual results to differ.

Please take a moment to review the safe harbor statement that is available in your booklets and on our website.

Thanks for your attention, and I'd now like to introduce our Chairman and Chief Executive Officer, Mike Wirth.

## Mike Wirth (Chairman of the Board and Chief Executive Officer, Chevron Corporation):

Thank you, Wayne. Good morning, and welcome everyone, both in the room watching and those watching via webcast to Chevron's 2019 Security Analyst Meeting.

I'm excited about where Chevron is going, and I'm honored to represent 45,000 people across our company who are committed to driving superior results, winning in any environment and creating value for our shareholders.

I'll provide forward guidance today on a number of key performance dimensions, including capital spending, production, cash flow, and returns.

I'll also update you on our view of the Permian, which is even better today than it was just a year ago.

Moving to Slide 2, over the last few years, we've repositioned the company to deliver sustained value for our investors. I'd like to begin by calling out four elements of our story that differentiate Chevron from our competitors and how we're poised to win in any environment.

First, we build an advantaged portfolio that's delivering strong cash flow and is underpinned by resource and reserve replacement strength. Second, we have an unmatched combination of balance sheet strength and low dividend breakeven price, providing resilience through the price cycle.

Third, we're committed to a disciplined, returns-driven approach to capital allocation. And fourth, this all adds up to a superior capacity to return cash to shareholders.



Over the last few years, we've repositioned Chevron to deliver disciplined growth and free cash flow with much lower risk.

I'll start with the bedrock of our success, which is operational excellence. Safety and environmental performance are ingrained in our culture. This results in a relentless commitment to the safety of our operations, which is the foundation of an efficient, reliable, and profitable business. For a number of years, we've led our integrated peers with best days away from work and oil spill rates. On process safety, we've reduced loss of containment events by 30% since 2015. Disciplined execution is the foundation for delivering consistent results. We're leading, and we intend to continue to do so.

Moving to the macro environment, the demand outlook for our core commodities continues to be positive. Over the next 25 years, the global population is expected to grow from seven and a half billion people to roughly nine billion. The world will need affordable, reliable, and ever-cleaner energy. The chart on the left reflects IEA's new policy scenario. An independent view of global energy demand that incorporates known and expected changes in policy and technology. Oil and gas demand is projected to grow by more than 25% and represent roughly the same share of the total energy mix in 2040, as it does today.

The chart in the upper right shows the investment needed over the next two decades to offset production declines from existing fields and also meet the growing demand for liquids. The chart on the lower right illustrates the strong underlying demand growth for petrochemical products. This is driven by a growing middle class and will also require ongoing investments. Any way you look at it, the world will need more of what we produce, not less. Against that backdrop, I'd like to talk about how we're positioned to compete and win in any environment.

I'll begin with our advantaged portfolio. In the upstream, we're diverse in asset class, geography, and asset maturity. Risk is decreasing as our capital spending becomes more weighted towards smaller, shorter-cycle investments. In 2018, we led our peers in earnings per barrel. We grew production by over 7%, and we maintained low unit production costs. In Downstream, we also lead our peers in earnings per barrel, a strong indicator of reliable operations, cost control and margin capture.

Our fuels business leverages integrated value chains anchored by the highest Nelson Complexity refining network and economies of scale. In petrochemicals, our advantages come from low-cost feedstock, world-class facilities and superior technologies.

Moving to Slide 6, the strength of our portfolio provides both upside leverage and downside resilience. Chevron is in a much stronger position today than we were just five years ago, and we're now uniquely positioned to deliver shareholder returns through the price cycle. In a high-price environment, our liquids weighted upstream gives us upside leverage and our commitment to capital discipline means that higher cash flow can be returned to shareholders.

In a low-price environment, our low cost of supply, more flexible C&E program, and differentiated balance sheet ensures downside resilience.

These attributes together with the commitments to disciplined cash flow growth and portfolio high grading illustrated in the middle of the slide yield a compelling pathway to shareholder returns through the price cycle.

We increased share repurchases during the fourth quarter of last year, and we increased our dividend by more than 6% in the first quarter of this year, demonstrating our confidence in future performance and our commitment to shareholder returns.



Turning to Slide 7. These charts show Chevron's robust capability to grow production while replacing reserves organically. We grew both production and reserves last year, and we have a large high-quality resource base to support high-value growth well into the future.

The chart on the left illustrates Chevron's 5-year reserve replacement, where we've added more reserves than we've produced and sold. Our shale and tight portfolio is a key contributor here. These are high-quality reserves with lower geologic risk, lower above-ground risk, and low break-even cost of development.

The chart on the right shows our reserves to production ratio is both prudent and stable. It's not too high, too low, or too volatile. This stable ratio demonstrates that our portfolio is resilient through the price cycle. We don't have resource anxiety. We won't chase lower return investments, and we don't need to ramp up spending to restock a diminishing reserve base.

Moving to Slide 8, our position in the Permian Basin just continues to get better and underpins the depth of our resource base. Today, we're updating our assessment of resource to 16.2 billion unrisked barrels of oil equivalent, up about 75% from a little over nine billion barrels just two years ago. Continued appraisal success, improved drilling and completion performance, ongoing land optimization, and ever-improving technology have allowed us to characterize more benches and increase our inventory of resource.

These same drivers have also increased the economic value of our acreage. Based on our valuation models, our estimate of the value of our Permian position has more than doubled over those same two years, using the same price assumptions. You all have your own methodologies for determining asset value. With the new data on production, cost, and resource that Jay provides today, I believe you too will see a dramatic rerating of this asset.

We remain focused on a capital-efficient, returns-driven strategy, integrated across the value chain underpinned by a low or no-royalty position on most of our acreage.

Turning to Slide 9. In a portfolio of assets that generate industry-leading returns, there's a higher bar against which other assets must compete. As part of our capital allocation program, we continually review and evaluate our portfolio. This updated Wood Mackenzie chart shows that our portfolio was grounded in large core assets that are reasonably young or long-lived. The chart also illustrates that we have assets deeper into their life cycle that have been positive value and cash generators in our portfolio, but at this point, may be worth more to others.

The bubbles shown in green represent assets that are being actively marketed. Our criteria for divestments is straightforward. We've screened our portfolio for strategic alignment, resource potential, relative economics, and value.

2018 was the first of the 3-year program to divest \$5 billion to \$10 billion of assets. We're well on our way to achieving that goal. And while divestments are part of the high-grading story, we continue to assess swaps and acquisitions too, looking to build an even stronger portfolio for the future.

Moving to Slide 10. Our advantaged and sustainable portfolio was underpinned by an industry-leading balance sheet and dividend cash flow break-even. Both are fundamental strengths, enabling Chevron to focus on what we can control and reinforcing our ability to deliver to shareholders, even in the face of price uncertainty and market volatility.

Our strong balance sheet is a key differentiator. The chart on the left shows Chevron's net debt ratio at the end of 2018 and the ratios of our competitors. The results speak for themselves. The chart on the right is WoodMac's estimate of



comparative break-evens across the same group of competitors, we're leading here too and are well positioned to cover our capital spend and growing dividend even at prices well below where we are today.

Companies with weaker balance sheets or outsized capital spending plans could be a greater risk of tradeoffs that restrict cash flow available for shareholders.

We are not one of those companies. We have the portfolio, capital program, and financial strength to balance growth and cash returns to shareholders.

Now let's turn to our capital program. This chart illustrates our 5-year outlook for total capital and exploratory spending. Our organic C&E budget for 2019 is \$20 billion, in line with last year and capex in 2020 is expected to remain within the \$18 billion to \$20 billion range. In the outer years, from 2021 to 2023, assuming a flat \$60 Brent price, we're guiding to a range of \$19 billion to \$22 billion.

Let me say it again. We're a much stronger company than we were just a few years ago. We've completed multiple major capital projects. Those projects are now generating strong cash flow. We've significantly reduced our pre-productive capital. We've refocused our investment priorities towards shorter-cycle projects that deliver returns quickly and expect 70% of this year's spend to deliver cash flow within two years.

Capital discipline always matters, and efficient capital deployment generates superior returns.

The chart on the left, drawn from several published sell-side forecasts, illustrates a forward-looking measure of capital spending intensity for Chevron and for our peers.

Between 2018 and 2021, we expect to have a lower level of cash capex relative to operating cash flow. Over time, a lower level of capital intensity and some of the industry's most economic investment opportunities delivers improved returns and stronger cash flow.

The chart on the right summarizes the impact of actions we're taking to improve cash return on capital employed. The big levers are growing volumes and cash margins, further lowering costs, selectively allocating capital by investing only in the best projects and actively optimizing our portfolio.

We've been successful increasing cash returns by almost two percentage points last year. We're targeting greater than three percentage points of improvement over the next few years at a flat price, which brings us to the subject of cash generation.

As our production grows over the next five years, we expect to sustain our industry-leading cash margins, resulting in strong upstream cash flow growth.

Over the next five years, we expect net production to grow at a 3% to 4% compound annual rate. This comes on top of 5% growth in 2017 and 7% growth last year. And I'll point out that we expect to generate this level of growth even with contract expirations in Thailand and Indonesia during this period.

The depth and quality of our current portfolio provides a much clearer line of sight to capital efficient production growth with much lower execution risk than we've had in the past. The chart on the right shows that we expect to sustain our advantaged cash margin even at a flat \$60 Brent price. In a higher oil price environment, the picture looks even better. Growing volumes with sustained peer-leading margins is a powerful combination for cash generation, which I'll cover on Slide 14.



Last year at \$71 Brent, we delivered on all four financial priorities, returning more than \$10 billion to shareholders in the form of dividends and share repurchases, while at the same time substantially lowering our net debt. This year, we'll continue to deliver on these commitments.

We are positioned to cover cash capex and dividends at about \$52 Brent, in line with last year. And at \$60 Brent, we expect to generate nearly \$30 billion from all sources, which not only covers our capital program and dividends, but also covers \$4 billion of share repurchases and further balance sheet strengthening.

And over time, we expect the cash flow picture to continue improving even in a flat price environment.

As a stronger company, we are better positioned to return more cash to shareholders. Over the next five years, we're set to return a higher percentage of cash flow to shareholders at a lower Brent price than in either of the preceding five year periods. We remain absolutely committed to our top priority of growing the annual dividend payout, and we expect to return surplus cash to shareholders in the form of share repurchases in any reasonable price environment.

Which leads me to my final slide, Chevron offers a winning value proposition, delivering industry-leading value to shareholders in any environment. On the left-hand side of this slide, our financial priorities remain unchanged. At the core, our competitive advantage is created by a strong portfolio of long-lived low-decline assets anchored by future, short-cycle high-return investments that carry a much lower degree of execution risk.

Chevron is operating from a position of strength today. The balance sheet is strong. Our dividend break-even is low. We're disciplined with capital, and we're generating strong free cash flow. Our investors don't need to wait several years for the story to come together. Nor do you need to hope for higher prices to see higher cash returns. We increased our dividend by more than 6%, and we raised our annual buyback objective to \$4 billion. Together, we expect to return \$13 billion this year, which equates to a total shareholder yield of nearly 6%. We're delivering now.

That concludes my prepared remarks. I'd like to turn the podium over to Jay Johnson to give you a deeper dive into our upstream business. Jay...

## Jay Johnson (Executive Vice President, Upstream, Chevron Corporation):

Thank you, Mike. Good morning. We've got a great story, so let's get started. The photo is a picture of a diver preparing to connect the oil export pipeline at Big Foot platform in the Gulf of Mexico, where we started production last November.

This is a new asset in our diverse and advantaged upstream portfolio. The pie chart on the left shows our diversity by asset class. The number of barrels in the shale and tight category has increased and now, represents a third of our portfolio.

We expect our shale and tight resource to continue to grow as we de-risk the less mature areas. We have a strong position in key hydrocarbon plays around the world and the map shows some of our most important producing assets, many of which I'll discuss further this morning.

Our advantage comes from having multiple long-lived positions in key geographic areas that generate strong returns and industry-leading performance.



Our upstream business is positioned to win in any environment. As you can see, on the left, we've significantly reduced our capital program over the last five years. Looking forward, we plan to maintain a relatively flat and ratable level of capital spend that supports continued growth of production and cash flow.

The chart at the top right shows we consistently lead our peers in unit production cost. We're driving efficiency in our operations through cost discipline, supply chain management and workflow transformations that leverage digital technology.

Today, we're more efficient and cost effective. And the result is industry-leading earnings per barrel as shown on the bottom right. We're earning nearly as much per barrel today as we were in 2014 when Brent prices averaged almost \$100 a barrel. We now lead our closest peer by more than 20%.

Let's turn to resources and reserves, important indicators for the long-term sustainability of our business.

In 2018, we replaced 136% of our production with proven reserves. Our 5-year reserve replacement ratio is 117%. Impressive results, when you consider that we've increased production by about 15% over the same 5-year period. Over the last 10 years, we've achieved a 147% resource replenishment rate by adding a net 4.6 billion barrels of resource even as we exit concessions and sell assets. We're spending at a rate that enables growth.

Our strong resource base gives us flexibility and choices, and we'll continue to actively manage our portfolio, be disciplined in our capital spending and fund the projects we believe will yield the best returns. Now let's go to our largest resource, the Permian.

As you're all aware, we have a great position in the Permian. Mike's already highlighted the increase in our resource base and the doubling of our portfolio value.

I'll share some additional information that supports these increases. We have a unique advantage, which is characterized by a long-held acreage, zero to low royalty on more than 80% of our land position and minimal drilling commitments. Between 2017 and 2018, we transacted more than 150,000 acres through swaps, joint ventures, farmouts and sales that enabled an additional 1,600 long lateral wells.

Going forward, we'll continue optimizing our land position, further increasing the value of our portfolio.

Our long-standing strategy in the Permian is to be competitive in our execution, leverage our midstream capabilities and use our advantaged royalty position to make us the clear leader in financial returns.

The charts on the left show the improvement in our type curves for each of the last three years. The solid lines show our actual production closely tracking the type curves, verifying our increased well recoveries and the predictability in our well performance.

In the Delaware Basin, our average EUR for wells put on production in 2018 is two million barrels of oil equivalent. And in the Midland Basin, it's 1.3 million barrels.

The chart on the right shows our operated unit development and production costs relative to our non-operated wells. We remain competitive in both well performance and costs.

We're developing new technologies that improve recoveries, lower costs and increase efficiency across our Permian assets. That in turn, is driving stronger cash flows, higher returns and increased value.



Now let's turn to Permian production.

Based on continued performance improvements, we're raising our guidance in the Permian. We're projecting Permian unconventional production to reach over 600,000 barrels a day by the end of 2020 and over 900,000 barrels a day by the end of 2023.

Our updated guidance is still based on a fleet of 20 operated and 7 to 10 net non-operated rigs over the period. And we still expect to be cash flow positive in 2020 at \$55 a barrel WTI.

We have the capability and the land position to further expand our drilling fleet and obviously, this would represent upside to what we're showing you today.

But in addition to the Permian, we also have other emerging shale and tight assets. We're actively developing attractive shale and tight assets in Argentina, Canada, and Appalachia. We share technology, best practices, and lesson learned between them continually improving our performance.

In the Loma Campana area and the southern Vaca Muerta shale, performance improvements in cost and production are yielding attractive returns, and we've increased the pace of our drilling program. We're also excited about another 162,000 net acres we hold in three perspective areas in the northern Vaca Muerta as shown by the crosshatch on the map.

We have an eight-well pilot in the El Trapial area and another four-well pilot in the adjacent Narambuena area scheduled for this year. We believe these three areas could offer an incremental two billion barrels of resource.

Next is the Duvernay shale in Canada, where we generate significant value from the produced condensate, which supplies local markets. The Marcellus and Utica shale in Appalachia is predominantly a gas play and with low development cost and improved infrastructure in the region, realizations have strengthened, and returns are competitive. Now let's turn to TCO.

TCO is a highly efficient world-class operation in Kazakhstan, a legacy asset in our portfolio that continues to generate industry-leading returns.

To kick things off, I'm going to show you a video that highlights the strength of our TCO operations and the progress we're making on the Future Growth /Wellhead Pressure Management Projects.

(TCO video: https://youtu.be/6-DUqQtej9U)

So, I hope the video provided insights into our operations at TCO. The main activities associated with the FGP / WPMP project and the progress that we're making towards first oil in 2022. I was in Tengiz last month, and also visited the module fabrication yards in Korea. As you saw in the video, we de-risked key aspects of the project in 2018 with module fabrication, logistics, on-site construction and drilling, all tested and progressing well.

As you also heard, last year, we deployed comprehensive construction planning tools and saw rising workforce productivity. With these tools now in place, we're hitting the ground running as we focus on interconnecting the modules and energizing the first systems.



Now let's move to our Australia gas assets. With five LNG trains at our Gorgon and Wheatstone plants, we're using a systematic approach to increase the reliability, utilization and plant capacity just as we've done at TCO. As a result, we've seen an initial 2% increase in capacity at Gorgon and 6% at Wheatstone.

With these increases, high reliability and no planned shutdowns in the fourth quarter, our net production for Gorgon and Wheatstone was just under 400,000 barrels a day.

We've also identified further reliability and capacity improvements that we expect to implement over time.

We have over 50 TCF of discovered equity resource offshore Western Australia, and we're working to monetize it to provide the highest returns.

This includes leveraging expected ullage at other existing LNG facilities in Northwest Australia.

As an example, our undeveloped Clio /Acme fields are close to existing infrastructure. This offers an efficient development option with higher returns.

Ultimately, we see an interconnected basin with shared infrastructure as the best development option for all stakeholders, much as we see in the U.S. Gulf of Mexico.

In our deep-water portfolio, we saw first production from Stampede, Tahiti Vertical Expansion Project, Jack / St. Malo Stage 3, and Big Foot during 2018.

Our operations have demonstrated industry-leading reliability and our production in 2018 increased by almost 10% from the prior year.

We're focused on improving returns by reducing our unit operating and development costs. Operating costs today are less than \$10 a barrel, approximately half of what they were in 2014.

For new opportunities, such as Anchor, Ballymore and Whale, we're targeting \$16 to \$20-unit development costs, which is roughly a third lower than our last set of greenfield deep-water investments.

We're lowering development costs by standardizing equipment, utilizing fit for purpose, surface facilities that require less capital and employing drill-to-fill strategies. We also continued to advance technologies in the deep-water. As an example, we just completed certification of multi-phase subsea pumps that will be field-tested at Jack / St. Malo later this year. These pumps can increase recovery and extend the lengths of potential tie-backs.

Around 60% of our exploration blocks are within tie-back range as shown by the red circles on the map. Tie-back opportunities utilize existing infrastructure, which can provide early production systems and improve the returns of smaller discoveries.

Now I want to start pulling all this together. This chart shows the three primary sources of our new production over the next five years. The biggest source of new production is expected to come from the Permian, shown in green.

A growing source of new production is the other shale and tight assets, including Vaca Muerta, Kaybob Duvernay, and Appalachia, shown in dark blue. Later in the period shown in light blue, we expect contributions from major capital projects that are already in execution, such as FGP.



As you can see, by the maroon sliver, our new production over the next five years is not dependent on sanctioning new major capital projects.

By the end of 2023, these sources should contribute around 1.5 million barrels of new production each day.

Now the last step in our production story is to look at how our new production offsets base decline rates, contract expirations and asset sales, providing our overall five-year production outlook. Today, we're guiding to a compound annual growth rate of 3% to 4% over the next five years at a flat \$60 a barrel Brent price, and this includes the impact of announced asset sales and the effect of contract expirations in Indonesia and Thailand in 2021 and 2022.

With the majority of our new production coming from shale and tight assets, our growth is disciplined and ratable with lower risk. Remember, we view production as an outcome of our investment decisions and our disciplined approach to monetizing assets.

We've said before that all barrels are not created equal. So, let's look at the value we expect to generate with our future investments.

Based on an analysis by Wood Mackenzie, Chevron's return on investments over the 2019 to 2035 time-frame is expected to be the highest among our peers. The analysis shows that we have a superior portfolio of new investment opportunities that can deliver industry-leading returns.

It's this rich portfolio of attractive investments that's driving our production growth and profitability and ultimately, offers a differentiated value proposition from our peers.

I've described our upstream business and why we believe we're advantaged. We have a sustainable portfolio that's underpinned by high-quality resource additions and strong reserve replacement. We expect to grow production with a disciplined and ratable capital program, investing in lower risk and higher-return opportunities than our peers. Our production growth coupled with strong cash margins leads to growing cash flow. We are not asking you to wait for it, we are doing it now. And with that, I'm going to invite Mike, Pat, and Mark up to the stage. Thank you.

# **Questions and Answers**

## Mike Wirth (Chairman of the Board and Chief Executive Officer, Chevron Corporation):

All right. Thank you, Jay. Before we begin Q&A, just a couple of guidelines, as you raise your hand and I call on you, please identify yourself and your firm. Please limit yourself to one question and one follow-up, so we can get to as many people as possible. I'll start up front here with Phil.

## Phil Gresh (JP Morgan):

First question for Mike, the new capital spending budget of \$19 billion to \$22 billion you've laid out through 2023. Is this a message similar to the past where this capital spending numbers is capped? Or as you think about a higher-price scenario, would you be willing to spend more for some of these major capital project opportunities that you have?

## Mike Wirth:

Yes, so we've laid that out [capital spending guidance] at a \$60 price, but the intent is to stick to that budget really through any reasonable price environment. We've got flexibility. One of the key things that I hope you've taken away from the presentation is that, because of the short-cycle nature of the majority of our capital spending, we have the ability to flex it up or flex it down. The intent is to keep it in a pretty ratable band and not to chase the price cycle if it heads up and not to get spooked, if we see a downturn. We've got the ability to deliver strong returns and strong cash



flow out of the portfolio we've got today, and the key is execution. Jay has talked about the steady improvements that we're seeing in all aspects of our Permian production that simply increase the returns out of those investments. Those are very attractive, even at a relatively low oil price, and much more so at a high price. We don't need to chase higher spending if prices were to cycle up to still deliver strong growth in cash flow.

# Phil Gresh:

I guess just a follow-up question to that in a higher price case. What would you do with the excess cash flow? I mean you're doing \$4 billion of buybacks at this point at \$60. So, should we be thinking for \$65 or \$70, the incremental dollars would go back to the shareholders incrementally or just kind of tying it back to the previous question.

# Mike Wirth:

We've been consistent with our financial priorities for a long time. Our first financial priority is the dividend, reinvesting in the business is number two, a strong balance sheet is number three, and returns to shareholders through share repurchases is the fourth priority. I think we've demonstrated that as we've begun to see surplus cash flow accrue, that we're willing to use share repurchases to return it to shareholders. And we'll continue to be mindful of the fact that our dividend is very important to all our shareholders. We got a 31-year history, and we're set for the 32nd consecutive year of an annual per share payout increase this year. We have a ratable capital program and a strong balance sheet. That takes us to the fourth priority pretty quickly, and I think, you would see share repurchases in any reasonable environment. Jason?

# Jason Gammel (Jefferies):

I've got two on the Permian. So, I'll just ask them both at the same time. Maintaining a 20-rig cadence in the guidance, obviously, you're generating tremendous results, but why is 20 still the right number? Is there potential to accelerate even further? The opposite side of that question is, how big would you be comfortable with the Permian actually becoming, it looks like about 30% of the portfolio at this time, we get out to the latter projection that you have? Are you comfortable with it going to 40%, 50%? Or is there some cap that you would have?

## Mike Wirth:

Yes, I'll give you a short answer and then let Jay build out on it, Jason. Number one, we're just talking about the program we've outlined for many years; we were going to steadily build to a 20-rig company-operated fleet and then as Jay said 7 to 10 non-operated rigs. That's been because we've had a clear commitment to discipline in the way we're focusing on returns and building a factory that can deliver strong performance. You need a land factory on the front-end to make sure that you worked a core of good, contagious drilling acreage. You need strong factory fundamentals to support how you drill and complete your wells and build surface infrastructure. Your midstream and downstream approach also needs to be built to move the growing production that you see. And so, we've had a plan, and we've stuck with our plan to pause here at 20-rigs and be sure that we're maximizing all the efficiencies we possibly can. You've been around long enough. You may have heard me talk about the reliability refinery back during the golden age of refining when everybody was collaborating to build new refineries. I greenlit a new refinery inside of our downstream business, but I gave them a capital budget of zero. I said you can find a refinery by operating our existing system better and we improved by 10% and "found" a 200,000 barrel a day refinery sitting right there. We can improve reliability for rigs too. Out of 20-rigs, with the improvements we're seeing, we get more work done out of the same rig fleet. And so that's where we are today, but as Jay said, we've got the capacity clearly to grow that, which would represent upside. It's clear that our unconventional position is getting bigger. It's the lowest geologic risk in the portfolio. It's low above-ground risk, and it's the highest return use of our dollars in a short-cycle. Given that they're the best assets that we have, seeing it grow to a larger and larger percentage of our portfolio is not something that causes undue concern. Jay, I'll let you add there.



# Jay Johnson (Executive Vice President, Upstream, Chevron Corporation):

I don't know what else to add, you covered that really well. I would just say, our focus, from the beginning, has been on returns, and so what we want to really make sure we're doing is optimizing our land position and our fleet to get the best returns. We certainly have the capability to go higher on that rig fleet once we get things where we are really happy, and when we feel that's the next best step with an incremental investment, then we'll decide to do that.

## Mike Wirth:

Okay. Yes, Blake?

# Blake Fernandez (Simmons):

I had two questions. One, Jay, I think you outlined the growth on the production, but can you talk a little bit about what the assumptions were on the base decline? The second piece is on capex. What is embedded in there as far as assumptions on Permian inflation? I think previously, you were assuming 5% to 10% inflation in the Permian. So that assumption and then also TCO, which had been running a bit hot, what's the embedded assumption there?

## Jay Johnson:

So, first I'll cover TCO. That is working really well. We are seeing strong execution performance. I've talked about some of the engineering issues we've had to work through. Those are largely in the rearview mirror. Some of the impacts have been felt in the fabrication and construction, but as we move now into 2019, it's a very important year for us. We're very focused on getting our workforce productivity and our work at site going well.

## Jay Johnson:

In terms of decline, our assumption on decline isn't much different than it's been in the past. We've actually seen very shallow decline rates in our base business. Our base business changes, so for example, now our base business has Gorgon and Wheatstone in it. Assets like Gorgon, Wheatstone, and Tengiz, are limited by plant capacity, not necessarily by the field on the front-end. Our decline rates are relatively low, but looking forward, as the Permian and other shale and tight become a larger percentage of our portfolio production base, we would expect to see decline rates pick-up somewhat.

# Mike Wirth:

Okay. And did you address Permian inflation?

## Jay Johnson:

Right now, we have seen some pressures on costs, but overall the improvements in efficiency and performance have been largely offsetting those costs. Really, we've been able to manage the impact of any inflation. We have longer contracts. We've got internationally source material. We have indexed contracts. We have staggered contract durations so they all don't come due at the same time. All of that has worked to really moderate what we're worried about in terms of the cost inflation in the Permian.

## Mike Wirth:

Okay. Roger?

## Roger Read (Wells Fargo):

Maybe to hit the Permian one more time. Permian acquisitions have been in the news. Not so much you, but others. Just curious how you -- you mentioned the 150,000 swaps, but how do you think about your overall position, should it get bigger? Should you take opportunities to buy acreage that might have additional upside? Just curious how you're evaluating that aspect.



## Mike Wirth:

Yes, Roger, I'll just reiterate what we've said before, which is, we're always looking to get better. And so, as Jay indicated, we've been actively high grading our Permian acreage over the last two years. I used an analogy with somebody the other day...We're from the Bay Area. After the Golden State Warriors won a couple of NBA titles, they added Kevin Durant, just to try to get better. They added DeMarcus Cousins. When you're doing well, it doesn't mean you're going to stop there. I think we need to get better. We're big. Bigger is not necessarily an imperative. But I think better is something that you're always looking to do. Sam?

# **Roger Read:**

Just really quick on LNG expansion. You really didn't talk about it, didn't show it in a major capital projects out to 2023 is having really any impact. How do you think about LNG here? Is it multiple years of just working out Gorgon and Wheatstone and then pulling the trigger? Or is there something you're looking for in the broader LNG sort of financial returns potential before you make another move in that...

# Mike Wirth:

I'll deal with it broadly and then Jay can add a little bit. Job number one is to get the most out of our investments that we have today. Jay talked about improvements at both Gorgon and Wheatstone already in terms of the capacity that we can move through those units. And that we've identified a number of other things that can be executed through the turnaround cycles to further improve performance. He also talked about Western Australia's infrastructure, ullage that could open at other facilities and the gas resource that we possess in Western Australia, so we don't necessarily have to move the gas through our own facility. There are commercial opportunities to move it through other facilities as they open up and those are issues that are actively being worked. Those opportunities offer a pretty capital-light way to continue to grow your LNG business. We've got other options. Certainly, we've got Kitimat. We'll continue to look for the right opportunities in other parts of the world. The key on big LNG investments is to be down the cost curve. You do not want to be out at the high-end of the cost curve. We really want to be in the lower cost facilities because those are the ones that are likely to get funded, to get built, and to be economic. That's how we're thinking about it. You have anything you want to add to that, Jay?

## Jay Johnson:

I would just say, we've got assets in various locations. Our primary focus, as Mike said, is to really get the absolute most we can out of Gorgon and Wheatstone. We've made those investments, so any incremental barrels would be very valuable. We have the opportunity to expand either Gorgon or Wheatstone. They were both designed with expansion in mind. We also have the unconventional gas plays up in Western Canada, with Kitimat, that offer some opportunity. We've been working hard to get the development cost of the plant to a point where it's competitive with U.S. Gulf Coast LNG delivered into Asia Pacific. There are opportunities in Middle East expansion., And we produce a lot of gas in the U.S. Gulf Coast area that can be potentially run through other people's facilities on the Gulf Coast. So, there's a lot of different options that we'll continue to evaluate to find the next best step for us.

## Mike Wirth:

Okay. Paul?

# Paul Cheng (Barclays):

Two questions. First, I think a lot of people have been talking about digitalization and how it's going to improve the operation. Jay, in the upstream, how big is the grand prize we may be talking about? I assume that we are in the very early stages. Can you give us some examples and elaborate on that?



# Jay Johnson:

You're going to get some great examples this afternoon at the technology showcase. I hope, you'll attend because we've got some of our practitioners that will be there. An area where the digital work is going to be really impactful and is yielding results today, is the Permian. We have the ability to run decline curve analysis, not only on our own wells, but on every well in the basin, every month. This is done through artificial intelligence. It gives us tremendous insight into how the basin is working and where the most prolific areas are. We are seeing opportunities in our supply chain to be much more efficient in how we procure services and goods. It's really just across-the-board. I think we're early in the process, and I think our digital efforts are going to drive the efficiency that we continue to seek, making our business more and more cost effective with increased production. We're in the early days of this thing. You're going to hear more about our digital efforts this afternoon, and it's an exciting area. I think it's going to revolutionize the upstream business.

# **Paul Cheng:**

Jay, is there a number that you can share that -- how big that grand prize may look like? You said 10% of your overall operating costs or productivity. Anything that you can share?

# Jay Johnson:

You're asking me to speculate, and I don't like to do that. I rarely do it. This one is big. I won't put a number on it, but I think it's got real potential. It will be beneficial in lowering our unit operating costs because there are opportunities to impact both the numerator and the denominator. We can get more production and we can lower our costs at the same time with many of these applications. That's what makes it so powerful.

## **Paul Cheng:**

The second question is on Gulf of Mexico. You talked the development \$16 to \$20 unit cost. How far along are we on that journey because when we're looking at your production profile, you talk about 2023. I mean, looking at the graph, it doesn't look like that you have any new Gulf of Mexico or deep-water projects in there, or at least not much. So where are we in the process?

## Jay Johnson:

We're pretty much there in getting to those unit development costs. The work on standardization has been yielding some real benefits, and it's not so much that we don't have the projects. The reason you don't see them in that five-year production forecast is just because we haven't needed them. We have Ballymore, Whale, and Anchor and I would expect to see those progress in a ratable fashion over the coming years. That production is largely going to start being apparent in the middle to end of the next decade, not in the early part.

## Mike Wirth:

The other thing I would add, Paul, is that I hope you heard Jay's message on longer-distance tie-backs and the amount of acreage we have that's within the tie-back range. And so rather than hit -- if you want to call them, home runs -- big new greenfield projects, we can [hit] a lot of singles and doubles with tie-backs into facilities as ullage starts to open up. Those are highly economic as well. Doug Terreson over here.

## **Doug Terreson (Evercore ISI)**

Mike, spending increases have historically led to higher volumes, but lower returns and valuation for the big wells during the past decade. And so given this history, my question is whether you can provide some specificity on how we're going to see the returns improvement that you guys talked about on Page 12. Why are you confident, meaning are the gains expected to come from the upstream or the downstream? And within those businesses, where do you expect them? So, the question is really about transparency of the value and how are shareholders going to get rewarded from this higher spending?



#### Mike Wirth:

I'll start with just a reminder that we're not talking about big spending increases. We're talking about a ratable investment profile. We're talking about not investing in everything. Jay touched on some deep-water projects that are still in the portfolio. But Rosebank is not, Tigris is not. Those are both economic projects. They both met our economic threshold. We simply have better things to invest in. And as Jay just said, one of the reasons you see the nature of that profile over the next five years is because we are investing in the best things in our portfolio. At the same time, we're taking other opportunities, and we're making them better. I've said this before, but I'll repeat it. One of the great benefits of the advent of shale is that it has inspired greatness in other asset classes. Different approaches to design, to standardization and to execution of deep-water projects, for instance. We'll lay out the improvement in returns, largely with ratable capital spending as we see some of the larger historical spending depreciate off the books. We'll reinvest in the short-cycle higher-return assets and we expect to see production grow as we sustain our margins. I think, the equation will be pretty clear to you.

#### **Doug Terreson:**

Okay. And then renewables and power generation. Concerns over climate-related issues and electricity and transport represent pretty [meaningful] threats to the industry. So, my question is, how significant do you see these threats? How does it play into the plan for ratably higher spending today, which I think, was your phrase? Or are they so far out, Mike, that you don't see them as relevant factors, Mike? So how does that play into today's comments.

#### Mike Wirth:

As I said, there are seven and a half billion people on the planet. A billion of those people don't have electricity today. Hard to believe, but it's true. Nearly three billion of those people still use biomass or animal dung for indoor heating and cooking. By 2040, there will be nine billion people on the planet. The one and a half billion that are added are generally going to be in developing countries. There is a need for more energy around the world of all types, and there's room for all types. We have core competencies in investing in the business that we know. We also invest in renewables. We've invested in wind, in solar, in biofuels and intend to continue to learn in those areas. But just as Jay said, deep-water has got to compete with other things within our portfolio for investment, as do renewables. We need to find investments that are economic and that are scalable. It doesn't mean that others shouldn't, and others won't invest in renewables. But we see a very attractive set of existing opportunities for the foreseeable future that leverage our core strengths and wouldn't pull us away into things that perhaps we don't have as much experience in or that may still not be established at scale or have the same robust economics. Paul?

## Paul Sankey (Mizuho):

If we look back at previous analyst meetings, particularly at the very top of the market, the outlook could be in for \$40 billion a year of spending, which became a challenge for you guys, obviously. My question is somewhat just the inverse of Phil's. How much do you intend to -- or expect to change capex in the lower-price environment? And I'm thinking particularly of the Permian. Or to what extent would you see this 18- to 20-type time frame, 20-type capex frame as being something that you'll stick with pretty much to really quite low prices. And the follow-up would be, in the previous cycle, you have built a fortress balance sheet in anticipation of potential outspend. In this environment, is there a potential for you to increase buybacks in a lower price environment? Or how would you manage that potential environment?

#### Mike Wirth:

There's a bit of a hypothetical construct there, Paul, and in a lower-price environment for a short period of time, I don't think much changes. We've laid out the material we've provided today assuming a \$60 flat world, which is in-line with most things I've read that are written by people that cover our industry and what we believe is in the ballpark of what people would expect. If we were to move into a lower range than that we thought was sustainable, I think you would



see some adjustments [to our capital program] because we have the flexibility to make adjustments, but we see still have a lot of investments that are economic at \$50 or at \$45 or at \$40. And so, it wouldn't be a dramatic shutdown of spending because we still have good returns in the best of our portfolio at those prices. The intent here really is to lay out a ratable plan not to be swung by the price cycle, which is hard to predict in our industry other than you know we're going to see higher prices than today and also lower prices than today. I'll touch on the balance sheet and share repurchases and then see if Pat wants to add anything. We tried to be very clear that as we've resumed the share repurchase program, we don't intend to swing that with the price cycle, and we intend to see it through in any reasonable price environment whether it's a higher or a lower price environment that we're in today.

# Pat Yarrington (Vice President and Chief Financial Officer, Chevron Corporation):

I don't think I have much to add. When we restarted the program, we took a look at a number of pricing scenarios and tried to peg a rate of annual repurchases that we felt could be sustained over a long period of time. And certainly, having balance sheet strength allows us to have comfort in that through, any reasonable price environment.

## **Paul Sankey:**

Yes, that's reasonable. I think the \$60, everyone expects it, so it's probably not going to happen, and the risk may well be to the downside. What you seem to be saying is that to keep doing the buyback through the downturn, the obvious conclusion is that you're going to flex the balance sheet.

# Mike Wirth:

Well, I think, we pointed to the two sources of resilience, Paul, as our best in peer group balance sheet and our lowest break-even. At a lower price, we feel less pain than others. And our break-even is likely to go down over time. So, we can endure a lower price and see [a buyback] through. Sam, I came to you and then skipped you.

# Sam Margolin (Wolfe Research):

Expanding a little further on that price outlook. I know that it's best to run the business kind of in an agnostic manner and just chase the best return opportunities you have. But is your suite of projects sort of that you referenced down to \$45 break-even? Does that sort of inform this \$60 band and why we can't go higher? Because you start out with this big need for global reinvestment that may be not being met right now. I'm wondering if you're looking at your own portfolio and you see some opportunities that are economic down to \$45, is that why you want to stay captive in this kind of \$60 outlook in that -- presume that we're going to be in some kind of deficit?

## Mike Wirth:

Well, we've put forth \$60 not because it's our planning price. We've laid it out because it's reasonably close to current prices and it's a price that seems to be generally viewed externally as a reasonable number. We're driving for financial returns, not for production levels. And we've talked about this already, but the objective here is to find the best projects, fund the best projects, take projects that look like they've got prospectivity and improve them until they can compete with the best we have in our portfolio. And do all of that it in a ratable manner that de-risks execution. We believe we can deliver on that objective and then do it very steadily. We've got a very clear, repeatable, and consistent deliverable value proposition, that won't whipsaw the budget. It is really about the long-term value creation and cash-generation model that we're focused on.

## Sam Margolin:

Sure thing. And just one follow-up. Back to the Gulf of Mexico and the Permian. It sounds like the Gulf of Mexico is a cost story, but you're exiting some other places around the world, too. Is there anything else that's going on that you're seeing, whether it's the fiscal regime or visibility in costs? Is there something that's pushing you towards a U.S. concentration in the future? Or is that just something that -- the way the portfolio is aligning today?



Mike Wirth: It's good rocks. Yes, Neil?

# Neil Mehta (Goldman Sachs):

The first question I had was on downstream. Can you just provide some thoughts on how Chevron's positioned in that business, particularly as we get closer to IMO 2020? And related to that, your latest thoughts on the chemicals FID potentially at Cedar Bayou. And then I have a follow-up.

# Mike Wirth:

Yes. So, I'm going to turn both of those over to the newly minted Head of Downstream and Chemicals, Mark Nelson.

# Mark Nelson (Executive Vice President, Downstream and Chemicals, Chevron Corporation):

Thanks for the question, Neil. So, from an IMO perspective, I think, we've shared that we're very well positioned as a company. That has to do with the kit that we already have. You heard earlier about our complexity index. We're in a spot where we're producing over 40% middle distillates and just about 5% of high sulfur fuel oil. So, we're not particularly exposed. And we've got plans for placing that product [high sulfur fuel oil] as well as making some minor adjustments at refineries to limit that exposure. Our shipping portfolio is essentially ready today. So, all in, I think, we're very well positioned. But, I'd also say, it's not necessarily material for the company, but it's certainly a net positive for us. The second question was on the chemical side of the equation. From my perspective, we are very interested long-term in growing the chemicals business. From our vantage point, it's about advantage feedstocks. I'm not so concerned about pace as I am that we're ensuring that we're picking the right projects so that we can be on the correct side of the supply stack over time. We're continuing to work that with our partners at CPChem.

# Neil Mehta:

Mike, the follow-up question I had is, these are a little bit nitty-gritty here, but two questions as we think about dialing these models. How do we think about the split of liquids versus gas in the Permian? And then how do we think about the evolution of cash capex versus headline capex, especially as TCO rolls into completion?

# Mike Wirth:

I'll give you a liquids versus gas at a portfolio level and then see if Jay wants to add some detail on it for the Permian. Then I'll talk a little bit about cash and non-cash capex. So, [for our upstream portfolio] we're approximately 60-40 liquids versus gas today in terms of production. In terms of realizations [for our upstream portfolio], from a pricing standpoint, because we've got the large LNG projects that are online, we're in the low 70s, say, between 70% and 75% [correction: approximately 75%] liquids pricing or oil-based pricing. Higher than the production split. On capex, today, we've got a sizable piece of non-cash capex as we're pursuing the project at TCO. We've had that last few years with a petrochemicals project at CPChem as well. As Mark just mentioned, we're looking at actively developing options for further growth in the petrochemical sector. As TCO comes off, the question would be does it get replaced by another large project, but it's a little early to speculate on that. At some point, it's likely that it will be replaced, but when and how large and what the spend profile looks like, I don't want to speculate on. Cash capex would go up a little bit if we're in the ranges we've provided if non-cash capex comes down. But I think that will be highly dependent upon finding attractive projects within the [operated] portfolio as well as looking for those in some of our large affiliates. Okay, Doug?

# Doug Leggate (Bank of America):

Just two, I guess, follow-ups, the number of the questions that have been asked. Slide 13 shows a dip in cash margin before it rebounds through 2023. I just wonder if you could walk us through the dynamics that I'm guessing WTI over Brent is part of that given the swing towards the lower 48 [states]. My follow-up and, I guess first, Pat, congratulations again on your retirement. A key part of your investment case over the years has been more sustaining capital. So, if we



pivot to shale as such a large part of the portfolio, wonder if you could speak to how the sustaining capital trend evolves over the next several years.

## Mike Wirth:

If you look at the scale on the chart, what looks like a little bit of an up and down is in a relatively small band, Doug. And what it reflects is in the near term, the growing production in the lower 48 [states] is a little gassier. So, you've got a little bit of a shift. And as we get out to the end of that period of time, we're bringing on a lot more oil in Kazakhstan. I think the real story here is that [our cash margin] is relatively stable, it's enduring and it continues to lead our peers, and it's matched up with 3% to 4% compound annual production growth through that whole period of time. So, we're not chasing lower margin, dilutive barrels to grow [production]. The second thing, I would say about that is, while the Permian may dilute the cash margin a little bit, the returns on the Permian investments are far and away the highest within the portfolio. These are the most economic barrels that we have to invest in. Your longer-term question was on sustaining capital. We've moved away from the category of base plus shale and tight. We got some feedback from people that it was a little hard to understand. And as our base changes over time, just from a modeling standpoint, it was difficult. What we've given you is broad guidance on capital for five years, which is something that we have historically not necessarily been all that thrilled about doing. We've decided to put out longer-range capital guidance and longer-range production guidance, so you can see the big picture. And the big picture is of ratable and relatively modest capital spending relative to a company of our size and steady continued growth while we're sustaining the leading margin position. Did you have a follow-up?

**Doug Leggate:** 

Sustaining capital (inaudible)

## Mike Wirth:

So, the question for those that couldn't hear it. Sustaining capital. Doug had it previously at \$12 to \$13 billion and does that go up as shale and tight become a bigger part of the portfolio? It's a question I really can't answer because as shale and tight become a bigger part of the portfolio, shale and tight [production] is growing, not declining. I believe there's a bit of a disconnect there. Yes, John, at the back.

## John Herrlin:

John Herrlin, Soc Gen. Looking at your PV-10 information, you've obviously had your pads in the Permian for the last three years. Also, your development expenditures. So, I was curious as to for the development expenditures, how much is drilling and how much is infrastructure or midstream with respect to the Permian and spending?

#### Mike Wirth:

Yes. So, I'll tell you, on midstream, there's not much midstream because we've had a strategy to take our large position, our strong balance sheet and our very visible production growth profile and go to midstream service providers who have competed pretty aggressively to offer us attractive transportation rates and good access to multiple markets. So, we're not putting much capital in the midstream because we can get access to it given the nature of our portfolio, and we'd rather deploy our own capital into higher return investments than pipelines. In terms of the breakdown on drilling versus completion, I'll see if Jay wants to take a crack at that.

#### Jay Johnson:

So, first, on the drilled but uncompleted wells, we're really not building an inventory over time. You may see some variations quarter-to-quarter just based on multi-well pads, and you may have some wells that have not yet been placed on production because we have to bring all of the wells on the pad at the same time. But as a company, our completions have been very, very efficient. Our completion pace has been staying right with our drilling on the different projects and development areas that we have in the Permian. For the unconventional wells, particularly long laterals, a big



component of the cost, and I'm not going to break it down exactly, but a significant amount of the cost is in the completion, that pretty much balances with the drilling side of the business. What we look at is the total cost on a unit basis. Our focus is on what is our unit development cost for barrels that we're going to produce, ultimately described in our EURs. That's why we showed you the type curves, and that's why we showed you being so closely matched to those type curves. It's really the barrels we're going to get out of those wells and what did we have to pay for them that we're most closely following.

# John Herrlin:

Okay. The follow-up for me is what's your average well length in the Permian?

## Jay Johnson:

It's been growing here as we've been improving our land position. As you know, a lot of our land is checkerboarded, so we work hard to fill that in. We've had some good land transactions to do that. In general, the lateral lengths have been growing. I'd say, the 7,000- to 8,000 foot range is kind of the average that I would expect over this year [correction: ~9,000 -foot range on average in 2019].

# Mike Wirth:

Yes, over here.

# Jason Gabelman (Cowen):

On the Permian break-even, I know you mentioned \$55 WTI. I'm just wondering what you're realizing on gas out of the Permian, and if there's any risk to the continuation of realizing whatever price you're assuming where maybe you'd have to ratchet up investments to continue to realize that gas price?

## Mike Wirth:

Yes, we're moving our gas. We're not flaring gas. We only flare for operational reasons. But the gas market has been a tougher market than the oil market and that's something that we're actively working with our midstream and our commercial people, to try to capture the highest realizations on gas. The economics on [Permian development] are largely dependent on the liquids. You don't want to leave money on the table, so we're working hard on the gas as well. We typically don't comment on specific commodity realizations [in any one region]. So, I won't comment on that, but I will acknowledge that the gas has been tough for the industry, and we're working hard to be sure that we're getting every penny we can for gas realizations.

## Jason Gabelman:

If I can just ask a follow-up on capex. The high-end of range, if you're going up to \$22 billion, is that activity you're ratcheting up? Is it more in the shale and tight bucket? Is it in pre-FID for longer term projects?

# Mike Wirth:

Yes, it will be in the best projects that we have to invest in. And over time, we'll have things that wind down. As TCO winds down, that [frees up capital]. Jay cited a number of deep-water projects that are being developed and we've got other developments outside of shale and tight. But I'll tell you, the shale and tight is highly attractive, not just in the Permian, but in the other basins that we talked about as well. And those are very attractive opportunities. From an investment standpoint, they're short cycle and lower risk from a return standpoint. And so, they really become the option that we look at other things in the portfolio to compare against. All right. We can go to a second question for some people because it looks like we're -- Jon. We haven't gone to Jon yet.



# Jon Rigby (UBS):

Just one question. Your balance sheet, as you acknowledge, is a differentiating factor. There's a wide range of gearing across the majors and you are towards the low end. Looking at your cash flow profile, the implication is it goes lower, not higher in most oil price scenarios that I can think of. Would you just leave that as something that just enables you to manage through the cycle as you sort of indicated? Or do you see it also as an opportunity? It's something that you can leverage to access new opportunities in a fairly disciplined way, but something that you can use to add to the portfolio over the next 3 to 5 years, as you indicated.

# Mike Wirth:

Well, I'll take, what sounds like an embedded M&A question and then I'll let Pat take the balance sheet question. I said earlier, we're always looking to high grade our portfolio. It's just a fact we're always looking at things, but we don't comment on that further until we have something specific to talk about. Pat, do you want to talk about the balance sheet a bit more generally?

# Pat Yarrington:

Yes, you use the balance sheet for all the above. In the case that we showed on one of the slides, in a \$60 world, we're relatively balanced. In terms of all sources of cash versus cash C&E, dividends, and the share repurchase program; it's really because of the share repurchase program, that we're balanced at \$60 [Brent]. We did show a very small sliver for continued strengthening of the balance sheet, but it's relatively small. I look at the balance sheet as the outcome of a whole series of really good decisions that we had made previously, and that concerns how much you're spending and reinvesting in the business both organically and inorganically, what your dividend profile is, and the growth of the dividend. Right now, because of the strength of our portfolio, and the fact that we've got a very ratable C&E program that delivers strong value growth and strong production growth over the next several years, we see that supporting the dividend and supporting the share repurchase program. That is a very stable place to be.

## Mike Wirth:

Okay. We've got time for one more. Paul.

## Paul Cheng (Barclays):

First, Pat, I just want to say thank you, and congratulations on your retirement. I hope you have a lot of fun.

## Pat Yarrington:

Thank you.

## **Paul Cheng:**

I don't want to spend too much time with the [pleasures]. Two questions. One, actually is either for Mike or Pat. Right now, your balance sheet is already very strong, but at some point, in the future, we know oil price will see another jump and then maybe down for two or three years. So, should we -- talk to the opportunity that at this point that you maybe even drive that to a ridiculous low number like zero [net debt], so just prepare yourself in the event that at some point, when you jump, you have even better flexibility that you do M&A or other things. The second question is for Jay. Argentina, let's assume that all the pilot projects are successful, but given the lack of infrastructure on the ground, realistically, how fast a development program could proceed?

## Mike Wirth:

Paul, I'll take the first one on the balance sheet. I don't think we need to go to a ridiculously low level of debt because we've got the lowest break-even oil price [amongst peers] for our portfolio, and it's going lower, and we've got a much more flexible capital program than we've had before. These things are contextual, and Pat talked about the fact that it's the result of a series of decisions. When we were at a point where we had a high oil price, we had a high break-even for



our portfolio, and we had a lot of long dated capital spending. We needed to have a very, very strong balance sheet as a risk mitigator. We're at a point now where our break-even price is much lower, our capital spend is lower, it's shortercycle, and we just don't have the same need for that degree of risk mitigation. Our balance sheet is strong. As Pat said, it may get a little bit stronger, but I don't think going to net debt of zero is something that would be appropriate for a company that's got the attributes of our portfolio and our spend profile. I'll let Jay talk about Argentina infrastructure.

## Jay Johnson:

In Argentina, down in the southern part, where we have Loma Campana, we're in partnership with YPF. There, the infrastructure right now is not a limitation. It's just been what pace do we want to develop. We've been running two rigs. We've just stepped it up to three rigs, and we've got capacity to increase that further, should we choose to. In the northern part, if those pilots are successful, that is an existing oilfield, El Trapial. So, there is some basic infrastructure already in that general area. But clearly, with the capacity that we could go to, we'd have to see some further build out of infrastructure. And just as we do in the Permian, where we work from land position all the way through the realization, we'd want to ensure our pace and development work is not outstripping the capacity of the offtake and the realizations that we can get, so that we can make sure we get the returns we're looking for. We're pretty optimistic about it. It looks like good rocks, and we'll keep you informed.

## Mike Wirth:

Okay. That looks like we're getting to the end of the time that we've got here for Q&A. So, I've got a couple of final remarks that I would like to make before we go to a break.

First of all, Chevron has a long history of innovation and using technology to meet complex challenges, improve our performance. Paul [Cheng – Barclays], this gets a little bit to your question. We're aggressively expanding the application of digital technologies and working to broaden their impact across our company. We're using digital to change the way we work and to strengthen a culture of innovation and agility. We're focused on four key value drivers: increasing revenue, lowering costs, improving reliability, and enhancing safety.

I think all of these will be a key lever to further improve performance in the future. We have many examples to share, some of which you'll see later today at the technology showcase. We're also investing in the future of energy, and this gets to Doug's [Terreson – Evercore ISI] question. This requires smart move to deliver affordable, reliable and ever cleaner energy that world needs. This slide illustrates four ways in which we're doing just that. Our future energy fund is investing in breakthrough technologies, such as EV infrastructure and direct air and CO<sub>2</sub> capture. We've linked employee variable compensation to achieving reductions in flaring and methane emission intensity.

We're working with industry partners to develop smart solutions for reducing greenhouse gas emissions, and we're investing in renewables to support our operations at lower carbon intensity. We also recognize shareholders are seeking more information about how we manage climate related risks and other ESG issues. On the left, you'll see our recently released update to the climate change resilience report, which is sitting at your table and also available on our website. As shown on the right, the Chevron Way guides how we conduct our business to get results the right way. Here, we highlight Chevron's greatest resources, the ingenuity, creativity and innovation of our people.

Before I wrap up, I would like to recap the headlines from today's presentation. First, we have a highly advantage portfolio with some of the industry's best quality assets. Jay highlighted several of these today. Notably, we've increased Permian resources by five billion barrels of oil equivalent in the last 12 months and almost seven billion barrels in the last two years.

Our view of the value of the Permian has more than doubled over that same period. Second, we expect to grow production at a compound annual rate of 3% to 4% over the next five years.



This will be underpinned by more than 900,000 barrels of oil equivalent net daily production from the Permian by the end of 2023. Third, we've announced capital spending guidance of \$19 billion to \$22 billion for the years 2021 to 2023. And we expect to increase cash return on capital employed by more than three percentage points over the next five years.

Finally, we're translating all of this into success and value for our shareholders, supporting a more than 6% dividend increase and \$4 billion of share repurchases.

In summary, Chevron has a unique, differentiated, de-risked, and extremely compelling investment proposition that is being delivered today and will continue over the long term.

I appreciate your time today, and your interest in Chevron.

I also want to take a moment here to recognize a special person and an outstanding career. Today is the last Investor Day for Pat. She has had a remarkable 39-year run at Chevron, the last decade serving as our Chief Financial Officer. She's been a principled steward of your investments, a passionate advocate for your interest and impactful leader for our company. Please join me in congratulating her on an exceptional career. Thank you very much, and that concludes our live webcast.