



Chevron's Energy Transition Spotlight Edited Transcript

Tuesday, September 14th, 2021



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Chevron

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This transcript has been edited by Chevron Corporation. It is generally consistent with the original conference call transcript. For a replay of the Investor Conference Call, please listen to the webcast presentation posted on chevron.com under the headings “Investors,” “Events & Presentations.”

Roderick Green: Good morning...

(Slide 1) I'm Roderick Green, General Manager of Investor Relations for Chevron. We're very excited to spotlight Chevron's Energy Transition actions and we greatly appreciate your taking the time to be with us today.

(Slide 2) Today's presentation will contain four parts.

We'll begin with Chairman and CEO, Mike Wirth, restating our goal of “higher returns, lower carbon” and how we plan to advance a lower carbon future and deliver ever-cleaner energy.

Bruce Niemeyer, Vice President of Strategy & Sustainability, will then cover our actions to lower the carbon intensity of our operations. Next Mark Nelson, Executive Vice President of Downstream & Chemicals, and Jeff Gustavson, President of Chevron New Energies, will discuss our plans to grow lower carbon businesses in renewable fuels, hydrogen and carbon capture and offsets.

Mike will close and then we'll take questions from sell side analysts.

(Slide 3) Before we begin, a reminder that today's presentation is focused on [our] long-term energy transition plans, which are based on current expectations. By its nature, this presentation contains estimates, projections, ambitions and other forward-looking statements. These statements are subject to certain risks, uncertainties and other factors that may cause our future targets and actual results to differ.

Please carefully review the safe harbor statement that's on the screen and available online.

I'd now like to introduce our Chairman and CEO Mike Wirth.

Mike Wirth: Thanks, Roderick.

(Slide 4) Good morning and welcome everyone to Chevron's Energy Transition Spotlight. Joining me today are Bruce, Mark and Jeff. I look forward to when we can meet again in person, instead of virtually.

I'm proud of Chevron's long history of strong ESG performance. During our last Investor Day in March, we committed to go deeper into our Energy Transition strategy. Today we'll do that, covering what we're doing now and what our ambitions are for the future.



Our Board has been heavily engaged in support of our energy transition strategy. Investor interest in this topic continues to grow and we know that stakeholders have lots of questions. I'm confident that the discussion today will show why an investment in Chevron is an investment toward a lower carbon future.

(Slide 5)

Let me start with some of our most important beliefs and intents.

We believe climate change is real and that human activity, including the use of fossil fuels, contributes to it. We believe the future of energy will be lower carbon and intend to be a leader today and in that future.

We believe energy enables modern life. Affordable, reliable energy will continue to be essential to power a growing economy, and to lift billions out of poverty. This will include lowering the carbon intensity of oil and gas operations and new lower carbon energy solutions.

Government action is essential to enable evolution of the energy system. We support well-designed climate policies and believe a price on carbon is the most efficient mechanism to harness market forces to reduce emissions.

We believe innovation, technology and policy will be the key drivers of change. Each will continue to evolve, and developments may surprise us. We'll know more a year from now than we do today and even more a year after that. We'll continue to apprise you of how developments impact our plans and progress.

Finally, we intend to be responsible stewards of our shareholders' capital. That means a focus on investing with discipline to deliver both higher returns and lower carbon. We plan to establish targets and ambitions to do both, and regularly update you on our progress.

(Slide 6)

Chevron begins in a different place than others in our sector, with an advantaged portfolio that is diverse, resilient, low-cost, large-scale and long-lived ... a low net debt ratio heading below 20% ... capital efficient investments that grow cash flows; and ... a dividend up 12% over 2 years, the only one among the integrated energy companies that's higher since the COVID outbreak last March [2020].

And this quarter we resumed our share repurchase program, making this year the 14th out of the past 18 that we've bought back shares.

Our Energy Transition strategy is also different with a goal to maintain first quartile upstream carbon intensity and to grow lower carbon businesses where we believe we can build competitive advantages and that target sectors of the economy that cannot be easily electrified.

A strategy that combines a high-return, low-growth, lower carbon-intensity traditional business together with faster-growing, profitable, lower carbon, new energy businesses that leverage our strengths.

We believe this is the right combination for our investors.

(Slide 7)

Today, we'll go deeper into the two parts of our Energy Transition strategy.



Bruce will cover the actions expected to drive a 35% reduction in upstream carbon intensity by 2028. Additional abatement projects after 2028 can reduce our emission intensity further.

Our ultimate pathway to net zero will require technology advancements, more ambitious government policy and development of large offset markets. Following review with our Board of Directors, we plan to publish next month an update to our Climate Change Resilience Report, which will include Chevron's response to recent shareholder votes on net zero and Scope 3 emissions.

Mark and Jeff then will describe how we plan to grow renewable fuels, hydrogen and carbon capture and offsets. These business lines are earlier in life than renewable power, have value chains that will often connect with our traditional ones and are areas where we believe we can earn double-digit returns.

Because these are still earlier in development, the opportunity and potential for advantage is greater.

It's a straightforward strategy: Be a leader in efficient and lower-carbon production of traditional energy, in high demand today and for years to come, while growing the lower-carbon businesses that will be a bigger part of the future.

A strategy that's both profitable and enduring in the short and long term for our shareholders and all stakeholders.

(Slide 8)

At the core, our lower carbon strategy focuses on harder-to-abate sectors. Manufacturing, aviation, and heavy-duty transportation are much more difficult to electrify than light-duty transportation. To accelerate progress, we formed Chevron New Energies, reporting directly to me, dedicated to growing businesses in hydrogen, carbon capture and offsets.

Renewable fuels will continue to be managed by our downstream team. These businesses are linked to existing assets, infrastructure and markets. Mark will share how we can leverage our refining system and customer relationships to profitably grow in renewable fuels.

We've focused first on the US West Coast, where there's already strong policy enablement and also on the US Gulf Coast and select markets in Asia, where we have big businesses and expect policy support to increase over time.

We'll continue to prioritize centrally our greenhouse gas reduction projects guided by marginal abatement costs to reduce the most carbon emissions for every dollar we spend. As Bruce will show, many of these projects also have economic benefits as they enable outcomes like higher production or lower costs.

We'll continue making venture investments, as we've done for over 20 years, working with companies that are developing potential breakthrough technologies. And we expect to increase the use of renewable power to supply our traditional operations and also a growing hydrogen business.

Chevron has world class capabilities – and we intend to fully apply them to accelerate growth in lower carbon energy. Now, I'll pass it on to Bruce.



Bruce Niemeyer:

Thanks Mike.

(Slide 10)

Being competitive means producing lower carbon intensity energy. So we're taking critical steps on a pathway to net zero.

In 2020, our upstream production was delivered with first quartile scope 1 and 2 carbon intensity, for both oil and natural gas. Having made faster progress on our initial objectives, we set new intensity reduction targets, timed with the Paris Agreement's second stock-take in 2028, that are expected to deliver a 35% reduction from our 2016 baseline.

We're committed to transparency in reporting our carbon performance to help investors make meaningful comparisons. Our targets are commodity based because oil and natural gas serve different end uses and our targets are equity based, like our financials, covering all production from both company operated and non-operated joint ventures.

(Slide 11)

On our path to net zero, we're taking actions to reduce the carbon intensity of our portfolio.

Over the next four years, we expect to allocate more than two-thirds of our upstream capital to the six assets highlighted in green on the map to help lower our overall upstream carbon intensity.

In addition, we're investing in many greenhouse gas reduction projects intended to reduce methane emissions and flaring, as well as improve energy management.

On the next slides, I'm going to spotlight examples of our current efforts in each of these categories.

Carbon capture will also be important to our net zero efforts. Later, Jeff will cover how CCUS can reduce our emissions as part of regional hubs that Chevron New Energies is developing.

(Slide 12)

Methane management is critical in the journey to a lower carbon future. We've set a 2028 methane target of 2 kilograms CO₂ equivalent per barrel, which is a 50% reduction from our 2016 baseline.

One of our projects is shown on the left. Throughout the industry, oil is stored in tanks prior to shipment. For safety, a layer of natural gas is typically present on top of the oil to prevent air from entering the tank. This project will replace the natural gas blanket with nitrogen and is expected to reduce tank methane emissions by 95%.

We're also expanding our methane detection capabilities because better detection will help us focus on the best opportunities to further lower emissions. In addition to traditional ground sensors, we're deploying airborne sensors using satellites, aircraft and drones to achieve broader coverage.

Examples include TCO, where we're using satellite technology to survey the production facilities. In the Permian region, we're collaborating in aerial flyovers that cover thousands of sites. In the DJ Basin, we're partnering in a university study that includes modeling, aerial flyovers and site visits to validate and improve methane detection. We're also developing aerial campaigns for the Gulf of Mexico and Argentina.



Methane detection capability is critical to the world's efforts to reduce carbon emissions, and our work with industry and academic partners is an important contribution to the accuracy and credibility of global methane reporting.

(Slide 13)

Reducing flaring is also a focus area. We're working to reduce overall flaring by more than 60%. We're also proud to be a signatory to the World Bank's Zero Routine Flaring Initiative. I'll talk about two projects as examples of how we're working toward these goals.

At the Agbami deepwater production facility in Nigeria, produced natural gas is compressed and reinjected into the reservoir. When a compressor goes down for any reason, gas is routed to the flare system. This project will enable reinjection to continue, even when a compressor is offline. In addition to emissions reduction, the reinjected gas also supports oil reservoir pressure and is stored for potential use in the future. We expect this project to reduce equity emissions by more than 300,000 tonnes of CO₂ equivalent per year.

In the DJ basin in Colorado, we've developed a new facility design which is expected to reduce overall carbon intensity by up to 95% when compared to original designs. It requires no production tanks, no flowback equipment and no flare system. Additionally, this design requires a smaller footprint, which optimizes land use and is expected to reduce lifecycle costs by 15-20%. The new design is already being shared with teams working with similar assets across our portfolio.

(Slide 14)

Energy use accounts for about 70% of our Scope 1 and 2 upstream emissions. I'll cover two examples of how we're using energy management to improve efficiency and reduce emissions.

In Australia, we've completed a gas turbine optimization at the Wheatstone LNG plant to reduce the number of running turbines from four to three and optimize each machine's combustion parameters. The project is expected to deliver emission reductions of approximately 15,000 tonnes of CO₂ equivalent each year.

In 2019, we began procuring renewable power for our operations in the Permian Basin. Initially, we started by buying 65 megawatts of wind-generated power. More recently, we're partnering with Algonquin to build an additional 120 megawatts of solar sourced energy. These efforts are expected to reduce emissions by 300,000 tonnes per year. As this effort continues, we believe that 70% of our Permian demand can be met with renewable power.

We're also changing the way we consume energy. All of our operated drilling rigs and completion spreads in the Permian have been converted to direct electric, natural gas, or dual-fuel power, displacing diesel use and further reducing expected emissions by another 100,000 tonnes per year.

I've presented just a few examples of the projects underway to lower emissions to highlight our disciplined approach to lowering carbon while improving returns – from improving methane detection, rethinking facility designs, optimizing equipment, utilizing renewable power and deploying new operational practices – all aligned to reduce carbon intensity on our pathway to net zero.



And now over to Mark.

Mark Nelson:

Thanks, Bruce.

(Slide 16)

I'll start with a bit of a summary which expands upon our Investor Day guidance.

In renewable natural gas, we're ahead of our plan to grow RNG production tenfold by 2025 and we intend to produce over 40,000 million BTUs per day by 2030.

For renewable diesel, we now expect to grow volumes 3 times by 2025, ahead of our original target to double. And with our complex refining system, we believe we'll have the capacity to produce 100,000 barrels per day of RD and sustainable aviation fuel by 2030.

Finally, with renewable base oil, we remain on track for our 2025 target with upside to grow annual production to 100,000 tonnes per year by 2030.

I'll go into more detail about each of these on the next few slides.

(Slide 17)

We're a leader in renewable natural gas, building our value chain from feedstock to customer in partnership with others, like Brightmark and CalBio in production and Clean Energy and Mercuria in marketing.

Today, we're producing RNG with CalBio and expect numerous project start-ups with Brightmark over the next two years on our way to future production targets. These projects capture methane that is currently emitted to the atmosphere and turn it into valuable fuel, with negative carbon intensity.

We're getting the RNG to market through fleet sites in California and into trucks converted to compressed natural gas under our Adopt-A-Port program. And we're adding CNG to a number of our Chevron branded retail sites.

To expand to markets beyond California, we recently announced a partnership with Mercuria, adding 60 American Natural Gas CNG sites to our portfolio.

While our primary focus is on lower carbon-intensity dairy feedstocks, we expect to diversify our feed mix over time likely to include wastewater and landfill gas.

Now, let's go a little deeper into how we're building this business.

(Slide 18)

For roughly half a billion dollars committed to date, we're building an RNG business expected to produce about 10,000 million BTUs per day in less than five years, with expected double-digit returns and an average carbon intensity feedstock score of around negative 250 under California's Low Carbon Fuel Standard.

With our partners, we contract with farms that have scale and proximity to natural gas pipelines to enable a commercial project. Each project is scored for its carbon intensity – which can vary depending on factors like manure management and gas handling, all of which drive the economics.

Chevron completes the value chain by getting the natural gas to customers. We began by growing our CNG network in California because of our strong brand presence and



California's cap-and-trade and low-carbon-fuels programs.

With comparable policy support, we'll be able to offer a similar value proposition to customers nationwide supporting the likes of Amazon, Pepsi and Walmart in their key distribution hubs.

To sum up, we believe Chevron is well positioned to be a US market leader in RNG – a fast growing, lower carbon transport fuel.

(Slide 19)

We have a similar story in renewable diesel and sustainable aviation fuel, and are building a business based on capital efficient production, strong marketing and feedstock partnerships.

So far, we've increased renewable diesel sales over 30%, ahead of our Investor Day targets. 60% of our U.S. terminals are now capable of renewable or biodiesel distribution. And we expect all of our U.S. diesel sales to have renewable or biodiesel content by the end of the decade.

We're now co-processing about 2 MBD of biofeedstock at our El Segundo refinery and just last week, produced our first sustainable aviation fuel there. Next year, we expect to convert the same diesel hydrotreater to 100% renewable capability, increasing capacity to 10 MBD of renewable diesel.

With our initial sustainable aviation fuel production, we're collaborating with Delta Airlines and Google to track the emissions benefits of SAF. And while policy support has not yet stimulated the SAF supply chain, these activities prepare us for the future.

As we look out further, we expect to convert more refinery process units to full renewable capability for less than \$1 per gallon of annual capacity. Leveraging our existing refining system and other anticipated actions, we expect to have the capacity to produce roughly 100 MBD of RD and SAF by 2030.

(Slide 20)

Like with RNG, building a value chain in RD and SAF starts with the feedstock and ends with the customer.

We're excited about collaborating with Bunge to help meet the demand for renewable fuels and to develop lower carbon intensity feedstocks. This relationship is a significant step in integrating renewable feedstocks into our system.

The proposed 50/50 venture is expected to include existing crushers, in Louisiana and Illinois, with the ability to add further crushers and pretreatment facilities sharing margins in those parts of the value chain. We expect roughly 30% of our biofeedstock to be supplied via this path in the near term with future expansion opportunities down the road.

We're also working with Gevo to create an option to produce sustainable aviation fuel using an alcohol-to-jet process, with Chevron having the right to offtake roughly 10 MBD. As we convert more of our process units to have renewable capability coupled with the new feedstock agreements and pre-treatment options, we're evolving our refining system to have greater feedstock and product flexibility, producing renewable or conventional products depending upon the economics and policy drivers.

To put this in perspective, capacity of 100 MBD in 2030 is enough to supply all of



Chevron's current West Coast diesel customers with RD and US jet fuel customers with a 5% SAF blend.

And we're doing it with smart partnerships, low capital investment and margin exposure across the value chain.

(Slide 21)

We continue to lead in the development of renewable base oil through our patented technology and majority ownership in Novvi. And we've made progress integrating this renewable base oil into our lubricants' product lines.

We've developed the first commercially viable renewable automotive engine oil, Havoline Pro-RS, with lifecycle emissions that are 35% lower than conventional motor oil of equal viscosity. This renewable based lubricant is expected to be available on Walmart.com early next year.

And we continue to innovate. To date, we have a portfolio of patents including ones targeting fuel economy, electric vehicle fluids and equipment life extension all using renewable base oil. And we're aiming to have renewable content available in all of our key lubricants' product lines near the end of the decade.

Finally, we intend to license the technology to drive market scale and expect to produce and/or license 100,000 tonnes per year by 2030.

With that I'll turn it over to Jeff.

Jeff Gustavson:

Thanks Mark.

(Slide 23)

As Mike noted, our lower carbon strategy is focused on growing new businesses targeting harder-to-abate sectors where Chevron can build competitive advantages over time.

Hydrogen, CCUS and offsets are consistent with this strategy and are an important part of the solution to the challenges of meeting the growing demand for affordable, reliable energy and addressing climate change.

These businesses support Chevron's efforts to reduce its greenhouse gas emissions and are also expected to become high-growth opportunities with the potential to generate accretive returns.

And they're not unfamiliar to Chevron. We begin with a portfolio of existing assets and decades of experience as a strong foundation for future growth.

Let's start with hydrogen.

(Slide 24)

We currently produce around 1 million tonnes per year through our traditional business and have experience in retail hydrogen going back to 2005. Chevron has been investing in hydrogen R&D for decades and holds patents from early commercial ventures that are applicable to our future development plans.

We're fostering transportation and industrial demand growth through OEM alliances with Toyota, Cummins, and Caterpillar, with many more expected to follow. And our Richmond refinery is an initial area of focus which I'll cover on the next slide.



We're developing large green hydrogen projects in the western US, such as our recently announced potential entry into the ACES project in Utah. We're assessing development of blue hydrogen production hubs in the US and Asia linked to existing storage assets, equity natural gas volumes or both.

We see the potential to produce 150 thousand tonnes per year, our equity share, by the end of this decade and we believe we're well positioned to participate across the value chain.

(Slide 25)

At Richmond, excess capacity in the new hydrogen unit, coupled with our strong distribution network, are expected to put us in an advantaged position to grow a profitable business in an attractive market.

We plan to use Richmond's volumes, combined with existing and future strategic partnerships, as the foundation to support demand growth in the heavy-duty transportation, industrial and power sectors.

But our vision for Richmond is bigger. We recently initiated two green hydrogen pilot projects – one utilizing a gasified waste stream and another a solar powered electrolyzer. And, we're exploring the development of a regional CCUS hub that could enable blue hydrogen.

(Slide 26)

Our potential entry into ACES is a significant hydrogen milestone and aims to develop green hydrogen production, storage and transportation infrastructure in the Western US. We're excited about taking steps to join partners Magnum and Mitsubishi, and believe we bring complementary strengths to one of the world's first large-scale green hydrogen projects.

The anticipated project plans to produce green hydrogen to generate lower carbon dispatchable electricity for California. Key enablers of the project include low-cost renewable power combined with hydrogen storage capacity in salt domes. There are also multiple expansion opportunities anticipated across the hydrogen value chain into West Coast markets.

We expect this opportunity to generate attractive returns and to provide cost-effective entry into a scalable hydrogen production platform with existing and future demand sources.

(Slide 27)

Moving to carbon capture, we view CCUS opportunities in two areas, reducing the carbon intensity of our existing assets and growing our carbon capture business, primarily through hubs with third party emitters as partners and customers.

Our initial carbon capture projects have been focused on decarbonizing existing assets. An example is Gorgon, one of the largest sequestration projects in the world – with the capacity to store up to 4 million tonnes of CO₂ per year – providing us with key operational experience. And we've recently completed FEED for a commercial scale project in the San Joaquin Valley to capture exhaust from gas turbines, one of several projects in our pipeline.

We're targeting 25 million tonnes of CO₂ per year in equity storage by the end of this decade. To achieve these ambitions, we're exploring several hub opportunities in the US and abroad, each including multiple large customers and with facility nameplate



capacities between 5 and 20 million tonnes of CO₂ per year.

CCUS is a critical enabler of global net zero and our CCUS targets reflect its importance.

(Slide 28)

Mendota Bioenergy is a good example of a project where Chevron is partnering with others to capture and then permanently store CO₂.

It's a Biomass to Electricity with CCS project, located in Mendota, CA. The plant is designed to use agricultural waste, like almond trees, to generate negative emission electricity. More than 99% of the carbon emissions are expected to be captured for safe, permanent underground storage in nearby deep geologic formations. We believe the project will position us to demonstrate capability and establish Chevron as a CCUS leader in California.

This effort illustrates another important point.

Mendota is expected to generate about 300,000 LCFS credits per year on top of qualifying for IRS-45Q tax benefits showing how the pace of growth in New Energies can be influenced by policy.

(Slide 29)

Like CCUS, offsets will be required to achieve net zero.

Chevron's experience developing and using offsets dates back nearly two decades, and is an important part of our operations in areas like Australia, Canada, Colombia and California. And customers are beginning to ask for offsets paired with product supply. We recently signed a 5-year LNG sales and purchase agreement with Pavilion Energy, where each LNG cargo delivered will be accompanied by a statement of its GHG emissions.

We expect to be a portfolio supplier of offsets by providing more customers with offset-paired products. In addition, we have a global [carbon] trading organization and actively participate on multiple registries and exchanges.

We're also planning to invest directly in scalable, nature-based solutions – like soil carbon storage, reforestation, and mangrove restoration – generating high-quality credits.

Offsets are critical to complement other efforts to reduce Chevron's carbon intensity. We believe this is a space that can significantly grow, both in compliance requirements and value generation.

(Slide 30)

Since 2018, we've committed about \$500 million to lower carbon investments through our ventures organization.

These investments target cutting edge technologies, bringing early insights through pilot programs – often utilizing Chevron's existing assets.

Last year, we invested in Blue Planet, a startup developing technology, products and services related to carbon capture and mineralization, where CO₂ is expected to be permanently sequestered in building materials.

Earlier this year, we invested in Boomitra, a startup developing an AgTech platform designed to grow the supply of carbon offsets efficiently and cost-effectively.



These are just two examples of our investments in emerging technologies. A few others are noted on the slide. Going forward, we'll continue to invest in and partner with innovative companies in an effort to accelerate the commercialization of promising solutions.

(Slide 31)

To close, although the New Energies organization is just that – new – we've had foundational work underway dating back decades. We have the assets, the capabilities, and the customer relationships that we believe are a platform to grow rapidly in the years to come.

Our existing assets span the value chain and are in areas where we can grow demand based on cost competitive supply combined with appropriate policy support. We have strong relationships with key customers and partners, which will be critical in developing economic projects that can scale quickly across a complex value chain.

We bring a unique set of capabilities to each of these areas. We've successfully managed complex Joint Ventures all over the world. We have deep technical expertise inside the company, and a long history of advancing and adopting external innovation. We have strong commercial capabilities, and experience managing rapidly changing businesses.

Chevron's credibility and reputation make us the partner of choice, bringing access to new opportunities. Managing diverse stakeholder and government interest is something we do every day. We have a strong balance sheet and capital discipline – providing us the flexibility and durability to invest in the right opportunities, and stay with them for the long term.

I'm incredibly excited and confident about Chevron's plans in hydrogen, CCUS and offsets, to help advance a lower carbon future while growing our value and increasing returns.

I'll now turn it back to Mike.

Mike Wirth:

Thanks Jeff.

(Slide 33)

Let's put this all together. Between now and 2028, we plan to increase our lower carbon capital investments to over \$10 billion, more than triple our prior guidance and are increasing our overall annual capital guidance to \$15-\$17 billion for 2022 through 2025.

We expect returns to be competitive with our alternatives, and projected cash flow from these businesses to exceed \$1 billion annually by 2030. Undoubtedly, there will be a range of outcomes with some projects working out better than others.

Our focus is on learning, growing capability and proving that these businesses work commercially and technically, and can be replicated over time to achieve lower costs and greater scale.

Growth in renewable fuels, hydrogen and carbon capture is expected to enable some 30 million tonnes of annual CO2 equivalent emission reductions by 2028 an amount roughly equivalent to 18% of New York State's annual reported emissions. You can think of this as the total emission reductions – Scopes 1, 2 and 3 – from the use of these solutions as compared to conventional fuels.



To sum up, we believe that these investments will advance a lower carbon future and be good for our shareholders

(Slide 34)

In our sector, investors are seeing a divergence of strategies as companies respond to poor stock performance and expectations for an energy transition.

For our investors, you'll see actions consistent with attributes that have long defined our company.

You can be confident in our continued focus to generate cash that's returned to shareholders and invested with discipline, in both traditional and new energy, to sustain and grow the company.

We'll be ready for the next downturn in commodity prices with leading financial strength. And in an industry that should have fewer players, we have a history of smart transactions when it's in the interest of our shareholders.

Finally, in a dynamic world with the rate-of-change accelerating, we have the flexibility to evolve with it. Our capital program is characterized by short cycle projects and our new energies platform can grow quickly under the right conditions.

(Slide 35)

Our guidance paints the picture of how our traditional and new energy businesses work together to drive and sustain financial performance in a lower carbon future.

We have the people, the partnerships, the engineering and project management expertise and the track record of performance to continue to develop the affordable, reliable and ever-cleaner energy that enables human progress.

Higher returns, lower carbon. We must deliver both, to earn a higher valuation for our shareholders and benefit for all stakeholders.

Thanks for your time today, and for your interest in Chevron.

(Slide 36)

Before we begin Q&A, just a few ground rules. If you'd like to ask a question, please do so using the hand-raising feature in Zoom and remain muted until I call on you. Please limit yourself to two questions, and ask them both upfront so that we can get to as many people as possible.

Let's go to questions.

Mike Wirth:

Okay we will begin with Jeanine Wai from Barclays. Good morning, Jeanine.

Jeanine Wai:
(Barclays)

Hi, good morning! Thanks for all the time today. We appreciate it.

Mike Wirth:

You bet.

Jeanine Wai:

My first question is on, RNG and you referenced double digit returns for RNG, assuming a CI score of -250 and for your non-California projects, are you assuming that policy support grows outside of California or do you expect to generate California LCFS credits for all of your planned projects? And maybe if you can talk about your returns on the California projects versus out-of-state projects and whether your conversations with



customers really show a willingness to support a price on gas that'll generate a return for those projects outside of any additional policy support?

And then our second question, I know there's a lot in that first one. Our second question is more of a general question. Your free cash flow outlook, that's unchanged over the period, but you obviously have an increased focus on the growing energy transition businesses. So our question is, how should we think about the priorities of excess free cash flow above that \$25 billion? And specifically, should we now think about incremental, renewable investments beyond that \$10 billion that you mentioned today? If we should think about those as competing directly with incremental oil and gas investments and shareholder returns? Thank you.

Mike Wirth:

Okay. Jeanine thank you. And let me take the second question and then I'll hand the first one over to Mark for a little bit more details and it's really downstream related. We did reiterate our overall enterprise guidance for greater than 10% return on capital employed by 2025, \$25 billion in excess cash '21 through '25. And I would encourage you to think about the use of that cash or cash beyond that \$25 billion in a way that's very consistent with the financial frame that we've long held and use to allocate capital.

So, the first call on that is to ensure we've got a strong and growing dividend. The second is for organic reinvestment, I'll come back to that. The third is keep the balance sheet strong, which we've seen recently is so important to weather the unpredictable commodity markets that our business faces, and then finally share repurchases, which we've restarted this year and 14 of the last 18 years we've engaged in. So, overall priorities stay very consistent with that.

Within the organic capital Jeanine, we've outlined an increase to \$15 to \$17 [billion], so we've clicked up the range by a billion dollars from our prior guidance. And I think you should assume that these projects will all compete, be they in the new energy space or in our traditional space, based on returns and how we see the best use of dollars to set the company up for the future.

Generating cash out of our existing portfolio to fund the future is very important. I think our traditional business will compete well for capital. But we also do see opportunities that deliver the prospect of good returns in new energies. And so, we'll look across all of that. I can't give you a simple formula. It's the way we always look at our portfolio and the trade-offs in returns, risk, execution, et cetera.

On your first question I'll just say, California does have a more supportive policy environment than just about anywhere else we do business today and that results in investment and activity. Over time, we expect a combination of cost reductions, technology improvement, market acceptance, and policy advancements in other geographies. All to enable the growth of these businesses. And we have customers that are looking for solutions, and so they've been willing to pay for the solutions in California, and we see evidence of that elsewhere. Mark, you might want to go a little more specifically into [renewable natural gas] and returns.

Mark Nelson:

Thanks, Mike. And Jeanine, thank you for the RNG question. If you think back to our investor day discussions, we talked about why we were so interested in RNG and being a leader in that space.

It started with the concept that this is one of the most cost and carbon efficient fuels from



an RFS and LCFS perspective. That it was lower risk, both from a capital and execution standpoint. And that it leverages our strengths, both partnerships, value chain thinking, and understanding policy.

And we started in California because that's where it is certainly supported the most, but we can make this economic across the United States because it's lower cost outside of California, even though it only has D3 RINs. In California, we get both LCFS and RFS support and can make it economic there as well even though costs are a little bit more expensive. And that's why you see us announce this deal with Mercuria where we are expanding outside to follow our customers, and they have been willing to pay, and we've been able to secure double digit returns across this offering, and we expect that to continue in the future.

Mike Wirth: All right. Thank you, Jeanine. And next up, we've got Phil Gresh from JP Morgan. Good morning, Phil. Phil. Okay, there we go. I see you. Are you unmuted?

Phil Gresh: How about now, sorry.

Mike Wirth: That works.

Phil Gresh: Good morning, alright.

Mike Wirth: Welcome to 2021.

Phil Gresh: First question... Yeah. First question, your European and Canadian peers have all committed to a net zero target. Chevron still has not done so here so I'm wondering what you see as the gating items that would need to happen to commit to a net zero target.

And then my second question is a bit of a follow-up on the financial side. With the higher capital spending of about a billion per year through 2025, \$4 billion in incremental spending, you're still reiterating your post dividend free cash flow target. So, what are the offsets you see here relative to the analyst's data that that allow you to maintain the cash flow target. Thank you.

Mike Wirth: Okay. Thank you, Phil. So, let me start with net zero. We showed a pathway to a 35% reduction in our upstream scope 1 and scope 2 emissions intensity by 2028. And we also outlined further reductions post-2028 that bring emissions down even further. Some of these are not economic today. The technologies may not be mature or they just don't prioritize versus the other more efficient investments we have prioritized in the near term. We see a pathway to get down to somewhere in the, you know, the order of 20 million tonnes overall in our upstream portfolio, and getting to zero beyond that will require new technologies, more ambitious policy as we were talking about a minute ago, development of large offset markets. These are all things that we're working on. They're all part of the new energies portfolio that Jeff will be leading. And we see real progress on all the fronts necessary there.

You know, it's a significant improvement in just this decade that we've outlined. And these net zero aspirations that most people have made 2050 is, you know, is the date that they've targeted them for. And we're going to make significant progress just this decade. There are two decades that follow for more work on technology, on policy, and things like offset markets.



We've got greater confidence today that those things are maturing. They're accelerating, and as you can see, we're committing more capital to them. The specific net zero aspiration is a topic that we have discussed with our board many times and continue to discuss with our board. And we're going to update our climate report later this year. And I think you can expect to see in that report a response to shareholder votes from this year's annual meeting. And we'll update our thinking on net zero. So, stay tuned for more there, Phil.

On the overall financial performance of the enterprise, we're seeing real delivery of benefits from the transformation that we went through last year and strong performance in our base business. That is on track or even in some instances ahead of pace with what our aspirations were. As we allocate more capital to new energies, it'll affect cash from operations to a certain degree because some of these projects are going to take some time to deliver their benefits. But the overall assessment of our portfolio with the strong performance in our core business, the benefits from the transformation, and what will be a scaled-in investment into new energies. We're still confident that the overall guidance can be delivered. And it's really a testament to the strength of our core business in the traditional side of our energy portfolio. Okay.

Next we're going to go to Neil Mehta from Goldman Sachs.

Neil Mehta:
(Goldman Sachs)

Yeah. Thanks a lot. Mike, the first question is around M&A capability, and it has historically been a strength of the organization, as we've seen in recent years on the traditional oil and gas side. Do you think you have that capability as it relates to the clean energy side and do these partnerships create that foundation?

And the follow-up question is around carbon capture. As you said, you've had some experience around this in Australia. Can you talk about lessons learned? And how do you think about progressing that technology going forward, which is, as you said, important to achieving some of the carbon targets we've set up?

Mike Wirth:

Sure. So let me talk about M&A, and then I'm going to ask Jeff who's responsible for CCUS to make some comments on that. Neil, I think the short answer is yes. The discipline that we have exhibited in traditional M&A is a discipline you can expect us to exercise in in new energy M&A.

And so, we have people that are very commercially capable and I think negotiating deals is something we've done across up, mid, and downstream for many years. These are new technologies, but the fundamentals of a commercial transaction remain similar. I think there is a, you know, we've seen a pretty well valued, I'll call it, market for a lot of these startups in green energy here in recent times. We've seen special purpose acquisition vehicles used to take many of them into public markets. And we need to be mindful of some of the lessons we've learned in our industry as we've looked back over the last decade plus, as valuations have shot up. And we need to be sure that we remain disciplined, but I would expect you to see this similar performance in terms of discipline and in commercial skills that our organization has in the M&A space.

On CCUS, you know, we've been working with CO₂ for decades in terms of enhanced oil recovery. So, transportation of carbon dioxide, injection of carbon dioxide, management of subsurface reservoir, behavior of CO₂. We've had big projects, as were mentioned in the remarks today, in both Canada and Australia. And I think there have been a lot of



lessons. Jeff, you may just want to comment on how those lessons read across to some of the things that we're working on now to expand our CCUS portfolio.

Jeff Gustavson:

Thanks, Mike, and thanks, Neil, for the question. Good to see you again. Yeah, there's two pieces to our carbon capture, utilization and storage, or sequestration, strategy.

First, we'll focus on existing Chevron assets. Mike talked about Gorgon. There are a lot of very valuable lessons learned from that project that will carry forward into future projects. We've got a number of carbon capture pilots underway at our San Joaquin Valley upstream operation, and if those turn out to be successful, which we hope they will, we can scale those across the rest of the enterprise.

We'll focus on our existing businesses, but we're also going to focus on third-party customer businesses, a new third-party customer business, specifically around regional hubs for CCUS. So, these are large, concentrated industrial areas with a number of different emitters. We'd like to come in there on a standalone basis or in a partnership consortium, identify a storage location for the CO₂. Obviously, we bring a lot of capabilities, subsurface and other in that area, but also build out the CO₂ transportation and distribution infrastructure to then be able to go out to all of those potential customers and provide a full CO₂ CCUS service, or provide a customized solution depending on what the customer's needs may be.

In this space, it's about the assets, our capabilities, and also the customers that we can bring into the CCUS market, but also into all of these new energies businesses that we're going to scale over time.

Mike Wirth:

Okay, Neil. Thank you very much. We're going to go next to Devin McDermott from Morgan Stanley. Good morning, Devin.

Devin McDermott:
(Morgan Stanley)

Good morning. Thanks for taking my question and thanks for the helpful update today. So, my first question is actually on carbon-neutral LNG. I think you'd had a remark earlier about a deal you had signed for emissions tagging for some of the LNG sales, and one of the things we've seen evolve in that market has been emissions offsets paired with certain cargoes. When you look at your LNG business, and also the emissions trading or offset business that you have in place, can you talk a little bit about the evolution of the opportunity set there tied to carbon-neutral LNG? And also whether or not you're seeing buyers willing to pay a premium for low-carbon or no-carbon cargoes? That's question one.

And then question two is on the downstream side and some of the renewable fuels investments. I think you mentioned that the Bunge partnership covers about 30% of your feedstock needs. Can you talk a little bit about the plans for that other 70% and what you've done to secure feedstock costs?

Mike Wirth:

Okay, yeah, thanks, Devin. Broadly speaking, we are seeing more interest from customers in paired contracts and looking to understand the full value chain carbon footprint of products. And I think that's a trend that we're likely to see continuing in LNG, but also in other products. And I think you raise a really important question, which is, generally there is a cost that comes with these things, and to what extent is the market willing to bear that cost?



I think that's something we're going to discover over time, and I think customers, you know, in the first instance would like to have everything at the same cost. I think that's probably not going to turn out to be realistic across most energy products, but Jeff, maybe you can comment a little bit more on that because it was in your portion of our remarks today. And then from there, we'll just go straight over to Mark to handle the question about Bunge and the rest of our renewable feedstock sourcing.

Jeff Gustavson:

Thanks, Mike. And thanks for the question. We are seeing an increase, a significant increase in demand for what we refer to as voluntary carbon credits attached to our products. I talked about an agreement we have with Pavilion Energy, a five-year LNG sales agreement, that's a great example where Pavilion expressed an interest to carbon footprint the volumes that were being sold to them, and that could lead to an advancement of attaching credits to those volumes going forward.

We're also in discussions with a lot of other customers and not just in the LNG space, but across our upstream, midstream, and downstream and chemicals businesses.

There're three sources of demand. We already have a lot of experience in the credits arena in meeting our compliance commitments, and I talked about some of the key geographies around the world where we already do that. We're building experience in the voluntary segment, which is another source of demand. And we're looking to build a much bigger carbon credit business by investing in nature-based projects, building that business, being able to attach more of these credits to other products that we sell to meet the voluntary demand, but also to trade some of these credits over time. Mike talked about this in his comments. We see this as a part of the new energy space that could scale significantly in the years to come. I'll hand it over to Mark now to talk about Bunge.

Mark Nelson:

Devin, thanks for the question. You may recall back in our investor day, we talked about when it came to renewable fuels and especially renewable diesel and sustainable aviation fuel, that we had three beliefs that were really important to us.

One was that feedstocks were going to be critical. The second was that margins were going to normalize and so we needed to be capital efficient. And then of course we had to have a good place to sell the product. I think you'll see that we're activating all of those elements in our discussions earlier today. And we're really excited about the Bunge partnership.

The 50/50 venture, just to step back for a moment, it essentially secures supply today from existing crushers. It allows us a platform for growth with Bunge. It allows us to partner with a leader who cares about sustainable agriculture. And finally, it allows us to participate in the margin of crushing and pre-treatment. And I know you all know this, but just two years ago, 3/4 of the soybean-based renewable diesel margin was in the R&M side, the refining and marketing side of the business, and here in the last two months, it's actually been in the pre-treatment and crusher side of the equation and starting to work its way back.

And the Bunge relationship allows us to secure supply from existing assets, allows us to grow with Bunge, and allows us to participate in that margin structure. In addition to growing with Bunge, we have a desire to be a part of all of the generations of feedstocks. The arrangement with Bunge focuses today on the first generation, which would be soy, we would expect to grow into second-generation of the tallow type of biofeedstock, and then finally, maybe into algae. We'll continue to grow both with Bunge and in regard to



these other generations of feedstocks.

And what's really nice about this Bunge relationship is the facilities in Destrehan, Louisiana and Cairo, Illinois. These are proven, high quality, high performing assets with waterway access, and 7,000 tons per day of output, and we can grow that with them. In fact, we've committed to do that by 2024. The 30% is a start. We'll continue to grow with Bunge and we'll look for other sources as well. Thanks for the question.

Mike Wirth:

Yeah, Devin, I think just to close out on that, you know, some of the points Mark makes are important. The fundamentals in some of these value chain businesses don't change so reliable high-quality feedstocks matter. Margins move across those value chains, capital efficiency matters. And then we do want to be able to source from multiple sources. And the relationship with Bunge is a great start and one that can grow, but it doesn't preclude other similar kinds of arrangements that you could see us enter into as well. Okay, let's go to Doug Leggate with Bank of America next. Good morning, Doug.

Doug Leggate:
(Bank of America)

Good morning, Mike. Hopefully you can see me okay. Thanks for taking my questions.

So you've given us about a billion dollars of cash flow for the run rate at the end of 2028. Can you give us an idea of what you think the incremental returns are going to look like relative to the broader business? And I guess what I'm really trying to understand is how you came up with the scaling of how much you want to allocate to this business, cause I guess you're going to get the comment that it's still quite a bit lower as a percentage of your spending compared to say your European peers. So that's my first question.

My second question is really more California-centric. The scoping committee meeting that CARB held on the 17th of August, and I guess the meeting before that, on the 2nd of August, there were some interesting things in there regarding what may or may not be included for LCFS credits going forward. One of the things that caught our attention was that carbon capture and storage may not be included as one potential scenario. I just wonder to what extent you've taken, you know, the range of possibilities into account as you've put together your strategy?

Mike Wirth:

Okay, thanks Doug. First of all, on scale and returns, we think these are going to deliver competitive returns within our portfolio. And we're serious about delivering higher returns and a number of these investments today offer double digit returns. And, and we would expect, broadly speaking, to see that out of this portfolio, as we get out to the end of the decade.

Now I said, in my comments, some projects are no doubt going to work out better than others, and these are less mature technologies. These are emerging markets, these are new value chains. And so, I would say there's a higher beta around the outcomes here. And we may find some that exceed our expectations and, I'm certain, there will be some that we learn a lot and fall short, but as a portfolio, we feel like these will be delivering double-digit and competitive returns.

In terms of scale, Doug, I recognize the point about comparing it to our traditional business, but you have to look at the scale of our traditional business and the scale of these businesses today. And, and throwing more money at them faster, in some cases, isn't going to accelerate technology or market adoption. And we've outlined what we believe are ambitious growth targets off of a small base, because these are nascent businesses.



This is different than wind and solar, which you've got two decades or more of technology and market development that make them relatively mature compared to the kinds of things that we're talking about today. So, \$10 billion over the next several years is a sizable commitment into growing these technologies, and look, I hope the returns in the market development of policy are so good that we find more than that. This is what we believe today. We've got a robust pipeline of discussions underway. You've seen a number of announcements here in the last several weeks that reflect a large, you know, body of commercial activity that's been underway for some time and is beginning to mature.

We'll continue to update you on both returns on capital commitment. This is our best view today and we've been working on it for quite some time. We've got confidence in what we're outlining, but as I said, we'll know more a year from now, two years from now, and update you on that.

Your question on CARB and the evolution of policy in California, I'm going to ask Bruce to add a little bit of detail to this in a minute. What I'll just say, Doug, is we've been on a journey with the state of California for decades. As California has sought to be a leader in environmental policy on water, on fuel, on emissions, on criteria pollutants, and now on greenhouse gas emissions. And we have a long and very collaborative and constructive working relationship with the Air Resources Board.

We understand their priority on carbon neutrality, and we certainly agree with that and support that. And there's no doubt that partnerships will be vital and essential in delivering on California's aspiration to become carbon neutral. And so, we intend to be a good partner there and to work with the Air Resources Board and with many other partners in the state to make that happen.

Bruce, you may want to comment a little more specifically on the state of rulemaking and the other aspects of Doug's question.

Bruce Niemeyer:

Sure, Mike. The question of the role of carbon capture in the state's journey to carbon neutrality has really been, you know, on the table from the outset. And as you look at every scenario, carbon capture is an important element in achieving carbon neutrality for the state.

We have assets and capabilities that position us to be a partner with the state and, importantly, other parts of the economy in the state to seek and allow the entire economy to achieve carbon neutrality.

Jeff mentioned Project Mendota, which is our first tangible effort in the state which will deal with and support the agricultural industry in the center of the state. We have other project concepts. He also mentioned hubs and those hubs provide platforms for us to partner with other industries in the state and help the state move effectively towards carbon neutrality. And so, as Mike said, we'll continue to work with regulators in a variety of settings, as we work to support the state's overall efforts. Thanks for the question.

Mike Wirth:

Let's move next to Alastair Syme from Citi.



Alastair Syme:
(Citi)

Thanks, Mike. Thanks for the presentation. Mike, can I ask, on the \$10 billion of incremental capital, you know, roughly how that splits between upstream scope 1 reduction? What you're doing in the downstream? and I guess what's rest, which I guess is, you know, offsets and hydrogen?

And then secondly, and I guess similarly on the billion dollars of cash flow, you know, are we including upstream scope 1 reduction gains in there? For example, you know, if you capture gas that was previously flared and sell that as a revenue source. Thank you.

Mike Wirth:

Yep. So, Alastair, broadly speaking, we've got a chart in there, the bars are a little bit fuzzy, because these things are not entirely precise. But on the \$10 billion, you can think of that as roughly \$3 billion on carbon capture and storage and offsets. Another \$3 billion on renewable fuels, about \$2 billion on hydrogen, and about \$2 billion on greenhouse gas reduction activities within our own portfolio. That's the view today.

And as you look for it on the billion dollars in cash flow, I think by [2030] we'll see roughly half of that coming from renewable fuels, which are a little bit easier to drop into value chains today, a little bit more mature, and certainly something that we're growing aggressively. And you'll see another portion of that coming from CCUS as it begins to penetrate and then hydrogen would make up the balance.

And there is, I think, a small contribution, to be honest with you, I can't recall, we can have Rodrick clarify for you, whether our let's say methane that is captured. Bruce talked about replacing methane with nitrogen in tank blankets, for instance. I can't remember where that drops in.

But renewable fuels clearly in the early part of this are going to be the larger contributor to cash flow. Hydrogen, CCUS are going to take longer to get some of these projects up to scale and they become bigger contributors further out, and the capital allocation is as I indicated. Thanks very much for the question. Let's move next to Manav Gupta from Credit Suisse.

Manav Gupta:
(Credit Suisse)

Hey guys, thank you for the presentation. It's interesting, you've put out hundred thousand [in 2030] barrels between SAF and RD. Can you help us clarify what percentage would be RD and what would be SAF? And the reason I'm asking this question is because at this point there's more common support for RD than SAF, you get 1.6 RINS for SAF and 1.7 for RD. So do you expect some kind of policy change from the government which will help you grow SAF at a faster rate than RD?

Mike Wirth:

Yeah, Manav, I'll just take that one and I'll say you do have stronger policy support today for RD than for Sustainable Aviation Fuel. Discussions underway on trying to create similar kinds of incentives for Sustainable Aviation Fuel. Big part of our business is to create flexibility and options here.

And whether you're talking about the overall rate of demand growth for energy in the world or the mix in the broadest sense between coal, oil and gas, renewables, hydro or you get right down into fuels like distillates and you're looking at renewable diesels, sustainable aviation fuel or conventional versions of those fuels. We have the capabilities to deliver across the spectrum and we're investing in our refineries and Mark made



mention of this, to create flexibility in our processing units, to process traditional or renewable feedstocks and to convert that into a variety of products.

Ultimately the allocation of those products will be a function of market signals, policy and customer demand and we didn't get more specific than 100,000 [barrels per day] because we intend to be flexible and have the capacity but at this point it's not entirely clear how the split will break down.

And we'll continue to update you on these things as they evolve but we don't intend to get locked into a point solution which if policy doesn't show up now we've got capital that we perhaps shouldn't have invested. We're going to try to be very efficient in our capital investments, create flexibility, create options and then as markets clarify and demand emerges, we'll meet that and perhaps lean into that with subsequent investments.

Thank you very much, next we're going to have Paul Cheng at Scotiabank. Good morning, Paul. Paul you might be muted.

Paul Cheng:
(Scotiabank)

Can you hear me?

So, I have to apologize first because I have some connection issues. So, you may have already answered the questions. If you have, please let me know. When we're looking at higher returns, lower carbon, that slogan. Can you give us ... because the nature of the business in your \$10 billion investment is different than your traditional projects ... how the return profile or how the criteria, is any difference in how you look at those businesses and how you judge whether it is a good business? So that's the first question ... trying to understand that when you're looking at those \$10 billion investments from a return criteria, are they different than, or how are they different than when you're looking at what is more important and different?

The second one is that when we're looking at the renewable diesel business, everyone seems to be going into that, the barrier of entry is close to zero. As long as you have money, you can build a renewable diesel plant. We have recently conducted an exercise. And one we find is quite alarming that with not even mentioning that you guys joined the new renewable diesel capacity, just on the existing plan. Seems like we're going to have a major problem with the feedstock and also the LCFS credits probably going to become oversupplied. And that margin is going to come down a lot. So how are you going to save out on that? Thank you.

Mike Wirth:

Okay, Paul, thank you. Look, these are businesses that are emerging and so the returns... I'll start with your, the latter part of your question and work back to the broader issue. You know, you may not have heard Mark say, but earlier in response to another question, he said, we expect margins to normalize, which is code for come down. And for the reasons you identified.

Mark also said, we're going to be very efficient in our deployment of capital. We're making a conversion of existing refinery units at modest capital investments to create the flexibility here, as opposed to green field plants where you've got a very different capital profile. And so we're mindful of the way these markets can evolve. And we've been in the commodity business for a long time. We've seen overbuild vis-a-vis demand and what that does. And we're very conscious of that. And I think savvy investors in new energies need to recognize that at the core, these are all commodity markets and they're going to



have commodity attributes that drive financials. And that's something that we are building our business with that very much in mind.

To the broader topic, Paul, I did say earlier, we expect these to be competitive with our other businesses and frankly, the kinds of things we're looking at now, be it renewable fuels, carbon capture, hydrogen, offsets we've got expectations for double-digit returns out of these things.

If we look at renewable power, it's hard to find even levered returns that get into the double digits on wind and solar, which is one of the reasons why that's not part of our strategy. We think there's plenty of capital. We think there's plenty of capability and there's good developers out there. We don't see the opportunity to create competitive advantage or strong returns that benefit our portfolios.

Over time, we're going to find out how the returns on these businesses mature, and they'll be a function of the things we've already mentioned, technology advancements, market development, policy, customer demand, and we've got assumptions on these things today. We've got our best view, but I've got to say the error bars around them are wider than they would be around our traditional business because these are new businesses and they're emerging businesses, and we're stepping into this with our eyes wide open.

We talked about where we're going to start, and it's where you've got existing policy, you've got existing markets, you've got existing customers that are looking for these products, and we'll then build out, learn there and look for opportunities to extend those lessons into other markets where we see the same kinds of trends emerging. So, a little bit of a different set of risks that we'll be managing through here, but we haven't lowered the bar for returns. That's the bottom line. Okay, next, we're going to go to Biraj Borkhataria from RBC. Good morning, Biraj.

Biraj Borkhataria:
(RBC)

Hi, thanks for taking my question. So, your strategy involves a growing reliance on the voluntary carbon market, and this is driven by customer demand, I guess, but there's been some criticisms around those markets because of transparency or the consistency in what it takes to generate a credit and pricing and things like that.

So, could you talk about your experience so far? And it seems like you and a number of your peers will have a large presence in these markets going forward, and they're evolving pretty quickly. So, I was wondering if any concerns have come up so far in how you're thinking about those evolving markets? Thank you.

Mike Wirth:

Yeah, Biraj, thank you for the question. I'm going to ask Jeff to speak to this a little bit more because although, as he said, he's new in his role, this is an area where he's been getting a lot smarter fast. We need to have markets that have strong assurance, and that people can trust. You can look at the history of the Renewable Fuel Standard in RINs, and the early days in RINS, for a while there, it was more successful in stimulating kind of dodgy and questionable RIN activity than it was in actually stimulating new technologies.

And so as these markets come into existence, there need to be agreed standards and assurance mechanisms that a market participants can rely on. These kinds of things are being worked. Jeff, maybe you can talk a little bit about where we are now and how we see this evolving in the coming years.



Jeff Gustavson:

Yeah, thanks, Mike, and thanks for the question, Biraj. It's a really good one and I think one that's sometimes overlooked. The importance of growing this sector really depends on having a very stable base, very transparent reporting, standardized reporting around the world, convergence around the world so we know what a good credit is, what a quality credit is and what one isn't, and we can work towards generating more quality credits versus non-quality, non-standard, less transparent ones.

This is something that will support the future growth of these markets, and it's something that Chevron's been working on for a number of years, going back decades, in fact, in internally footprinting our own carbon emissions. And you've seen the progress that we've made. If you look back at just in the last few years, the transparency and the data quality where we've taken things inside the company, we've seen significant improvement there.

We're also taking that knowledge, so that you might think of that as an asset and a capability of the company. We're also involved in many external organizations that are working this issue globally, and we'll share the lessons that we've learned managing this inside the company to help grow the transparency and standardized reporting around the world, which as you said, will support growth in this market going forward. Thank you for the question.

Mike Wirth:

Yeah. Biraj, thank you. We've got, you know, we go all the way back to, I recall under the UN clean development mechanism, I think it was, our Darajat geothermal project in Indonesia nearly 20 years ago. We were certifying tradable offsets. And this is an area where we've got deep expertise and are working with many others now to extend it into a lot of the emerging fields that hopefully can help us create these, you know, these offsets that can be part of the solution. Okay. Let's go to Jason Gabelman from Cowen. Good morning, Jason.

Jason Gabelman:
(Cowen)

Good morning. Thanks for taking my question. The first, just on the carbon reduction that you've laid out, 30 million tonnes. It appears 25 of that through 2030 is from carbon capture. So is all the remaining activity just reducing emissions by 5 million tonnes of carbon dioxide through 2030? It sounds a bit low. I don't know if there's something unique to the way you're accounting for emission reductions.

And then the second question is just on the capital spend, the \$10 billion you laid out. It seems like a decent amount of that is within joint ventures. I wonder if there's any leverage that you're using within those ventures to hit your growth targets, or if that's something that you could utilize if these businesses turn out to be good businesses to invest in, to increase your investments. Thanks.

Mike Wirth:

Yeah, Jason, so you know, the overall magnitude has a lot of assumptions built into it. And you know, one of the biggest uncertainties that that exists right now is who actually takes credit for the reductions that you attribute to your activities. Whether it's green hydrogen, renewable diesel, sustainable aviation fuel, or carbon capture and storage potentially paired with an LNG sale, for instance.

There are people out there across the economy that have made pledges, set targets, declared ambitions to reduce their carbon footprint scope 1, scope 2, scope 3, they come in all different flavors and constructs. But one of the things we're finding is we, you know, we build out our business here in the early days is, you know, the ownership of that



credit becomes very important because it allows someone to make progress towards their declared ambition. And so, it becomes a pretty important commercial element of any agreement that we enter into.

And we haven't necessarily assumed that we retain a hundred percent of those credits now. So, what we've defined there, the 30 million tonnes [in 2028] would be what we think are a reasonable expectation of what we can deliver. And there could be more, to your point, I hope there is more, but how that gets allocated and who gets to take credit for it remains, I think, to be seen, ultimately almost transaction by transaction. And then as you aggregate these things up, the issues of reporting become very real.

And, you know, I think most of you have probably studied this, and, you know, if you have multiple players claiming the same reduction, you didn't reduce one tonne of carbon ten times, just because 10 different people some way can lay claim to that. And we're trying not to get in a position where we've laid out ambitions that we don't believe are realistic and deliverable. We'll continue to say more about that.

Your second question, I guess, was about partnerships, joint ventures, and one of the attributes of our company that I'm really proud of is partnering. It's been in our vision forever to be, you know, most respected for people, partnership, and performance. We work hard on partnering and Jeff talked about it in his remarks that we have a long history around the world in all different kinds of circumstances, of working well with partners to deliver value. Sometimes these partners are governments. Sometimes there are others in our industry. Sometimes there are people in other industries and we really do have a culture of finding mutually beneficial outcomes. And I think this business will be especially dependent upon that because we're talking about new technologies, we're talking about new value chains, and we're talking about everybody being part of making progress on this big issue.

And so I think that the opportunity for us to attract more capital into projects, into various sectors, and figure out which partners are going to carry, which piece of these things is something that we are well-positioned to do. Carbon capture and storage, as Jeff said, these big hubs, you're going to have lots of players involved in emitters, lots of people that have storage capacity, midstream infrastructure players, et cetera, and putting those together will be complex, but it's no more complex than putting together a big LNG project a project in Kazakhstan. It's just you're moving a different commodity and ultimately creating a different, you know, meeting a different market need. So I think that's an area that we can leverage a lot of our history and a lot of our strengths to really make progress here. Okay. Let's go to Roger Read from Wells Fargo.

Roger Read:
(Wells Fargo)

Yeah. Hey, good morning. And thanks for everything. Hopefully you can hear me all right. I think I had a little tropical storm Nicholas power drop and disconnection earlier.

Mike Wirth:

I hope you're staying dry.

Roger Read:

Yeah. Yeah. We're good. Thanks. I know we just blinked off. Anyway, my quick question is to get kind of back to the earnings, the cash flow potential here and there are so many moving parts, right? There's policy, there's customer demand for some of these products. And I believe Mike, you mentioned earlier, you know, the challenge of what are they willing to pay for versus what they're asking for.



So as you step back, look over the next 5 to 10 years as this rolls out, do you feel that we're going to see this more policy driven, meaning, you know, in some regions, a carbon tax, you know, here in the U.S. for example, the 45Q for CCUS and all that tax credit, or do you think it's going to come from essentially the retail customer demanding that companies provide a lower carbon product? And therefore they're going to say to you, you know, whether it's food or clothing or whatever, we're willing to pay X amount more for, you know the energy we're buying from you in order to achieve that? I'm just curious how you see that, and maybe how that flows into the expectations for earnings and cash flow from these ventures.

Mike Wirth:

Sure Roger. So look, government policy plays a role, no doubt that's widely accepted. And as Jeff said, where we see a policy in place, it accelerates investment. And that's the intent of the policy is to incentivize investment.

But we're not just relying on policy support here. We intend to leverage our strengths, which our capabilities, our assets, our customer relationships, to be a leader in advancing a lower carbon future. And, you know, the pace is picking up, the direction is clear. And we want to be part of making it happen.

You know, we're certainly focused to a significant degree on California, where there's a lot of policy support. It also happens to be our home. But other areas like the U.S. Gulf Coast, parts of Asia, where we've got leading businesses, big assets, deep relationships ... we can help influence policy ... we can help influence market development. And ultimately, these are the things that enable scale, they enable technology, they enable cost reduction, and ultimately customer acceptance.

And I do think that customer acceptance is an issue we're going to have to continue to have a dialogue about. The business-to-business customer has kind of stepped up to the plate, I would say. And you see not only the pledges and aspirations, but we're seeing it in many of these relationships that we've been announcing where we're working with other business entities to try to put together these new value chains and create lower carbon energy systems that they can rely on for a bigger part of their energy needs.

The question is, does that flow all the way through to the end consumer? Does that result in a higher price for various goods and services that consumers rely on? And, you know, I think that's an important conversation. It doesn't come for free. There are investments that need to be made and ultimately need to be paid out. And I don't think that it gets quite as much airtime as it really deserves.

And over time, if ultimately consumers won't pay for it, I think the business-to-business partners that we're working with are going to struggle to make it all work, which means we may struggle to make it all work. And so, over time, that's going to be an important issue, but look, there's real momentum here now.

There's real policy here. There's real technology here, and they're real businesses. I mean, we're selling renewable natural gas. We're selling renewable diesel fuel today. We're capturing carbon and storing it today. We are moving hydrogen out into the value chain here very shortly into the retail business. But we helped build the hydrogen highway in California, you know, a decade and a half ago, so we've been in that business as well. And we believe that commitment from all of us is what it's going to take to advance these forward.



Okay, we've got a little bit of time left. I'm going to go to Jon Rigby, and I'll shorten up my answers to see if we can get to a few more.

Jon Rigby:
(UBS)

Thanks, Mike. Yeah, two questions. Can I just... first talk about your E&P portfolio? I was struck by the map that you provided that shows the energy intensity by various regions or by projects. And it raises two questions in my mind. One is how much can you bend the sort of emissions curve of your project portfolio by the projects that you choose, and therefore, actually shape the portfolio? And how do you balance rates of return, economics, and emissions in that profile? And then just as a side question on that, Australia LNG shows up on a scope 1, scope 2 emissions intensity is actually quite high, but if you were to look at your emissions on a scope 3 as well, it would end up being quite attractive and quite competitive because clearly the end user's got emissions. So how without a scope 3 target, do you think about that going forward?

And then, sorry, I know you're short of time, but can I just ask one other question? Is this update today, does this effectively rule out your participation in solar or wind, or would you revisit that at some point or other if the opportunities arose or is that now a dead duck?

Mike Wirth:

Okay, so let me try to get through those efficiently. It's interesting, Jon, now, as we sanction projects, part of the discussion is the carbon intensity of the asset. And a few years ago that wasn't necessarily part of the conversation. And when you make it part of your FID criteria, guess what? Your project development teams find ways to reduce carbon intensity. And as Bruce gave a number of examples, we actually see better economic outcomes, because we're reducing the count of equipment. We're reducing the footprint of some of our facilities. We're ensuring that we're using the resource even more efficiently.

And so, as we seek lower carbon, we're actually finding that there are economic benefits that often play into projects. And sometimes there are tradeoffs, and there's a point at which, just like any other design parameter, you reach a point of diminishing returns, but there's an active consideration of that in every one of our upstream investment decisions.

On the question of Australia, you're right, those are remote facilities that generate a lot of power because you've got a lot of compression required, and so that power generation right now is natural gas, and so they have a higher carbon intensity than some of our other facilities that don't have that same power demand.

Over time, we're going to look for ways to address that. And we may not have said it specifically, but we're looking at renewables as part of the power equation in Australia LNG, and seeing how that may change things. We sequester CO₂ at Gorgon right now, are there ways to leverage that with some of the combustion emissions, all of these things are being reviewed and over time, I think you'll see us look for ways to address them.

And I'll just take the scope 3 question and say, when we update our climate report here in the fourth quarter [2021] we will address scope 3, and I think you'll see you, you make a really important point that a good way to look at things is scope 1, 2 and 3, because there are tradeoffs among them at times and the real goal is to get them all down and find a pathway to lower emissions in aggregate. And we'll say more about that when we release the report.



Finally, on solar and wind, I would say that for the foreseeable future, unless it enables our operations, and that could be green hydrogen, that could be the reducing the carbon footprint of an existing asset to the topic we're just talking about, I think that's where you're going to see solar and wind in our portfolio. As a merchant developer, there are just plenty of people doing that, it's a crowded space, we don't bring much to it, and I don't think you'll see us venture into that, we've just got better places to [use] our people and [spend] our capital. Okay, Sam Margolin, we're going to sneak you in just under the wire from Wolfe Research, last question.

Sam Margolin:
(Wolfe Research)

Appreciate it, thank you. Question's on, so it's sort of a follow up on the upstream project selection question and the unit intensity of emissions. The Permian's a real benefit to you on that metric, very favorable unit emissions intensity, but the tension is that it's not supported, it's not always supported domestically under various political regimes. So is that something that's influencing your mix in the Permian? How do you see yourself sort of advancing the Permian number, battling the tension between favorable unit intensity, but sort of uncertainty around the local regulatory regime? And I'll leave it there.

Mike Wirth:

Yeah, thanks Sam. We've really kind of only had two administrations so far as our Permian business has been growing, maybe you can argue it began under a third. But like most of our long lived assets, it will produce for many, many, many administrations. And we've got a history of working with administrations from both sides of the aisle to meet environmental, economic, and energy security policies. And look, the Permian is a really important asset to the country and it's an important asset to our company. It's a low carbon intensity asset today and it can be a lower carbon intensity asset in the future.

Bruce talked about how we're bringing renewables into, you know, greater supply for our drilling and completion needs, our ongoing facility needs. And, the example he cited from the DJ Basin in Colorado of advanced facility design can come in and create even further contributions. So, from an energy security standpoint, domestic investment standpoint, employment standpoint, the Permian is a great asset for the United States. And there are ways for us to continue to bring the carbon intensity of that production down even further.

And so, I think any administration that we work with is going to look at that in totality, as opposed to in isolation. And, I think we've got a pathway to a really bright future. It's a great asset for us in an energy transition it's got flexible capital, it's got the ability to bring the carbon intensity down, and it's a very, very large resource. I think it's a tremendous asset, as I said, both for the country and the company.

Okay, we're running right up against the wire. I want to thank everybody for your time today. I want to thank you for the questions. We'll continue to engage with you on subjects related to energy transition. We're absolutely committed to delivering high returns to our shareholders, absolutely committed on delivering lower carbon as a part of that, and delivering a business that creates value for shareholders, both in the short term and enduring into the long term in a lower carbon future. We've got a strong portfolio. We've got the capabilities, the assets, and the customer relationships to do that long into the future. So, thank you very much for joining us today and I look forward to seeing you all soon.