

# **Imperial Oil 2022 Investor Day**

Thursday March 10<sup>th</sup>, 2022

## Welcome & Cautionary Statement

### **Dave Hughes – Vice President Investor Relations**

Good morning, everybody, and welcome to our 2022 Investor Day. I'm Dave Hughes with the Investor Relations team here at Imperial. And I'd like to thank you for joining our webcast this morning.

I'm joined today by our management team, and you're going to have an opportunity to hear from each of them throughout the morning. And we're coming to you from our office at Quarry Park in Calgary.

One item I have, housekeeping, before we get started. I want to draw your attention to the cautionary statement, which is at the end of the presentation materials, which were posted to our website earlier this morning. They contain some important information regarding forward-looking statements, reserves, resources, risks and uncertainties, and today's comments also include reference to non-GAAP financial measures. The definitions and reconciliations of those measures can also be found in the supplemental information section following the cautionary statement. And would highly recommend you have a look at that at your convenience.

So now let me turn to the agenda. In a minute, Brad Corson, Chairman, President and CEO, is going to come up and offer some opening remarks. After Brad, Sherri Evers, our Vice President of Commercial and Corporate Development, is going to talk to you about Imperial and our efforts in the area of sustainability and environmental, social and governance, or ESG.

After Sherri, Simon Younger, Senior Vice President of the Upstream, is going to give you an update on our Upstream business. We're then going to take a short 10-minute break, after which Jon Wetmore, Vice President of our Downstream business is going to give you a review of our Downstream and Chemicals businesses.

Following John, Dan Lyons, the Chief Financial Officer, is going to provide a financial update, and then Brad is going to rejoin us for some closing remarks. We have a Q&A session after Brad's final remarks. I would ask at that time that you limit yourselves to 1 question plus a follow-up so that we can get in as many questions as possible in the allotted time. And of course, if by any chance we can't get to all the questions, we will certainly follow up with any we don't manage to get to.

So with that, I will pass it over to Brad Corson.

## Opening Remarks

### **Brad Corson – Chairman, President & CEO**

Well, good morning, everyone, and it's great to be with you today. It's my pleasure to add my warm welcome to you for our 2022 Investor Day and also to express my sincere appreciation for your ongoing interest in Imperial.

While we were certainly hoping to be meeting in-person today, unfortunately, with the ongoing uncertainties around the pandemic and associated recent lockdowns, we felt it more prudent to move ahead with a virtual event today instead.

However, things do seem to be improving, and I'm very much looking forward to getting out and meeting with you in-person. And hopefully, our next Investor Day will be in-person as well. I just can't wait for that.

I think you'll find we have a very exciting and informative program for you this morning. Once again, we have the full senior management team of Imperial gathered here with me. They will each take you through their segments of the business, and we will all be available for questions at the end of our prepared remarks.

I'd like to kick off the day by reflecting on the past year. 2021 was a great year for Imperial, both operationally and financially. And I'm going to take a couple of minutes to go over a few of the many highlights.

But first, it would be hard to reflect on the past year and not talk about the pandemic. 2021 was still a challenging year from a pandemic perspective. But fortunately, for our business, we saw a significant recovery in commodity prices and product demands as restrictions began to ease both in conjunction with higher rates of vaccination and ongoing mobility.

And through our actions in 2020 things such as reducing our cost structure, improving our reliability and progressing high-return brownfield projects, we were well positioned to take advantage of the recovery that emerged in 2021. Our operational performance was nothing short of outstanding.

We set a number of records at our assets. Our Upstream delivered its highest annual production in over 30 years with numerous production records being set at Kearl. You heard me talk about those on many of the earnings calls.

Our Downstream finished the year at 97% utilization in the fourth quarter. Wow, what a change. And our Chemicals business delivered its highest full year earnings in over 30 years. All of these records underpinned by our relentless focus on reliable operations. So the combination of recovering demand, the business improvements we made in 2020, our high-return capital investments and strong operations drove outstanding financial performance in 2021.

We generated cash flow from operations of around \$5.5 billion with free cash flow of around \$4.5 billion, and we continued our relentless focus on costs realizing over \$1 billion in efficiencies since the beginning of the pandemic.

It was these strong financial results that allowed us to return an all-time high of nearly \$3 billion to

shareholders via dividends and share buybacks, while still growing our cash balance significantly.

In April of 2021, we announced a dividend increase of 24%, which at that time was the largest dividend increase in our history. And I say, at that time, because on February 1 of this year, we announced a further 26% dividend increase, making that the largest in our history.

On the sustainability front, you've heard me say before that Imperial is highly committed to providing energy solutions in a way that helps protect people, the environment and the communities where we operate. This includes doing our part to address the risk of climate change. In 2021, we made substantial progress towards advancing low-carbon solutions. The year saw the launch of the Oil Sands Pathways to Net Zero alliance. Imperial is proud to be a founding member of this unprecedented alliance that is committed to working with our federal and provincial government counterparts with a goal to achieve Net Zero Greenhouse Gas Emissions from Oil Sands operations by 2050.

We also made 2 other significant sustainability-related announcements in the past year. First, we announced our intention to invest in a world-class renewable diesel manufacturing facility at our Strathcona refinery, providing Canada with a large new domestic source of renewable fuel to help reduce Scope 3 emissions. And second, we announced a new greenhouse gas intensity reduction target of 30% by 2030 versus 2016.

Along the way, our focus on safety has not wavered. Through 2021, the pandemic continued to present challenges in managing the health and safety of our workforce. However, the robust processes we put in place allowed us to successfully respond to the changing conditions and ensured the continued well-being of our workforce while maintaining reliable operations and minimizing disruptions. This focus was and is a key part of our continued strong personnel and process safety performance.

I am incredibly proud of what the organization was able to accomplish in 2021. And I believe those accomplishments provide a very, very strong foundation for continued success going forward. So now let's talk about some of the themes you'll hear about today.

First of all, resilience. Our integrated business model is a powerful source of differentiation for us. And it helps to insulate our financial performance from the volatility associated with commodity markets. Our Downstream business is a significant source of free cash flow and a significant contributor to our low corporate breakevens. Finally, our balance sheet remains rock solid and provides us with flexibility to take advantage of opportunities should they arise.

Secondly, we have a lot more value to create through optimization of our existing assets, and this remains core to our strategy. For example, in the Upstream alone, we're growing volumes at Kearl in a very capital-efficient manner and we have more to do there.

We're also transforming our Cold Lake operation as we accelerate the use of greenhouse gas advantaged in-situ technologies. And we expect to capture synergies at Syncrude from the change to an

owner-operated model. So a lot of value accretive opportunities within our existing core Upstream assets, and you'll hear more about that this morning.

Our focus on costs and reliability across these entire portfolio including the Downstream is also creating value for our shareholders via stronger cash-generating capabilities.

Third, in the area of technology and innovation, we're rapidly expanding our industry-leading portfolio of digital opportunities, which helped to reduce costs and improve recovery in our operations.

Our research and development efforts both in Calgary and in Sarnia, support development and deployment of technology and solutions that support our operations, our emission reduction goals and help us to meet the needs of our customers.

And finally, you will hear a lot more today about our focus on a lower carbon future, including our journey towards emissions reductions and Net Zero in our Oil Sands operations by 2050. I have said before that we believe Canada should be seen as a supplier of choice when it comes to the world's energy needs. We should be proud of what our industry has done and is doing with respect to responsible development. It's quite frankly, unparalleled anywhere else in the world. Imperial is very much a part of this, and we'll talk more about how we are engaged in these efforts.

So what does all this add up to? Simply said, value creation and shareholder returns. Imperial has a long track record of providing a reliable and growing dividend and we've demonstrated our commitment to return excess cash to shareholders via share buybacks over time as well.

And with our strong balance sheet, our business plans and with commodity fundamentals improving further, we expect to be in a position to continue returning substantial amounts of cash to our shareholders.

Switching gears, I'd now like to take a couple of minutes and talk a bit about the overall global energy landscape. 2021 was an interesting year with respect to a number of global supply and demand challenges. And we don't expect that to change in 2022. For some time now, we have seen a declining rate of industry capital investment, which has been further exacerbated during the pandemic. This underinvestment is also being impacted by other factors, such as infrastructure availability and the uncertain and changing landscape around energy transition. And with the market tightening up, geopolitical events are having a material influence on prices again.

The current tragic situation in the Ukraine and resulting sanctions on Russian energy has further stressed global supplies. Given all of this, we expect another strong year of crude and product pricing in 2022 and potentially beyond, if supply remains challenged. And this is all in an environment of increasing demands.

While we certainly experience significant demand destruction at the onset of the pandemic, global

energy demand is quite robust now and is very nearly returned to pre-pandemic levels. This is despite the challenges that new variants pose as society has become more and more resilient. This has added up to a fairly steady decline in global inventories, which are currently tracking below the 5-year average with no signs of improving.

For Imperial, our low corporate cash breakeven in the mid-20s on a U.S. dollar basis allows us to be profitable even at low prices. But certainly, at today's prices, we can generate a lot of cash and grow our returns to shareholders. The priority we have been putting on our existing assets has put us in an enviable position to take advantage of both the demand recovery and the strong commodity price environment.

We saw this in 2021, and we expect it to continue as we go forward this year. As we look to the future, demand for energy in all forms will continue to grow. The world's population is expected to continue to grow through 2050. And with this growth comes the need for more energy. In addition, while in the developed world, we are seeing technology help improve energy efficiency.

In other parts of the world, the pursuit of improved standards of living is driving increased per capita energy usage. And as the global energy supply evolves to meet this increasing demand, we expect to see growth in natural gas as well as other lower emission energy sources. These trends are expected to vary by sector. Liquids fuel demand is driven primarily by transportation and chemicals, both of which are expected to grow.

Commercial transportation is driven by economic activity, and we see personal vehicle ownership growing as standards of living continue to improve. And as standards of living improve, the demand for air travel is also expected to rise. With respect to chemicals, demand is driven by consumer preferences. Chemicals form the basis for so many products we all use today. You might immediately think of plastics, but don't forget about textiles, cosmetics, fertilizers and many more products that we all rely on every day.

As demand for energy grows, we also expect to see a shift to lower carbon fuels as the world works towards achieving the goals of the Paris Accord. Natural gas is expected to grow significantly as our renewables and nuclear. And though we expect to see growth in overall demand, that growth should be tempered somewhat by advances in technologies that drive energy efficiency.

Clearly, there are many possible scenarios around the future energy mix, but one thing sure seems certain, they all continue to require oil and gas to a large extent. And to ensure there are sufficient supplies of oil and gas, significant future investment is required. And while there is a lot of uncertainty around the transition timing and how it may take place, we need to remain flexible to respond, regardless of how it plays out.

So before I pass this over to Sherri to talk in more detail about our environmental, social and governance performance and priorities, I wanted to take just a minute to talk about sustainability. As I just

mentioned, of the many potential energy scenarios out there, the one thing that is quite consistent is that oil and gas is seen as being a key part of the mix for decades to come. And we see Canada as needing to play a large role in providing that future energy demand.

Canada is a world leader in sustainable development with some of the most stringent environmental and regulatory requirements in the world. And our industry in Canada has shown incredible initiative and unprecedented collaboration via the well-established COSIA consortium and more recently, via the pathways to Net Zero alliance.

At Imperial, we are excited to reinforce our commitments to sustainability. We have demonstrated our ability to respond effectively to what the market brings and are confident we will deliver on the challenges facing us with respect to current environmental challenges. And we'll do so while preserving shareholder value. We have aggressive greenhouse gas intensity reduction goals. And most importantly, these goals are underpinned by specific plans to achieve them.

Technology and innovation are key to achieving many of our commitments and goals including economic emissions reductions. Our long history of research and development will continue to serve us well on this journey.

So with that, I'd like to now hand it over to Sherri Evers. Thank you.

### **Environmental, Social & Governance**

#### **Sherri Evers – Vice President Commercial & Corporate Development**

Good morning, and thank you, Brad, for that introduction. I'm really looking forward today to sharing with all of you the significant progress that we've made in the areas of sustainability over this past year. But it's not also what we've accomplished in the past year, it's also the progress we've made on our plans as we look forward in the coming decades, as Brad has just alluded to.

But before I get into talking about the momentum that we've gained in our ESG and sustainability work at Imperial, I first wanted to touch on the overall foundational value of being an integrated oil and gas company in Canada.

As Brad talked about, Canada is a leader in ESG. And one of the reasons that we are a leader in ESG is the geopolitical framework that we have and enjoy in this country. We have a strong human rights record. We have a relatively stable political environment. And we have some of the most stringent but also a cooperative government working with us on the regulatory framework that we work within.

And not only that, we have unparalleled expertise when it comes to carbon management and we are one of the third largest operators of carbon capture utilization and storage capacity in the world today. And our emissions measurement and reporting is also a global leader. When Canada originally signed on

to the Paris Agreement, Imperial, along with many of our other oil and gas counterparts, started to look at what we are going to be able to do to start abating the emissions that we generate through our operations.

But we very quickly came to realize that if we are going to be able to do this to create a greener economy in Canada and do this at the lowest cost to society while ensuring stability and energy supply, that it really was going to take all of us coming together to collaborate with ourselves as industry through the Oil Sands Pathways set to Net Zero alliance and working with the government, working with our indigenous communities and working with clean tech firms and academic institutions in order to achieve this very lofty goal.

You see the challenge that we have facing our industry today is really bigger than any one of us can accomplish on our own. And by pooling together our talents and our resources and working to develop that new and innovative technology, we can continue to see Canada remain firmly at the top of the ESG spectrum, but also become a leader in terms of climate change.

Canada has lofty goals to achieve net zero by 2050. And then through this collaboration that we have and in working with government, we believe that we can set the appropriate fiscal and regulatory policies that will enable that rapid deployment of technology advancements that are going to be required to meet those goals of achieving reliable and sustainable, low-cost energy to Canadians and to the world.

So now I'd like to focus a little bit more on Imperial sustainability priorities. Our sustainability report outlines significant detail about what we're doing overall in this space, but I wanted to highlight 4 strategic areas in our sustainability priorities. The first is around climate. I don't think you can go anywhere these days without thinking about climate change and the impacts that will have on oil and gas and how we work to not only to manage the energy transition or as I like to say, energy transformation and developing those pathways that will allow us to achieve that Net Zero future.

Any business in Canada will also tell you the importance of indigenous reconciliation. It's extremely important for us to continue to work and collaborate with our indigenous communities and work to understand what are the priorities that we can work on together. How even we ensure that we have a strong economic performance and measurement and create a social framework that allows them to have societal economic benefits and create generational wealth that we know is extremely important to them.

Imperial has been around for more than 140 years, and we didn't get to this stage without our people. The commitment, the resilience and the innovation that they bring every day is only further enabled by ensuring that we can create an inclusive workplace where everybody feels that their diverse opinions and ideas are going to be valued and respected. And if you can create an environment where people can bring their best selves to work every single day, we know that we are going to be able to empower our workforce to create solutions for the challenges of today and the opportunities for tomorrow.

Imperial will continue to have a strong commitment towards environmental performance, particularly, around protecting our water resources. Canada is extremely fortunate to have some of the most water resources in anyone in the world, and it's important that we continue to do our efforts to protect that base. And included with that is also continuing to ensure we can preserve the biodiversity in all the areas where we operate.

So strategic investment into areas that will have meaningful investment impact to the environment, the social and governance continues to be a key priority while continuing to ensure that we can deliver strong financial performance for our shareholders.

So if I can get into a little bit more detail around our progress. I'm exceptionally proud. I don't think that I can say at any point in my career with Imperial that I have seen as much progress and momentum around ESG, as I have in the last 12 months. The entire organization has been extremely focused on creating and moving the needle. And while I won't talk about all of these throughout the course of today, many of us will touch on a number of these opportunities, but really, the key thing I want you to take away is the momentum that we are building and gaining in the space towards ESG and certainly in our climate efforts.

And we expect this to really just be the start. You'll see, as we talk throughout the day, not only what we've accomplished but the plans that we've set as we look forward. But just to hit on a few examples, when we talk about climate, certainly, one of the biggest focus areas is reducing the emissions intensity in our operations. And we are well on our way to delivering our 10% reduction in 2023 versus 2016 levels.

And a couple of the key areas that we've been working on are technologies in our Cold Lake region. The first is liquid addition to steam for enhanced recovery and the second is non-condensable gas. Both of these technologies are adding light hydrocarbons to steam to enable to get enhanced bitumen recovery.

If I move over to our Downstream. As Brad mentioned earlier, we're extremely proud to have announced the first and the largest the largest renewable diesel production facility at our Strathcona refinery. And this opportunity has the opportunity to reduce emissions in commercial transportation by 3 million tons per year.

And as Brad also mentioned, we've recently established our new targets for emissions reductions intensity out to 2030 with a 30% reduction planned by 2030 versus 2016 levels. But it's not just in the areas of climate and emissions reductions where we've been placing our focus. We continue to have a strong commitment to our indigenous business development. And in 2021, we achieved our highest level of indigenous spend reaching now over \$3.3 billion since 2008 into helping develop and prosper indigenous communities.

We're also a member of the Canadian Council for Aboriginal Business. And through that council, we have

the opportunity to achieve certification through the progressive aboriginal relations. And through a very rigorous process and through all the excellent work that our teams are doing around increasing our understanding around indigenous reconciliation and creating economic benefit and development in our indigenous communities, we're very proud to have received the silver-level of PAR certification, and we continue to look forward to growing our status within that certification in the years to come.

Turning to our people. Again, as I mentioned earlier, we are working on how we can build out a more robust progress in inclusion and diversity. And that includes involving our employee resource groups as we work to create a more sustainable and inclusive culture and work environment for the company.

I'm exceptionally proud of what we've accomplished in this space and again, look very much forward to what we can accomplish in the years to come. Of course, foundational to all of the ESG progress that we've made is a robust governance structure and a very committed leadership team and an engaged Board of Directors.

The ESG management is embedded in all levels of our organization, as you can see. And a couple of new areas of focus in the last year have been around climate. We've created a Climate Council that works across all parts of our organization, including our Upstream, our Downstream and Chemicals organizations. And we have multifunction teams that are working on developing the pathways and road maps that will allow us to achieve our long-term emissions goals, while at the same time, protecting our strategic initiatives and delivering shareholder returns.

Following that similar vein, we've created an Inclusion and Diversity Council. And again, that group is focused on sharing best practices and driving ownership through every level of the organization towards creating that more inclusive and diverse workforce that will really work to empower our people and allow them to bring their best to work every day.

New, this year, we also engaged Ernst & Young to complete an extensive assessment of our ESG framework. We worked with investors, we worked with our customers to understand what are the risks facing our business and what are the opportunities for Imperial Oil. And this has really helped us frame out our ESG strategies as well as our effective risk management as we move forward.

I talked about the importance of indigenous reconciliation and our journey continues as we look to progress our own understanding and learning and growth that is required. In the last year, we've made it a priority to create a safe place for our employees to learn, engage and understand what indigenous reconciliation means and where there are opportunities for us to further engage from a business perspective, with the indigenous communities where we are operating.

We launched a new and expanded training program that included computer-based training as well as in-person learning with a focus on the residential school experience. And I can say that in 2021, we had the highest level of participation through our employee groups into this expanding training program. And we've been able to leverage that into external volunteering, opportunities as well as community

engagement and participation across the country.

New for us this year as well is an executive-led indigenous recruitment and retention working group. And the focus of this group, again, across multiple disciplines is to focus on how we can attract indigenous talent to our organizations and work on developing and furthering their careers within the company.

And finally, we have not relented on our focus on creating business development and working towards creating economic benefit for our communities. And as I mentioned previously, we've reached record level spend in 2021 working with indigenous businesses in terms of helping them grow the financial prosperity in their own communities.

And we saw our largest indigenous business operations contract awarded at Kearl this year, and we're exceptionally proud of that. And our efforts are not being recognized only externally, as I mentioned, through our PAR certification. But we've also been invited to join a working team with the government of Canada as they look to increase their indigenous procurement to 5% across the country. And we've been the only oil and gas company that was invited to participate in those efforts. And so we're exceptionally proud to be part of that working group.

So let me now switch gears to climate. This is certainly, I think, the most pressing challenge or one of the most pressing challenges of our times. And I recently attended an industry conference, and somebody had equated that the work that we have to do in the next 28 years to get to a Net Zero 2050 future, is equivalent to what the Industrial Revolution achieved in its time.

So we certainly have much less time and significant efforts to achieve over the next 28 years. And the real critical thing here is to be able to create an environment where people have access. Every person has access to reliable and secure energy at a low and affordable cost. At the same time, we need to be able to accelerate aggressively to achieve the goals that Canada has set out as well as the Paris Agreement.

And this is going to take a strong amount of patience. It's going to take collaboration, collaboration with our partners, collaboration with all levels of policymakers, with indigenous communities, with clean tech firms and academic institutions. Every reputable energy outlook, and Brad mentioned this in his opening remarks as well, suggest that oil and gas will continue to make up a material part of the energy needs for the future, particularly, if we want to have a stable and reliable path to energy as we move forward.

Our corporate strategy focuses on 4 areas: the first is advancing climate solutions in our operations. The second is around providing lower life cycle emission products for our customers. And as I mentioned, this can't be done without finding those solutions and collaborating with partners and policymakers to make this happen, if we're going to work to achieve society's goals to achieve Net Zero by 2050.

And of course, the way to do that is through transformational technology. We need to evaluate, deploy

and develop the transformational technologies. And the good news is that our industry has over 100 years of experience, a strong track record of developing and deploying new technologies.

So let's take a little bit closer look at the various opportunities we have in these spaces across the short, medium and long term. And both Simon Younger and Jon Wetmore, will talk more fully about some of these opportunities in their segments.

So as you can see, there are multiple pathways towards reducing emissions with a range of possible scenarios. What we're looking at here is opportunities in renewable opportunities, renewable fuels, next-generation solvent-based activities and technologies and, of course, well tested and true carbon management technologies like carbon capture and storage.

So I talked earlier about some of the short-term opportunities in Cold Lake with the LASER technology of the liquid edition to steam for enhanced recovery and non-condensable gas. But if I looked further up the road to Kearn, we're also working to create significant opportunities as well.

We've commissioned our first full-scale boiler flue gas unit in Alberta's Oil Sands, and we were awarded an Alberta government grant to deploy an additional 5 waste heat recovery units to be installed on the 5 boilers at Kearn.

These 6 units have the opportunity to reduce 220,000 tons of greenhouse gas emissions, which is the equivalent of saving energy in 26,000 homes in a single year. And it's also creating progress around reusing up to 700,000 metric cubes of condensed water per year.

If we're looking to the right-hand side of the chart at the short-term customer solutions, we're investing and expanding our advanced fuels and lubricants and our biofuel and renewable blending fuels capabilities. We've also recently completed some co-processing opportunities at our Sarnia and Nanticoke refineries taking agricultural feedstocks and mixing that with conventional feeds to create a co-processed fuel with lower emissions. And we're also working with ExxonMobil around evaluating opportunities at Sarnia to take waste plastic as a feedstock through advanced recycling at our Sarnia refinery.

Further, Brad and myself have talked about our participation with the Oil Sands alliance and we're deeply engaged in policy discussions with both the Alberta and the Canadian government around how we can create the right fiscal frameworks and economic support to see these opportunities come to fruition, especially in the next decade.

In the medium term, we're assessing carbon capture and storage opportunities across our facilities, evaluating as well further opportunities for renewable fuels into our operations to support emissions reductions at our assets.

For our customers, we're evaluating new product opportunities, and we certainly see opportunities in

sustainable aviation fuel. It's one of the areas today where we don't have a long-term solution and sustainable aviation fuel is a way to meet that growing jet demand as we look forward.

When we look at game-changing technologies, certainly, Imperial's focus on creating low emission opportunities has been paramount. Our cyclic solvent process, which replace the steam with propane, reducing the energy requirements and water use is expected to lower greenhouse gas intensity emissions by 90% as well as reduce the water usage.

And we started piloting this technology at Cold Lake facility in 2014. And one of the things we're very optimistic about is that, if we couple that with a modest amount of carbon capture and storage at Cold Lake, you could actually see incremental barrels being produced with net zero emissions.

Moving to the long term. We're certainly evaluating a greater integration of hydrogen at our operations and evaluating the applications for customers as well. We're also exploring greenhouse gas emitting energy and power sources, including small modular reactors to provide heat and power from nuclear fission. Our relationship with ExxonMobil also adds significant benefit as we can leverage their more than 30 years of experience and leadership in carbon capture and storage.

The company continues to also collaborate on carbon capture and storage technologies, including carbonate fuel cell technology as well as direct air capture for the longer term.

And lastly, there is a concept of bitumen beyond combustion. Diversifying and producing non-combustible products from our Oil Sands presents a significant opportunity to reduce greenhouse gas emissions while garnering an economic advantage. And our own Sarnia research facility is looking at opportunities of creating feedstock for carbon fiber produced with a competitive advantage.

So hopefully, you can see a series of plans that we've outlined, really look to drive Imperial towards both the short, medium and long-term goals that we have to reduce emissions in our operations. But more specifically into our oil sands facilities where we see some of our highest emissions today.

We approach these opportunities with measurable objectives and very specific plans to be able to achieve them. We're on track to meet our greenhouse gas intensity target of a 10% reduction by 2023 versus 2016 levels, building on the already 20% reduction from 2013 to 2016. And through the plans that I've outlined this morning, these form the framework for us to work towards achieving the new goal that we've set earlier this year, which is a 30% reduction in our greenhouse gas intensity by 2030 versus 2016 levels.

And we're continuing to build the road maps and the framework to achieve Net Zero in our Oil Sands operations by 2050. And while much work has been done on the Upstream part of our business, we are also working diligently on our Downstream business to build out those road maps as well to 2050.

I'd like to take an opportunity to just talk about a couple of additional items around what we're doing to

focus on our assets, our customers and our longer-term plans. Carbon capture and storage is certainly one of the proven technologies to help decarbonize energy-intensive industries. But it's a complex undertaking, and it requires a significant amount of investment, expertise and collaboration.

The good news is those are things that we have in spades and strength, both in the Alberta industry, but also in Imperial. Extensive knowledge of subsurface and reservoir management is key, and oil and gas companies have some of the strongest resources and assets to understand those complexities. Alberta also has a very established and proven geology for carbon storage. The Basal Cambrian where Cold Lake is sitting today is one of the key areas for long-term safe storage of CO<sub>2</sub>.

And in joining the Pathways, we're looking at those opportunities to collect the carbon from the assets and from the more than 20 assets between Fort McMurray and Cold Lake to inject into a common infrastructure CO<sub>2</sub> pipeline and collect that CO<sub>2</sub> into the storage hub in the Cold Lake area. And so we're certainly working to develop those opportunities for Imperial to be able to create the appropriate scale and do this all at the most affordable cost to ensure we can provide that low-cost energy to society.

We're also looking at expanding the use of carbon capture in our Downstream as well that could help to support emissions reduction opportunities into the future. And our recently announced plans for the renewable diesel manufacturer at Strathcona refinery will also source low carbon hydrogen that is produced with carbon capture and storage to reduce the carbon intensity of our fuel being offered. So you can see the opportunity for carbon capture and storage across the integrated value chain.

Let's now talk about how we're working to help our customers reduce their emissions by advancing the development of low-carbon solutions. And John will talk more about this in his segment, but I wanted to touch on the strategic approach.

Electrification is certainly front and foremost on everyone's mind. But electrification of vehicles doesn't necessarily meet all needs, especially when you start looking at different applications particularly into long-haul transport or heavy duty. And biofuel is quickly becoming probably the most attainable, quickest solution but also provides opportunities for the long term. And you can see that the demand for biofuels is growing exponentially out over the next 10 years.

Additionally, the other area of growth is for jet. While it needs to still recover from pandemic lows, you can see that there's a significant opportunity as well for jet. And with Imperial supplying 7 airports across the country and our 34% market share, looking at opportunities to create sustainable aviation fuel certainly becomes important. But we're also focused on producing advanced fuels to improve fuel efficiency through products like our Synergy Supreme and our Diesel Efficient but also growing our biofuel blending and distribution capabilities across the country and piloting those agricultural feedstocks to produce co-processed commercial fuels.

Now just to talk a little bit further about the investment that we're making into our Strathcona refinery with the renewable diesel production. Again, this is something we're exceptionally proud of, and it's

because it's designed to create meaningful reductions in emissions, but it is also a very impactful investment. And the reason that it's going to create value for our shareholders is that, it provides a low carbon intensity option for our customers, particularly in the heavier segments, where there isn't a clear answer, as I mentioned before, about electrification. And today, traditional biofuels do not necessarily have the operability to be successful in the Canadian climate.

This drop in premium fuel allows performance of heavy-duty equipment and commercial transportation to operate at the same levels as if they're running a more conventional diesel product. So it creates significant value by ensuring that we have a solution to our core customer base to provide that opportunity for them to lower their emissions into the future. And as I mentioned, the Strathcona project will reduce greenhouse gas emissions by 3 million tons per year as we look forward and can form in the harshest of Canadian climate in our winters.

We're also looking at opportunities to be able to use this fuel into our own operations, lowering our own greenhouse gas emissions. So I hope over the course of my presentation this morning, you've been able to see that we have a series of opportunities across the value chain to lower our emissions and provide solutions for our customers and keep that momentum going forward.

For all of you that watch and analyze our company know that we don't put plans forward without having specific ways in which we can work to achieve them. The strategic approach we have for our in-situ technology development, our advanced customer offerings through renewable products and sustainable aviation fuel, and our evaluation of emerging energy sources is grounded in expertise and experience.

Our strategy is to leverage this expertise into our integrated business model and our advantaged technologies through the skills and innovation of our people to build that competitive business for the long term. We plan to play a key role in the energy transformation while retaining investment flexibility across a range of opportunities to ensure we can deliver returns and maximize those returns for our investors.

Many people believe that a Net Zero future means a turn away or no fossil fuels, but I believe that Canada and specifically, Imperial, with the plans that we've laid forward, can be the provider and supplier of choice for sustainable, reliable, socially responsible produced energy to supply to those Canadians and to the world.

So I want to thank you for your time today, and I'd like to turn it over to Simon Younger, our Senior Vice President of Upstream to talk about the Upstream business. Thank you.

### **Upstream Outlook**

**Simon Younger – Senior Vice President, Upstream**

Well, thank you very much, Sherri, and good morning, everybody. It's my pleasure to be with you this

morning, providing an overview of our Upstream assets and strategies. And it's a real honor for me to once again represent Imperial's Upstream and its many wonderfully talented and dedicated people. So I'm going to start at an overall level. We'll talk about some of the success that we achieved in 2021, including some key parameters like volumes and unit costs. Then I'll discuss our outlooks, including our capital plan, that will be followed by our asset-specific strategies and outlooks. Along the way, we'll look at our expanding portfolio of digital and how we're deploying new technologies to improve our performance. And throughout, I hope you'll get a real sense of the priority we are placing on improving our greenhouse gas intensity. Of course, we've been working this for many years, but I think you'll see that we're accelerating our plans.

So with that, let's get started on the Upstream. So just a quick reminder of our Upstream strategy, which is to be the best-in-class producer, maximizing value from the assets we have, while we position the business to compete in a lower carbon future.

One of our key advantages is our long-life, low-decline assets that offer decades of cash flow potential, enabling a focus on continuous improvement technology and innovation, which in turn supports our strategy of targeting industry-leading unit cost and reliability. The capital discipline is key to our strategy also, and I think you'll see that clearly in the upcoming slides, we're pursuing only select capital-efficient projects that create long-term value. We've got many compelling opportunities that grow and sustain our volumes as well as profitably lowering emissions.

Another key part of the strategy is the enormous potential we see in digital and research. Our digital portfolio continues to grow and our research and development efforts are enabling transformation at Cold Lake and further upside at Kearl.

The photo you see on this slide is of the Mahkeses LASER project start-up from early 2021. We'll talk more about this later, but it's part of the greenhouse gas intensity reduction journey at Cold Lake.

And finally and most importantly, in everything we do, we continue to pursue excellence through safe, responsible operations.

So as Brad discussed at the outset, 2021 was a very strong year for our business overall and certainly Upstream played a significant role in that, as you can see here, with sustainment of the gains made in 2020. I'll speak to the numbers in the table in a moment, but at first, bears highlighting that the team delivered a very successful year while managing COVID and maintaining priority on safe operations. We also maintained our capital discipline and focus on cost amidst the strengthening commodity price environment. Now looking at the table.

On the left, I'd like to draw your eye to the 3 green arrows which highlight some trends that are within our control. We're showing results for 2021 and comparing them to 2019, which, of course, was a much more normal year than was 2020. At the top, you'll see we raised production by 8% or over 30 koebd which, as Brad mentioned, was a record for the Upstream.

Next, while our total cash costs in absolute dollars were up around 5%, our unit costs were down 3%. But what I'm really most proud of is the unit cost, excluding energy, which is down 10% over the same time period. Also, you can see on the table that our greenhouse gas intensity fell by about 12% in 2021.

We also made great progress on GHG advantaged projects such as Mahkeses LASER which has already been mentioned and the Kearl boiler flue gas. And we remain on track with our intensity reduction targets. I'll share more background on some of the key GHG projects throughout the presentation this morning.

This chart emphasizes our high-quality, long life, stable production base with low decline. Production is predominantly represented by our core oil sands assets, Kearl and Cold Lake, and of course, our nonoperated ownership in Syncrude, all of which have low sustaining capital requirements.

Underpinning our production profile is a large reserve space. At year-end 2021, proved and probable reserves stand at approximately 4.3 billion barrels, supporting decades of remaining life. This year, we expect production to average between 425,000 to 440,000 oil equivalent barrels per day and I'd certainly expect growth versus the 428,000 delivered in 2021.

This outlook includes Kearl at around 265 to 270 kbd gross and Cold Lake at around 135 to 140 kbd. Speaking of Kearl, we are expecting to see a relatively lower first quarter this year. A typical plan would see us in the range of 220 to 240 kbd in Q1. Although last year, we were well above that with a record-breaking quarter, as you might recall.

With the weather challenges from earlier in the year, we definitely won't be matching last year's Q1, and I'd expect to be around or even a bit below the bottom of that range that I mentioned.

So a bit of a slower start to 2022, but certainly, I have no concerns about delivery of our full year production target at Kearl. You can see in the chart the noticeable impact of improvements of Kearl in 2021, driven by the addition of supplemental crushers and also moving to a single train annual turnaround.

Cold Lake is also performing exceptionally well relative to the outlook we shared at the last Investor Day with a number of base optimization improvements.

Moving on to our cash flow outlook. We have strengthened the Upstream's cash generation versus the outlook we provided at our last Investor Day.

The chart here is based on a \$60 WTI scenario. What you can see is that we now expect to generate more cash than we forecast previously. In fact, about 15% more excluding the additional help from market factors. The bar on the left-hand side represents the prior outlook averaged across the 2021 to '25 period shown at our last Investor Day. And on the right-hand side is the 5 years 2022 to '26.

The improvement is driven predominantly by cost reductions and efficiencies, which have been reduced by a very significant 9% and also higher production, which has grown by 3% versus the prior outlook. The bridge also includes a benefit from market factors such as modeling a \$2 narrowing of the WCS differential, offset by a 4x rate change. And you can see those assumptions noted at the bottom of the chart there.

The combined effect of growing production and reducing costs supported by a pipeline of attractive investment opportunities is to lower the unit cash costs or dollars per barrel of our upstream business. This, in turn, is improving our resilience to lower prices. Over this window that I'm showing, our average unit cost has decreased by around \$3 per barrel versus the prior outlook.

On the flip side, of course, our portfolio has significant leverage to higher oil prices, being predominantly liquids, unhedged and bitumen based. Based on this improvement, we are confident that our strategy is really delivering results.

Next, just to give you a bit of an overview of our investment outlook for Upstream. The key message I want to leave you with is that beyond our sustaining capital needs, we're investing for value through select and GHG advantaged growth. On the chart, sustaining capital is represented by the blue bars, and GHG advantage growth is represented in green. The red diamonds show the outlook that we shared at our last Investor Day for the years 2022 to '24.

And as you can see, we are down a bit from that outlook, really just reflecting plan updates as we continue to refine and focus on capital efficiency within the planned activities.

Our sustaining capital requirements remain low. And even as we execute on several large mining projects with a 5-year average of around \$5 per barrel. Some of the key sustaining investments in the outlook include the Kearl in-pit tailings project, Autonomous Haul at Kearl, the Mildred Lake mine expansion at Syncrude and also Cold Lake infill drilling.

Our GHG-advantaged capital includes things like Cold Lake, Grand Rapids Phase 1, Cold Lake Leming field redevelopment, which is a little bit new, and I'll talk a little bit more on later, Kearl boiler flue gas projects and Kearl's secondary recovery projects. Importantly, these investments support our plan to achieve a 30% reduction in greenhouse gas intensity from our operated oil sands business by 2030 relative to 2016 levels as outlined by Sherri.

Okay. Shifting focus a little bit. I'm really pleased to give you an update on our digital program. We continue to see enormous scope for value creation here. And relative to the last detailed update I gave, we are actually accelerating value with a rapidly growing portfolio of digital opportunities.

At our last update, cumulative value realized was \$150 million. That has now grown to over \$400 million. And our portfolio of defined projects has grown to \$750 million of cumulative annual value

potential by 2026. As you can see on the chart, up from the \$500 million that we shared at the 2020 Investor Day. We also see upside of over \$1 billion, including future potential.

Now these are very large numbers, obviously. As you can see on the slide, though, near-term wins are underpinned by over 30 successful initiatives to date. As a reminder, we evaluate our digital projects under the lens of 3 key principles. They must be capital efficient; they must have a very fast payback and think in terms of months, not years; and the way we deploy the technology must be flexible and integrate with our existing operations.

The implementation of digital technology is spreading across our organizations not just limited to our digital team. Over 50% of the value last year has come from analytics work and to be honest, this is the most exciting focus area for us going forward, and I'll highlight a few of those examples on the next page here.

Starting at the top left with enhanced mine planning. We've leveraged our vast set of plant and mine data to enhance our understanding of our resource and optimize mine plans. This optimization has already supported roughly 8 kbd benefit and will enable a total of about 10 to 15 kbd in the future.

Moving to digital well downtime tracking. We've built a tool that integrates our well production data, downtime information and delivers repair team execution priorities to minimize time to repair and optimize production. At the top right, I'll touch on surveillance and failure analytics.

Observing about 1.5 kbd difference between our 2 trains at Kearl, regular troubleshooting was unable to determine the cause. So our digital teams applied advanced analytics to vast amounts of historical operating data and correlations to reveal the discrepancies. The resulting recommendations closed the gap, resulting in about a \$17 million per year benefit.

Analytics enabled numerous other opportunities, many related to equipment failure analysis and production optimizations through building and applying machine learning algorithms. In total, we can see benefit here that exceeds \$40 million a year. The bottom left example refers to our annual maintenance plan tool which through digitization enables enhanced work prioritization and elimination. This tool integrates with SAP, which is our maintenance platform, providing increased definition of tasks and enhanced screening. And these optimizations ensure that only the highest risk and highest priority work is selected into the plan.

Another example of maintenance improvement is providing real-time management and feedback to maintenance execution. This tool extracts tasks from SAP and enables efficient worker assignment and tracking to drive increased time on tools. And lastly, I'll touch on an opportunity to further optimize Cold Lake's water balance.

Cold Lake, as you might know, has a complex network of wells, pipelines and plant facilities. The amount of water produced back from the field has to balance with the amount of steam that we're sending out

to field. Otherwise, production constraints arise. This is another example of where computers provided with the right data and optimization algorithms can help us make much faster and better decisions.

Okay. Let's shift gears and I'd like to focus on our key assets, starting, of course, with the strength of Kearl. The volumes performance at Kearl last year was outstanding. We achieved 263 kbd, which was over a 40 kbd increase versus the prior year on a gross basis. New production records were set in 9 of 12 months, and we achieved the best ever month in June with production across that month of 311 kbd.

The chart at the top left illustrates the key factors that contributed to that enhanced performance. First, in 2021, we were able to realize the full benefit from our supplemental crushers, including enhancements to capacity that we didn't realize in 2020 due to the market constraints. We also achieved record reliability in 2021 supported by the new crushers. And these factors combined resulted in 24 kbd of growth.

Second, the shutdown interval extension achieved a year earlier than planned, resulted in a 7 kbd uplift. And then lastly, grade and recovery factors contributed 9 kbd of growth.

Equally important, I want to highlight unit cash costs with the bottom left chart. Unit costs are down around 21% versus 2019. And in 2020, Kearl achieved a unit cost of USD 20.56 per barrel. Then in 2021, we further reduced that by about \$0.70 a barrel, though that was more than offset by ForEx and energy cost increases in the substantially higher price environment. As you can see from the chart, excluding the impact of increased ForEx and energy cost in 2021, Kearl's unit OpEx was below USD 20 per barrel.

Now if I broaden things out a little bit and take a longer-term look at the Kearl journey. We are accelerating optimization based on the foundation of stable and reliable operations. We are now targeting 280 kbd in 2024, a year earlier than our prior outlook. The factors that are driving that are achieving our single plant annual turnaround strategy a year ahead of plan, debottlenecking, reliability and maintenance improvements such as in our ore prep plants, where we continue to optimize materials used and refined maintenance execution strategies. Enhanced mine planning and improved recovery and the digital initiatives that I've already discussed.

We're also laser-focused on driving down unit cost to below USD 20 per barrel. This will be achieved through a focus on structural cost reductions, I think everything from maintenance to third-party contractor spend to consumables.

Also, of course, efficient volumes growth to 280 kbd and focusing our digital and technology on cost improvement, such as the autonomous haul initiative, which I'll update you on shortly. Beyond that, we continue to evaluate further production potential at Kearl above 280 kbd.

On the next slide, I'll highlight some of the technologies that are supporting that. First, starting on the left, an update on advanced wear materials. We continue to push hard on testing and trialing different materials to improve the longevity of parts such as shovel teeth, ore screens, pump impellers and sizer

teeth.

At the last Investor Day, I shared an overview of our successful pilot for shovel teeth. Since then, we've landed on the optimal design, which will double the life of our teeth.

We're currently adding tungsten carbide onto ore screens to quadruple their life and similarly for sizer teeth with a plan to implement that by 2023. And later this year, we will begin upgrading our large hydro transport pumps to contain embedded tungsten carbide rods that will extend the life, which currently believe it or not, is only about 3 months and these rods will increase the life three to fourfold. These reliability improvements support a 4 kbd production uplift. We're on track to realize some of that this year, but we'll see the full benefit being achieved by the year-end.

Next, shown on the slide are 2 secondary tailings recovery projects, which have the potential for over 10 kbd of production benefit supporting Kearl's journey beyond 280 kbd. Both projects will apply column cell technology.

Column cells provide additional separation of bitumen from tailings by air countercurrent which offers a second opportunity for bitumen flotation. One opportunity is recovery from coarse tailings and the other is recovery from flotation tailings. Both of these secondary recovery projects are anticipated to start up in the mid-2020s. These projects will reduce bitumen and tailings ponds, reduce operating costs and improve GHG intensity.

The center photo actually shows you our coarse tailings bitumen recovery pilot at Kearl. We recently completed the successful field trial. It ran from July to October of last year.

Okay. I'm pleased to give you a brief update on autonomous haul or AHS, where our ongoing conversions are improving both profitability and safety. This technology application has been in progress since 2017, and we're on track to convert about 70% of our fleet by the end of the third quarter of this year. We're currently working on converting our 44th truck.

In 2021, we achieved record material movement tripling the amount moved in 2020 with AHS. And consistent with our prior communications, the unit expense savings of autonomous haul are around \$1 a barrel. Factors that drive this are the productivity uplift, reduced staffing requirements and higher utilization. The autonomous platform is not just about optimizing the trucks. The platform also improves shovel productivity through enhanced dispatching capabilities, and it supports broader fleet productivity through automated queuing, spotting and dumping.

As I shared with you last year or last Investor Day, this technology really works at Kearl. And in addition to unit cost improvements, AHS supports safety by reducing the number of people in hazardous areas. Additionally, the platform provides collision avoidance and enhanced safety for all of the other networked but staffed mobile equipment in the mine. I'm very proud to say that we are on track to be the first fully autonomous oil sands mining operator by 2023.

Next, a quick spotlight on boiler flue gas, which you've heard a little bit about already. This is an emissions reduction effort that also delivers value to the bottom line. A schematic of the process is shown at the right. This technology recovers waste heat from a boiler's exhaust to preheat process water, resulting in less steam usage and lower GHG emissions. This emissions reduction technology has been successfully deployed on 1 boiler, which was started up in May of last year and will now be applied to 5 additional boilers by the end of 2023, as Sherri shared. This project has robust economics and drive significant greenhouse gas benefits, eliminating a total of 220,000 tons of CO<sub>2</sub> across all 6 boilers as has already been mentioned. It also creates significant cost savings of approximately \$40 million per year.

And it's already been mentioned, but I would also like to add my acknowledgment and thanks to the government of Alberta for providing grant funding of \$20 million. This funding was granted through the Alberta TIER program, which is designed to incentivize technology and innovation that reduces emissions.

Okay. Now I'd like to move to our Cold Lake asset. Performance in 2021 at Cold Lake exceeded expectations. We surpassed 2020 Investor Day volumes guidance by a full 10 kbd. And as you can see on the top chart, production was increased by 8 kbd year-over-year from '20 to '21.

Drivers of that increase were improved reliability. We saw reliability that was the strongest it's been in 5 years and was supported by improvements we made to our water balance strategy, which together added 5 kbd of growth at Cold Lake.

And 3 kbd was driven by optimization of existing wells and also production from new infills drilled at the Mahihkan field, which started up in the second half of the year. Also on this slide, you can see we are highlighting many milestones that were achieved in 2021. To name a few, we started up the Mahkeses LASER solvent project in the first quarter. We progressed an innovative niche drilling program, which I'll share more on in a moment. And we progressed margin enhancements such as butane blending, which we're about to start up in the first half of this year and progressed significant diluent optimizations that had a huge impact on the bottom line.

As you can see on the bottom chart, we expect to sustain strong volumes and cash generation at Cold Lake, underpinned by strong operating performance and select investments. In the near term, we'll be around 140 kbd and longer term will be in the range of 140 to 150 kbd at Cold Lake.

Now looking at a bit of a broader view of Cold Lake over a longer time horizon and in particular, our strategy to maximize asset value and cash flow through a transformational GHG strategy. Cold Lake, of course, is our flagship in-situ asset with decades of remaining production potential. We've produced about 1.7 billion barrels to date, and we have about 1.1 billion barrels of proved and probable reserves remaining.

We are progressing plans to accelerate the use of solvent technologies while increasing profitability and

reducing our reliance on steam. The top left chart shows our production profile out to 2030. The wedge highlighted in blue shows the growth of lower emissions production over time. And by 2030, over 40% of our volumes will be lower emissions.

Our technology transition will reduce greenhouse gas intensity, and if I draw your attention to the chart on the bottom left, you can see that our emissions intensity in the 2026 to 2030 period is expected to be about 25% lower than the period '21 to '25. Also of particular note, intensity in that same period is significantly below our prior forecast, which is shown by the red diamond. As to how are we achieving this transformation, I would draw your attention to the table at the bottom right.

This table is a high-level road map of the technologies that we're implementing that Sherri has already mentioned. We've already implemented LASER at Mahihkan and Mahkeses fields. In 2024, we plan to start up the Grand Rapids Phase 1 solvent-assisted SAGD project, utilizing spare Nabiye steam. And then we're also progressing a SAGD project at Leming, which I'll mention or discuss further on the next slide.

Then by mid- to late 2020s, we plan to deploy technologies such as non-condensable gas injection or NCG and our cyclic solvent process, or CSP. It's also really worth noting that the latest Cold Lake development plan includes no further new CSS developments. I'll highlight some of these technologies a little further on the next 2 slides.

Now on this slide, I'm going to start you on the right. It's a bit of my strategy to make sure you're continuing to pay attention, but this is a pretty neat story. What you see there is a photo of our Leming field plant where we are progressing the field redevelopment that I just mentioned. We plan to revitalize a core part of the Cold Lake Clearwater reservoir. Now Leming is where Imperial trialed and proved the heritage CSS technology, starting, of course, in the best part of the reservoir. Early pilots began in the 1970s and were successful. However, only a portion of the high-quality resource was recovered. With this project, we plan to deploy SAGD to capture the remaining high-quality resource in this area. We anticipate 9 kbds of peak production at about 35% lower GHG intensity relative to CSS. This efficient and resilient investment has a \$20,000 per flowing barrel capital intensity.

And then on the left-hand side, you see a photo of our niche drilling in action, driven by a strong focus on maximizing value from existing infrastructure, we have collaborated with drilling contract. This is the first for Cold Lake. Up until now, we have not been able to restore existing wells on existing pads due to inability to position sufficiently capable rigs.

We've now executed over 20 opportunities and have a robust inventory of opportunities looking forward. This is providing a highly efficient and flexible program that can flex to align with capital targets. We expect to reach over 5 kbd of production from this program by 2024 with a capital intensity of about \$10,000 per flowing barrel.

Continuing on, I'd like to further underscore how critical research and development are to supporting our asset strategy at Cold Lake and particularly the greenhouse gas transformation that I've mentioned.

Here, I'm highlighting 3 technologies that will enable future greenhouse gas reductions. First, at the left, enhanced late-life process will replace steam with butane in late life steamflood fields.

The technology reduces greenhouse gas intensity by roughly 70% and does not require water. The photo you see there is a pilot that we've built in one of our steamflood pads, where we will be shortly starting up injection through 4 butane injectors and flowing 9 producers for a pilot period of about 2 years.

Second, non-condensable gas is an opportunity where methane is co-injected with steam in late-life low-pressure pads. The technology can offset steam, which reduces water reuse and greenhouse gas intensity and improves cost efficiency. Now NCG is used across the industry for SAGD operations, but we will be trialing it in steamflood areas at Cold Lake.

We plan to start up a field study this year that will utilize 2 horizontal injectors and 27 producer wells. And as you saw in our strategy slide, we plan to apply NCG more broadly from about 2026 onwards.

The third technology to highlight is our cyclic solvent process or CSP, which was developed in our Upstream research lab. This non-thermal process reduces GHG intensity by 90% relative to CSS. This technology has already been successfully piloted at Cold Lake. And as you saw, we are pursuing commercial deployment in the late 2020s.

Before I leave Cold Lake, I'm excited to share a little bit more information with you on our Carbon Capture and Storage opportunity that's based at the asset. Now CCS has the potential to be an important component in Cold Lake's emissions reduction strategy applied on technologies that I've discussed.

We are currently evaluating multiple options that will underpin the concept for our first CCS project at Cold Lake. The schematic on the bottom right shows you the type of concept under evaluation. So steam and diluent are injected into the reservoir to enable bitumen production as we do today. The 2 gas streams that we are evaluating for carbon capture are the produced gas that comes back with the bitumen, which incidentally has a relatively high concentration of CO<sub>2</sub> and the flue gas that comes off the boilers.

And the captured CO<sub>2</sub> will be injected into the Basal Cambrian beneath our bitumen production reservoir. Start-up of our first CCS project is projected for the mid- to late 2020s positioning this project to potentially be one of the first within the Pathways initiative.

Shifting focus now to our Syncrude ownership, where we are looking forward to capturing value from transition to the new owner-operated model.

I'm really proud of the successful partner engagement and collaboration that delivered this transformational step in the asset strategy in 2021. And I particularly acknowledge all the hard-working and dedicated staff of Syncrude and Suncor, who are working together to implement this transition on

behalf of all the owners.

In terms of status, a detailed transition plan is underway for the full integration and consolidation of people, processes and systems to enable the planned value capture and is targeted for completion by the end of 2023. This new model will result in roughly \$300 million worth of synergies, and the operator is targeting to achieve \$200 million of savings in the first 12 months.

Now those efficiencies include annual savings in turnaround and maintenance costs, leveraging economies of scale from consolidated regional support organizations and integrated economies of scale benefits in areas such as warehousing, critical sparring, rentals and contracting. As shown on the chart on the left, we are also expecting increased volumes in the coming years through improved reliability and upgrader utilization. And we continue to target competitive unit costs of below USD 30 per barrel at Syncrude, representing a significant reduction from the actual unit cost that was achieved in 2021.

And as you know, Syncrude produces a synthetic crude product, which trades at similar pricing to WTI. Imperial share of production continues to be predominantly consumed in our own refineries, creating integration value an advantage for us.

Okay. Before closing, I just want to remind you of our future resource optionality in the Upstream, including a large and attractive portfolio of growth opportunities with Net Zero potential. We are employing a strategic approach to future development. Our multibillion barrel in-situ opportunity set includes Aspen, Corner, Clarke Creek and Clyden, which is shown on the map there.

Our strategy is to maintain optionality at these leases. While in the background, we are progressing technologies aimed at making these large in-situ developments more attractive, both economically and in terms of greenhouse gas emissions.

Now one of the most attractive of these technologies is enhanced bitumen recovery or what we call EBRT. This technology has the potential to reduce greenhouse gas intensity by up to 60% relative to industry average SAGD and also achieve lower operating costs and enhance profitability through faster recovery of the resource and higher production rates.

This technology has been proven by us at a large scale in our research center. And we are currently progressing plans for a field pilot. While the current base plan at Aspen remains SA-SAGD and is ready to execute, the benefits of utilizing EBRTs are obvious as illustrated in the top left chart. The further potential exists when combined with CCS being developed within the Pathways alliance for Net Zero incremental production. So we feel really good about the future optionality in our in-situ portfolio.

And finally, I'll just make a quick comment about our unconventional strategy, whereas you would be well aware, we are currently marketing our assets. Although interest is exceptionally strong, no definitive decision has yet been made to sell. Future decisions will, of course, be aligned with our Upstream strategy of maximizing value.

As we conclude the Upstream section, I would like to reiterate a few key messages. First, we remain focused on maximizing value from existing assets. The team is focused on sustaining efficiencies captured as we target industry-leading unit cost and reliability.

Next, I hope you got a strong sense for our capital discipline a very attractive set of growth opportunities and our increasing focus on reducing greenhouse gas intensity.

Our industry-leading digital portfolio continues to deliver. And at Kearn, of course, we continue to focus on efficient volumes growth, and we're on track to achieve 280 kbd by 2024.

With that, I'd like to conclude the Upstream section and certainly thank you for your attention.

Next, we have a break scheduled for 10 minutes, and then we'll resume with Jon Wetmore, our VP of Downstream. Thank you very much.

### **Downstream & Chemical Outlook**

#### **Jon Wetmore – Vice President, Downstream**

Welcome back, everyone. I hope you had a good break, albeit short. My name is Jon Wetmore. I'm the Vice President of the Downstream for Imperial. What I'd like to do now is walk you through an update for our Downstream and Chemicals business, which is always evolving.

I'd like to start first with our key strategies for the Downstream and Chemicals business. Firstly, we strive to deliver industry-leading performance on safety, reliability, cost and efficiency in all aspects of our operations. Next, we invest in specific product delivery and logistics, which we select on a strategic basis as driven by our lowering our cost to serve and providing industry-leading supply reliability to our customers.

We build upon our brand strengths in Esso and Mobil for both fuels and lubricants to create industry-leading product offers across a broad spectrum of customers in Canada. We are putting increasing time, effort, energy and investment into developing and implementing lower-carbon products. Our customers want this. Our regulations are asking more of us to do this, and our strategy is to provide compelling low-carbon product offers that make Imperial a partner of choice during the energy transition.

We are working relentlessly to reduce our Scope 1 and 2 greenhouse gas emissions in our operations. And we take advantage of industry-leading refining assets by exploiting their ability to run flexible crudes as well now as renewable feedstocks. And finally, we have a relentless approach to squeeze as much value as we can from integration between our assets, integration between refineries and upstream, between our 2 refineries in Ontario and between our refining and chemical operations in

Sarnia.

On this next slide, we wanted to review something we've shown you before, but I think it bears repeating. And it's just showing a little bit of how gasoline and diesel crack spreads in Canada compared to the U.S. Here, in Canada crack spreads are really driven by the U.S. key markers in the U.S., Chicago and New York Harbor.

What we've plotted here are crack spreads in Canada, in the dark blue, versus those New York Harbor and Chicago markets. We've used the same crude base in this case to keep things on an apples-and-apples basis, and in this case, a conventional crude called light sweet crude MSW. We've used a 50-50 mix of East and West here. For Canada, that's 50% Edmonton and Toronto and, in the U.S., 50% Chicago and the New York Harbor.

What you can see here is that the product crack spreads in Canada are stronger than they are in the U.S. for both gasoline and diesel on the right and the left. And this difference persists across an entire decade. And if we apply to the data going back even further, it would show the same story.

If you look closely at the dark blue layer between these 2, you'll see that Canada has, oftentimes, seen double the crack spreads of the U.S., particularly since 2016. One further point here is that these graphs are on a common crude slate between Canada and the U.S. In reality, roughly 1/3 of Canada's refineries exist very close to the crude source of Western Canada in the area around Edmonton.

Those refineries, of course, have very, very low cost of transportation, considering the proximity to the crude source. And if you added at our own Strathcona refinery, then Edmonton enjoys that benefit. If you added that advantage on average to both of these charts, you'd find a further growing of the advantage for Canada on the order of \$2 to \$3 a barrel. Imperial is very well positioned to reap rewards from this advantaged Canadian market as we are the largest refining capacity here in Canada.

On this next slide, we wanted to provide an update on Canada's fuel demand following the pandemic. You can see from the numbers on the left, the gasoline and diesel have recovered to about 90% to 95% of pre-pandemic levels. And in this case, pre-pandemic, as we measured it, is the same period in 2019.

Jet fuel, you can see is up to about 70% to 75% of 2019 levels, and that's mostly driven by domestic air travel here in Canada. We are hopeful now that many of the COVID restrictions are being lifted and including on air travel, and that may see now a lift in international air travel. Jet demand may continue to recover this year, but we would expect that the recovery does extend into 2023.

To give you an update very recently, here in the first quarter of 2022, the COVID Omicron variant definitely had an impact on fuel demands in January and February, but we are now starting to see those demand impacts diminish in March.

We're pleased to see that jet fuel demand recovery, which is our numbers here, Imperial's numbers. It's

70% to 75%, and I wanted to mention that those are above the industry average, probably 5% to 10% better than the industry average as we have had some competitive gains in Eastern Canada by aggressively bidding on airline contracts as we saw the recovery starting to spool up last year.

For the Canadian refining business, Imperial is advantaged by having larger refineries than our competitors in Canada, and we benefit from access to world-leading technology and expertise through ExxonMobil. Our refining assets are all greater than 100,000 barrels a day in capacity, and they're all in the top half of refining capacity in Canada in terms of both size and complexity.

Our 2 Ontario refineries, Sarnia and Nanticoke, are run in an integrated fashion, with pipeline connections between them that allow each site to process hydrocarbons that are best suited to its configuration. One of our greatest strengths is the huge amount of operations and technical support that we get from ExxonMobil. They are a globally recognized leader in refining. We have the benefit of not having to invent our own solutions to problems that we encounter in this business. And instead, we always reach for best practices from ExxonMobil. This is a massive unique advantage for Imperial here in Canada.

We maximize heavy crude processing at our facilities, particularly at our Sarnia site where we have the only coking unit at a refinery in Ontario. And we invest at scale for energy efficiency in our assets as well.

We've got cogeneration now at all 3 of our refineries. At our Strathcona site, we also manufacture diluent for our Upstream operations at Cold Lake. And that provides a nice secure source of supply of diluent for Cold Lake and an option for producing gasoline versus diluent at the Strathcona refinery. And it helps us avoid some of the more expensive cost of diluent that are imported sometimes into Canada.

The chart on the right, you can see that we've achieved about 90% utilization in 2021, and that's averaging about 380,000 barrels per day of throughput. And next year, for 2022, our guidance sits at 93% crude utilization or about 400,000 barrels per day of throughput.

Okay. Next, what I wanted to talk to you about is the combination of our premium brands that we put together over many, many years of effort that we've combined with customer service, technical support and advantaged partnerships that are really unparalleled in the Canadian industry.

Our branded wholesaler method of business in retail allows us to work with some of the world's most accomplished gasoline retailers. To name a few, Couche-Tard, 7-Eleven, Parkland and others. This method of business allows us to avoid hundreds of millions of dollars of sustaining capital for the retail assets themselves, and it still allows us to grow profitable market share in the retail business across Canada.

Our lubricants business carries equally strong brands, including Mobil 1, which I'm sure you've heard of, and it leverages ExxonMobil as the world's largest marketer of finished lubricants. In our lubes business line, we not only use globally recognized brands, like I mentioned, but we've also got a very strong

distributor network and a highly trained workforce who are backed up by a field technical support team in our Sarnia research facility, and that provides them with unique troubleshooting customer support for particular lubes applications here in Canada, and that's very unique to Imperial. No one else has that.

We are the largest producer and seller of asphalt here in Canada. We've got production of asphalt at 2 of our 3 refineries. And we sell that product all across North America via railcar shipments. We produce asphalt from all of our 2 facilities that I mentioned, always with Cold Lake crude. And Cold Lake crude is recognized in the world markets as the highest quality asphaltic crude available.

Our strong fuels brands are further supported by a strategic loyalty partnership that we've worked in recent years with Loblaw in the PC Optimum program. Loblaw have more than 18 million PC Optimum members, which is almost half of Canada's population. By our own estimate, that equates to 70% of Canadian households being members of the PC Optimum program. So we're incredibly pleased to be involved with PC Optimum. We are the only fuel supplier in that program.

And just recently, we've added the capability to purchase fuel at the point of sale by redeeming points. And that puts us on par with how Loblaw and Shoppers Drug Mart treat their customers for points redemption at the point of sale. So our marketing position is amongst the very best of Canadian downstream competitors, and it gives us compelling brands upon which to improve and reshape our product offers as the energy transition continues.

Now on the energy transition. As I mentioned before, we are spending an increasing amount of time and energy to develop low-carbon product offers. More than 75% of all the gasoline and diesel currently sold in Canada already has some biofuel content to lower its carbon intensity. I think sometimes that statistic is a surprise to people that think that biofuels are perhaps a vision of the future. It's much more correct to say biofuels are here today, and they're around us all the time.

At the same time as we are expanding biofuel blending, we're working with customers to maximize the benefits of these lower-carbon fuels and offsets any debits in energy that they may get associated with biofuels. Most biofuels, whether it be ethanol, biodiesel or renewable diesel, do not have the same energy content per liter of fuel as a fossil fuel does. And so our customers end up buying more fuel with bio content than they would otherwise.

We provide solutions for them in this space by advertising our products to improve composition efficiency, and some examples of that are Synergy Supreme gasoline and are Esso Diesel Efficient. The additives work to improve mileage for the customer, whether it be on cars, trucks or even locomotives. That reduces their fuel costs and helps the customer manage the more expensive cost of the biofuel content.

I wanted to mention, in particular, our Bio-protect product, which is a new launch for us. It contains the Esso Diesel Efficient additive, which again directly goes to offset any energy debit that comes from the 20% biodiesel content in that product. So again, that lowers the customers' costs, and it helps build their

acceptance for growing amounts of biofuels as the energy transition continues.

Our advanced lubricants equally provide energy efficiency gains that competitors cannot match and reduce emissions even further. An example is our Mobil 1 passenger vehicle lubricant that can improve fuel economy as much as 4%, depending on the application.

Our next venture is going to be into producing sustainable aviation fuel. You'll hear the acronym S-A-F or SAF. To get a better position in this emerging fuels market, we recently joined the Canadian Council for Sustainable Aviation Fuels. We expect to be producing our own SAF from our facilities using vegetable oil feedstocks in the near-term years to come.

Okay. I wanted to shift gears now and talk a little bit about innovation in the Downstream. I think, many times, people look at the refining and downstream sector and think that it's a little bit of the old history of the business and, perhaps, not doing a lot of innovation. And in fact, the opposite is true. There are a tremendous number of initiatives that are going on that are truly changing the footprint of how we operate.

On the left side, I wanted to start first by talking about a very interesting initiative that transforms plastic waste into fuel. We're looking at a project that will take plastic waste into our Sarnia facility into our coker unit as a feedstock. That will make the plastic a valuable raw material for that unit, and that will allow us to make gasoline and diesel and feedstock for the chemical plant from that plastic raw material. We call this advanced recycling.

We're using plastic care, as I mentioned, as a raw material, and it's very different than conventional recycling, which seeks to take waste plastic and blended into virgin plastic to really blend it away. This has clear advantages over mechanical plastic recycling, which often results in final plastic products that have degraded performance.

Our method of advanced recycling allows us to help remove contaminants, which is a chronic barrier to recycling plastics across the world. ExxonMobil has recently announced plans to build North America's largest plastic waste recycling facilities at its Baytown facility. And their plan is to initially start with 30,000 metric tons per year of plastic being recycled through the advanced process that I described. Imperial's project at Sarnia will build upon that as a proof of concept, and we seek to create similar facilities here in Canada.

Next, we are looking at vegetable oils being brought into our refineries' feedstocks. The industry calls this co-processing. And what we'll be bringing in would be vegetable oils like soy, canola, possibly also waste oils. By processing these vegetable oils alongside conventional fossil fuels, we are creating diesel, gasoline and jet fuel, all of which would have lower carbon intensity. We held 2 successful trials last year, with Sarnia and Nanticoke refineries. And there, we were able to prove that as much as 5% to 10% of the fossil fuel being fed to a cat cracker can be replaced with vegetable oil. We're looking to expand that into permanent facilities on all 3 of our refineries using small, nimble, efficient capital projects.

One customer trial in the third column here that we're especially proud of is working with CP Rail to test our Esso Diesel Efficient product. They came to us asking if we could provide a diesel fuel that would help them achieve their sustainability goals.

We then collaborated with them with the Esso Diesel Efficient project to test an idea and a theory, which is if Esso Diesel Efficient improves mileage and performance of engines in the truck transport world, could it also do the same for locomotives. We tested the theory at the Southwest Research Institute in San Antonio in 2019, and we did it on a test locomotive that represented CP's typical locomotive fleet.

The theory did prove to be correct. Our additized fuel resulted in significantly lower GHG emissions, and it also reduced particulate matter or soot coming from the locomotive stack. CP soon decided to replace all of the purchase diesel that they were buying from us previously with the Esso Diesel Efficient product.

And finally, on the right-hand side, we are working with a partner in Sarnia to build North America's largest battery. It's what's called a behind-the-meter battery energy storage solution or BESS. This large battery will improve our Sarnia site reliability by filling in gaps in electricity supplied from the grid during grid disruptions.

And it will reduce our cost for electricity using battery as a source of electricity when the grid is most expensive at peak periods. Our partner there is Enel X, and they provided us with battery technology here that is that world scale industrial size, in fact, 20 megawatts of capacity. The battery will be charged at night, when demands on the grid are lower and the price of electricity is lower. But that's also the time that the lower carbon sources in the Ontario grid are most dominant, so that would be nuclear, hydro and wind. The battery will then discharge during the day when electricity costs are obviously more expensive. This technology is a win-win not just for Imperial to reduce our costs but also for the grid in Ontario by having some of our power in Sarnia provided from that battery during times when the grid is at its peak and needs to be managed for other customers. So for Imperial, it saves us electricity costs, but it also directionally helps us reduce our Scope 2 greenhouse gas emissions.

So these 4 examples are just some of the examples we're working on in the Downstream and Chemical business lines, which can provide us with sustainability benefits as well as competitive advantages going forward.

Okay. Now I'd like to walk you through a little bit of the capital portfolio in the Downstream. Looking at the bar chart, you can see that we're spending at levels around \$400 million between here and 2024 and then expecting to be a bit lower around the \$300 million range for 2025 and 2026. You can see the split there between sustaining capital versus growth in GHG emission capital. In this case, growth would not mean adding to refining capacity but, rather, growth in logistics, product offers, improving our market access and supply chain capability and adding to biofuel blending projects across the country. Our portfolio is focused on smaller projects, like the examples I reviewed on the prior slide, co-processing

with vegetable oils, blending more biodiesel and renewable diesel, adding sustainable aviation fuel to our mix advanced recycling and other small high-return projects.

Now I'd like to just cover the 2 largest investments in our portfolio. The first is the closure on our Sarnia products pipeline in Ontario. This project is approaching its commissioning phase, with an anticipated total spend of \$470 million versus the just over \$400 million in our original plan. The spend rate is now tailing off, and then here in 2022, we expect to spend about \$70 million to wrap up the project. We are very pleased with the project performance, considering the fact that the 63-kilometer segment that's being replaced here is in the middle of Canada's most congested urban corridor, literally Downtown Toronto with dozens of stakeholders, governments, landowners, communities and indigenous groups.

We're on track to commission the project in here in April. The new segment will allow us to pump more product into the important Toronto area market, and it allows us to save \$40 million a year of cost as we shed the more expensive layers of logistics like truck and rail that are currently serving the Toronto market.

Okay. Now to cover the largest project in our downstream portfolio, the Strathcona renewable diesel project. We're very excited about this one. Here, we are investing about \$500 million in building facilities that will convert vegetable oil feedstocks to produce renewable diesel, and you'll hear me use the acronym RD. This conversion requires a lot of hydrogen, and so we are working with a third party to provide a new blue hydrogen facility, blue meaning that the hydrogen production plant will have carbon capture over it to reduce its own emissions. This hydrogen plant, combined with the new vegetable seed crushing facilities to create the vegetable oil that will be needed to supply this facility, put the total investment for the venture at well over \$1 billion. Our objective is to produce 20,000 barrels a day of renewable diesel, which will be Canada's largest production source. And we will need to use this to comply with the new Canada clean fuels regulation, or CFR.

Renewable diesel is not the same as biodiesel. I know sometimes the terminology gets mixed up. Renewable diesel is a drop in fuel that can be used year-round across Canada in almost every engine application at high concentrations as much as 80% or greater. Our facilities would be fully integrated with the Strathcona refinery using their infrastructure, their utilities, their staff, their expertise. And we know that Strathcona refinery is world-class in terms of its cost and reliability performance.

In this case, we are not repurposing equipment at the refinery for this venture. Our new facilities will be built at top quartile capital efficiency, and we will use industry-leading catalysts and other technology. And that compares well to others that are literally trying to shoehorn in new technology to older equipment that was never really designed for that purpose.

We received a considerable amount of funding in this case from the BC government's low-carbon fuels investment program. And our objective is to have the production of renewable diesel flowing by the end of 2024 to manage our CFR compliance. And working back from that, we anticipate to get a final investment decision later this year.

So now to talk a bit about the business case for renewable diesel. The primary objective, as I mentioned for the project, is to produce competitively advantaged compliance with the clean fuels regulation, CFR, and do that using renewable diesel but do it at a cost of compliance, which is lower than anyone else's use of renewable diesel for compliance in the industry.

Renewable diesel is a very flexible compliance option within the regulations. As I mentioned, unlike biodiesel and unlike ethanol, there are very few limitations on where it can be used. It can be used at very high concentrations in many locations. Renewable diesel is already here in Canada. It's been used for many years, and it's always been imported from other countries. It's currently present in the diesel around the country in quantities ranging from 0% all the way up to greater than 40% in some cases. So it's a very well-proven fuel for our use.

The project is driven by very strong economics to make renewable diesel instead of buying and importing it. The map on the left shows an orange arrow depicting what is happening today. Renewable diesel is being manufactured in the U.S. Gulf Coast, made from crop sources and waste oils that are gathered from all over the U.S. but predominantly in the Midwest area of the U.S.

The cost of moving all of that feedstock in the U.S. down to the Gulf Coast, then manufacturing it into Canadian specifications and then transporting it all the way back to Canada makes the landed price of renewable diesel in Canada very expensive, often well over \$150 a barrel. Our plan is to make renewable diesel in Canada instead and drastically reduce this complex supply chain cost by using local crop sources. And those local crop sources have been deemed by the government of Canada as having highly sustainable, low-emissions farming practices.

By using advantaged local crop sources, we estimate our cost to produce will be far below the imported cost of renewable diesel, and that will create strong returns for the project and deliver a very short payback period in almost all the scenarios that we've studied. We're currently working on the hydrogen and vegetable oil feedstock agreements for the project, and we need to see the final CFR regulation in the summertime to really narrow down the economic and market scenarios that we're studying.

But for everything that we've looked at, this project is high return. It's highly competitive, and it's very resilient to all the regulatory outcomes that we've studied thus far. So we remain very confident that it will be fully sanctioned later this year.

Our refineries and chemical plant here in Canada are cost leaders in the business, and we work relentlessly to improve the cost of our supply chains downstream of those facilities and lowering our cost to serve. During the pandemic period in 2020, we had doubled our efforts to reduce cost and improve cost efficiencies, and considering the challenging markets we were in, I think it was very necessary.

I'm happy to report that the majority of these savings have not only been sustained in 2021, but we've

actually made them bigger. You can see in the bar charts on the left side, cash OpEx declined from \$2.6 billion to \$2.1 billion between 2019 and '20, and then it further reduced to about \$2 billion in 2021. In the orange line, you'll see that our refining throughput actually grew from 340,000 to 380,000 barrels a day during 2020 to 2021. So what to take there is that we've completely offset the added variable cost from the higher refining throughput. And we've also offset higher costs that came into our business from electricity and natural gas pricing, and putting all that together, we were still able to deliver 2021 as the lowest cost in that 3-year period. That is industry-leading cost performance, and we are fortunate to have that fantastic performance in all aspects of our business.

In the bottom left, you'll see our net income results, and they will show a strong recovery in 2021, with the second half of the year showing a continued improvement versus the first half. In the current environment, we expect to see the first half of 2022 be even stronger still. But regardless of the very volatile market conditions that we're currently in, we are going to continue to focus on what we can control, growing profitable sales, improving our margins on key products and continuing to grow our low-carbon offers.

Okay. I'd like to pivot now and talk about the Chemicals business, which has seen, as Brad mentioned earlier, record profitability in 2021. Our chemical manufacturing facilities in Sarnia, alongside our Sarnia refinery, and we are the only company in Canada to link together a medium-sized refinery with a diversified complex chemical plant in this way. And the benefits of doing that are significant. The refinery off gas portion feeding out ethylene production in Sarnia is shown in the bar graph there in the left, and that's about 35% of our needs. Using that off gas material saves us \$10 million in feedstock costs versus purchasing third-party ethane or propane to feed that ethylene production.

Our net income history is shown there in the middle. And you can see that tremendous growth in profitability in 2021 versus 2020. And it's, of course, driven by very strong prices.

The chart on the right shows the U.S. domestic Platts quote for high-density polyethylene, HDPE, in U.S. cents per pound. And you can see that polyethylene price record profitability in our polyethylene business. And we're very pleased to see that our operations were very reliable through this period of high pricing to take full advantage. Equally, we are proud of the number in 2020. Although it's lower, it shows the resilience of our business in some of the most challenging bottom-of-cycle price conditions that we've seen in decades.

On this slide, I wanted to share a little bit more about the unique nature of our polyethylene business because I don't think it's really well understood outside of Imperial. In many ways, our polyethylene business is the opposite of a commodity business. We create custom-built grades of polyethylene based on unique customer needs, and then we work directly with customers to trial the products and ensure they deliver maximum benefits.

The type of high-density polyethylene that we produce is for a specific set of customers, namely rotational and injection-molded products or what the industry calls R-I-M or RIM products. In RIM

applications, the resin pellets are melted and then injected at high pressure into large-sized molds, often as big as an SUV. And they're then spun or rotated in order to use centrifugal forces to push the liquid resin into all the corners of those large molds. That provides very large formed plastic products with very few seams with unique strength and durability.

For many years, Imperial has cultured a group of engineers and scientists, which have built a very unique knowledge of how to modify polyethylene resin to uniquely fit these rotational and injected molded products. The team works directly with its customers to trial new grades of resin and directly respond to customer needs for lighter, stronger and more durable products. So this is a customer-intimate business model. In many ways, the opposite of a commodity business where customers flip suppliers on some frequency based on price bids of the day.

The margins for these niche RIM products that we produce are clearly better than commodity PE margins that are being realized by most other PE producers in Canada. We continue to grow our customer-intimate approach. And you can see there from the bar chart, we are planning on growing the number of customer trials this year to approach \$50 million in additional net present value generated from those trials.

So to close, here are the key strengths from the Downstream and Chemical business that we see leading us into the years ahead. We will capture advantaged crude and crack spreads as a Canadian base refiner. We'll leverage our strategically located assets which are close to their market centers with industry-leading supply chains. We are operations leaders amongst our peer group for some of the best safety, reliability and cost performance in the sector.

We carry some of the strongest brands in the industry for both fuels and lubricants and chemicals, and we sell right across North America. The brands are instantly recognizable for dependability and quality, and they allow us to keep building strong, strategic customer relationships. We reach coast to coast across Canada with an unparalleled supply chain in the downstream, and we sell across North America, as I mentioned, products like asphalt and polyethylene.

We're developing low-carbon product offerings. Those are compelling to our customers, and that will allow us to comply with new legislation with competitive industry cost. We've implemented significant cost reductions in recent years through the pandemic, and those cost reductions have staying power in an inflationary environment, and this will allow us to further lower our cost to serve and advantage versus our competitors. And finally, we are leveraging ExxonMobil's strongest brands, technology and best practices throughout our operations here in Canada.

Thank you very much for your time and attention. I know I went through that quickly. Look forward to getting some of your questions during the question-and-answer session. So now I'll hand over to Dan Lyons to cover our financial outlook.

## Financial Outlook

### **Dan Lyons – Senior Vice President, Finance and Administration**

Thanks, Jon. Good morning, everybody. So I will jump right into talking about Imperial's advantaged financial profile. You can see on the upper left there, we've shown this pie chart before, but we have a great balance between the Upstream and Downstream. This is looking at 10 years of cash flow. And clearly, that balance Upstream, Downstream integration gives us more resilience and lower volatility on our earnings.

Additionally, as you heard about from Simon, we're growing our Upstream production. We have long-life, low-decline assets that need relatively small amounts of sustaining capital. And Jon just talked about the advantages of our Downstream and Chemical businesses. And on top of all of that, as part of our balanced integrated model, we have a relationship with ExxonMobil, which provides us greater scale than we have otherwise. We have access to their global expertise and know-how, which we apply here to our businesses at Imperial.

We also have a low corporate breakeven. Now part of that is, obviously, our large and successful Downstream and Chemical businesses. But we are also pursuing low-cost volume growth. We've been delivering that. You've seen the outlook in Simon's presentation. And across our business, we're pursuing structural cost reductions.

So we believe we're built for the cycle. We have a strong balance sheet, industry-leading leverage. You can see a little graphic on the lower left, and that makes us very resilient, certainly in the downside, in the downturns. We also have unhedged production, which Simon talked about, and we are reaping the full benefits of the higher prices we're seeing now. And on the refining side, we have a flexible network, which can adjust its crude runs and its product and crude slates according to what's going on with prices and margins. And all this together allows us to provide reliable shareholder returns over the long run.

So before getting into some of that in a little more detail, I do want to talk about our financial performance in 2021. As it says on the chart, it was a record-setting year. All of our businesses performed strongly, as you've heard. We had record cash flow from operating activities.

You can see that chart there on the left, as was already mentioned, record Upstream production, record Chemical earnings, strong recovery in the Downstream and the highest-ever shareholder distributions of just under \$3 billion, driven by our largest dividend increase in history, as Brad mentioned, along with accelerated repurchases under our NCIB programs. I want to note that this isn't a one-off event. I mean if you look at that chart on the left, you can see we've made steady progress over the years in making our business both more resilient and more profitable.

Moving to operating costs. This is cash operating costs specifically. As you've heard, we've had

sustainable cost reductions across all of our business lines, and just looking at the bridge there on the left, we bridge pre-COVID 2019 to 2021. And you can see we have over \$1 billion in cash OpEx efficiencies. That was partially offset about \$250 million in OpEx associated with volume growth, which, of course, we're very happy to have those volumes.

And then we also had significant energy price escalation. We're happy to have that too on the revenue side. That's about \$400 million in terms of OpEx in the bridge. And as you also heard, this is not the end. This is really the beginning. We're continuing to progress additional cost reduction opportunities. And I'll just call it out because it's a big bar of the chart. That includes a focus on energy efficiency.

We've always focused on energy efficiency. But clearly, at higher prices, the returns on those projects are even greater. I mean Simon talked about our boiler flue gas project at Kearl and the solvents project at Cold Lake, which will make us more energy efficient going forward.

So on a gross basis, our total cash OpEx has come down, as you see. And we've also had cost-effective volume growth, which Simon talked about, lowering our unit cost. So you roll all of that together and looking at our corporate breakeven over the next 5 years, our outlook for that, it has come down since our last Investor Day.

On a cash basis, U.S. dollar WTI \$25 a barrel, we can break even and \$35 WTI U.S. per barrel can cover our dividend, sustaining capital. That was \$36 at our last Investor Day. But I think it's notable that we've had some significant headwinds in terms of the ForEx rate. Last time, we were looking at \$0.75. Now we're looking at \$0.80, and we significantly increased our dividend. So despite that, with our structural cost reductions and our low-cost volume growth, we've lowered our breakeven, and we're going to continue to progress that going forward.

Looking at capital expenditures, you can see this is obviously for all of Imperial. You saw the pieces for Upstream and Downstream. Separately, it's the same sort of scheme. The blue is sustaining. The green is growth in high-return GHG projects. The red diamonds are prior year outlook.

So just looking at the chart, you can see, in 2022, we have a target of \$1.4 billion of CapEx, down \$200 million from our previous plan. And looking out over the years after that, it's similar to our plan in the \$1.4 billion to \$1.5 billion range. Sustaining capital over this period averages about \$1 billion a year, predominantly in the Upstream. You can see we have a tick up in sustaining capital in 2022. That's really driven by the Kearl in-pit tailings project. 2022 will be the highest year of spend for that project, and you could see the sustaining capital come back down. And as Simon mentioned, I think it's worth repeating, we have a relatively low sustaining capital requirement just CAD 5 per barrel, which to be sustaining our current high volumes.

Looking at the green wedge, about \$400 million over the period. The key projects making up really the majority, certainly, of that \$400 million are listed there, and they were talked about earlier the Kearl debottlenecking work, the boiler flue gas project at Kearl as well at Cold Lake, our Grand Rapids project

and other solvent projects. And in the Downstream, our Strathcona renewable diesel project.

I'd like to spend a moment talking about capital allocation. You can see the slide is titled reaffirming our capital allocation priorities because that's what we're doing. These have not changed since we talked a year ago and all the interim discussions I've had with many of you. You can see it starts with a reliable and growing dividend, and that's graph there on the upper left.

You can see it grows consistently over time, particular growth very recently. If you look back from the beginning of 2021 until now, we had 2 dividend increases, 1 in the second quarter of '21 and 1 in the first quarter of this year. That's a 55% increase over that period. And given our cash flow growth, we feel quite comfortable with that.

Next, in the capital allocation priorities come sustaining capital, which we talked about. And then to select high-return capital efficient investments in our core assets, which we have discussed. And then we come to, I think, maybe you all's favorite line, returning surplus cash to shareholders.

You can see on the lower left that those are millions of shares outstanding. You can see we've come down 20% over the last 5 years or so. That's really from utilizing the NCIB programs pretty hard. Going forward, market conditions permitting, which they certainly seem to be doing, we plan to continue to fully utilize our NCIB. And given where our cash balances are and our positive outlook, we anticipate supplemental returns, including a potential substantial issuer bid.

Now at the bottom here, we will keep our aperture open and scan the horizon and if there's highly attractive growth opportunities, we'll consider those as well. And those could be organic or inorganic, but they have a high bar. They have to be strategic. They have to be highly attractive, as I said. They have to be clearly accretive.

So let me move to the next page. You can see here on the left, it's just a graph of our average annual cash distributions from '16 to '20. And then showing 2021, you can see a very substantial increase both in dividends but particularly in share buybacks. And if you look to the right, this is our free cash flow outlook over the next 5 years at 4 different oil prices. It includes about \$1.5 billion in each case from our Downstream and Chemical businesses. And you can see that looking at the \$60 case, that little red diamond, you can see our outlook for free cash flow is higher this year at \$60 than it was last year. And obviously, that reflects the unit cash operating expense reductions we're seeing and we're planning as well as the volume growth at that Simon talked about.

Clearly, \$60 case is well below today's prices. Today's prices aren't even charted here. So you can figure out where that graph goes, if prices, in fact, stay higher. But looking at the \$60 case, both these charts on the left and right are sort of the same scale. So if oil is \$60, we will generate more free cash flow than all of the cash we returned in 2021, if you look across on the left chart. So we have substantial capacity not only to generate cash flow but to return free cash flow to the shareholders, and that is what we plan to do.

And this is my final chart, and I won't say a lot on this chart. This is our corporate guidance summary. On the left is the guidance, we released them latter part of last year. It's unchanged. On the right, we lay out our turnaround schedule for 2022. Upstream is relatively normal. I mean we have a couple of Syncrude events, one of our plants at Cold Lake and our new normal as one turnaround per year at Kearl. But you can see the Downstream, the turnaround schedule is actually quite light, which should support strong capacity utilization and cash flow in the Downstream in the coming year.

Now let me turn it back to Brad. Thanks.

### Closing Remarks

#### **Brad Corson – Chairman, President & CEO**

All right. Well, it's great to be back with you again. And I really hope you've enjoyed the presentations from the management team over the last couple of hours. I hope it's not only kind of reinforced the great successes and achievements that we delivered over the last year. But I hope it also painted a clear vision for you of where we're going as a company and the strength that underpins our journey.

All 5 of us that are here today represent the management team. We're very proud for what our company has achieved. But we are just 5 of over 5,000 employees that are working extremely hard every day to deliver these results, and I think it's worth acknowledging them. We're also supported by a great contractor workforce. And obviously, we've got a very long-standing relation with very important customers. And so it's really bringing all that together that has allowed us to deliver these results and give us confidence as we go forward.

At the start of the session, I talked about what you could expect to hear today. And before we move to the Q&A session, I'd like to take just a moment to reflect on some of the key messages from the day.

At the center of the diagram on the left, you can see our key priority: maximizing shareholder value. This is central to what we do, and we believe our strategies and actions reflect this. It really starts with our assets. You've heard a lot about those today. They are high quality and long life, and maximizing their value is central to our strategy.

You heard through the morning about some of the opportunities we have in this area, such as continued cost reductions, low capital, high-return growth opportunities and continuing to enhance reliability. And I hope the discussion this morning underscored the value of our integration. Being integrated on several levels provides opportunities for synergies across our businesses.

We are certainly integrated in the sense of having material upstream and downstream businesses, which offers us some insulation from commodity price swings, but integration goes far beyond that. And for example, our chemical manufacturing is fully integrated with our Sarnia refinery. Access to

economic, reliable chemical feedstocks certainly contributed to the outstanding results the Chemical business delivered in 2021.

The quality of our assets and the integrated nature of our business are key to our ability to effectively manage through the various business cycles our industry sees. 2020 was a perfect example. While it was a very difficult year for all and likely the most challenging any of us have seen in our careers, Imperial fared relatively well and went into the recovery in a much better position than many others. We delivered outstanding results in 2021, both operationally and financially and expect to continue that momentum through 2022.

We continue to take pride in our balance sheet strength. Not only did this contribute greatly to our ability to weather the pandemic storm while maintaining our dividend and not incurring incremental debt, it provides us optionality to pursue opportunities that we see as critical to continuing to deliver increasing shareholder value. The strong balance sheet is also one of the things that enables our historic focus on shareholder returns.

Our dividend history is unparalleled. And in recent years, we have returned a significant amount of cash to our shareholders through share repurchases. Our views here have not changed. As you are aware, we announced our largest dividend increase in history in early February.

You would have seen that technology is a common theme across our businesses and throughout our future plans, whether related to our ESG sustainability commitments or our focus on continuing to improve the capability and reliability of our existing assets.

Our ability to leverage ExxonMobil's technical expertise and their world-class research capabilities makes this a true differentiator and provides real value to Imperial. So again, all of this adds up to maximizing shareholder value. And I certainly hope that is what came through in our discussion this morning.

So let me just wrap up with this slide on our winning strategy. While this chart may look a little different than what we shared at last Investor Day, the messages should be very familiar. They really have not changed much since I spoke to you back in November of 2020, and they really shouldn't change that much. We have been very committed to the strategy we outlined at that time, and it has delivered substantial results, and I believe we'll continue to do so.

Our focus continues to be on getting the most out of our current asset base, and we continue to do this with a focus on the most efficient use of capital. While we have made significant progress on our cost structure, we continue to see further opportunities as we strive towards industry-leading performance.

Sherri provided a lot of detail on our ESG plans and focus areas. But you would have also heard some specifics from Simon and Jon in this area as well. This demonstrates a commitment across our entire organization to achieving those goals and a focus on doing so in a way that drives value for our

shareholders.

We remain steadfast in our commitment to returning more cash to our shareholders. Our view forward is one of robust free cash flow bolstered by our plans to continue to optimize our existing assets. This free cash flow will support our history of a reliable and growing dividend, and we will continue to return cash in excess of these requirements to our shareholders.

And as we've stated many times, capital discipline is a guiding principle for us. However, this does not mean we will not consider growth opportunities. We will continue to scrutinize them and integrate them into our portfolio as we see warranted. And while large-scale organic growth remains a low priority today and our asset optimization and debottlenecking plans are delivering meaningful growth at low cost, there may be a time for organic growth in the future. And we have optionality around that with our large resource base and with progressive technologies. And we've not changed our view on M&A. We continue to keep our eyes open for opportunities that can potentially add incremental value for our shareholders.

And finally, resilience has been a common theme today. In markets that have been and continue to be as volatile as they have over the last couple of years, it is a key that we remain agile and able to quickly adapt. Throughout the pandemic, we were able to demonstrate this. And this puts us in a position to react quickly as market conditions change in order to capture maximum value.

In closing, I would say that my one disappointment over the last year has been limited ability to meet with you face-to-face. When I stood here in November 2020, I was optimistic that, that situation would change by last year. But as we all know, that was not to be. And while I've certainly enjoyed engaging with you virtually, I also believe that in-person interaction is most valuable. And I'm cautiously optimistic that this will become the norm for us in 2022 to return back to face-to-face. And I'm very much looking forward to that.

And so with that, I would like to thank you for your ongoing interest and support of our company, Imperial. So we're now ready to move to the Q&A session. I'm going to move back to my seat along the panel with the rest of the management team. And collectively, we look forward to your questions. Again, thank you very much.

## Q&A

### **Manav Gupta – Credit Suisse**

Thank you, guys, for all this additional information. It's very helpful in modeling. I had a couple of quick questions, and I'll ask them upfront. So this is the first time we have seen you guys actually come out and say that Kearn's potential can be increased to 300 kbd. If you could help us understand what gets you there? And given the environment where we are, is there a way you could accelerate that development plan and get to 300 kbd faster?

And then second is a quick follow-up here, sir. It looks like your CapEx has been changed since last guidance. But if you look carefully, there's an entire renewable diesel project which has snuck in. So essentially, it means that although the CapEx looks the same, it's actually lower because now, with the same CapEx, you're actually doing a renewable diesel project in there. So if you could just address those 2 issues.

**Brad Corson – Chairman, President & CEO**

All right. Thank you for those questions. I might turn to Simon to talk a little bit about our journey at Kearl. He spent a lot of time on that. And as you recognize, we continue to have aspirations beyond 280,000 barrels a day. So maybe I'll let Simon talk to that. And then I'll come back and answer the question about CapEx.

**Simon Younger – Senior Vice President, Upstream**

Yes. Certainly happy to talk a little bit more about Kearl. And as I shared in the prepared remarks, we are starting to evaluate production potential above 280 kbd, as you've noted. And I shared some of the details on what's going to enable that. I talked about enhanced recovery, plant debottlenecks. And the 2 examples that I gave you of secondary tailings recovery were exactly examples that could help with that journey beyond 280 kbd at Kearl. So bringing those online in the sort of the mid- to late 2020 is entirely consistent with that plan.

And then the other piece that we'd need to look at is certainly mine fleet expansion. So yes, very much part of the plan, looking forward to evaluate that. I think the other part of your question was any opportunity to accelerate. The way I would respond to that certainly is that our first step is to get to 280 kbd. You've seen us accelerate that already by 1 year versus the outlook that we shared at our last Investor Day. I think we need to get there first by 2024 and then in the meantime, evaluate these additional steps. And obviously, acceleration, just like we did with the 280 kbd milestone, would certainly be part of that evaluation that we complete.

**Brad Corson – Chairman, President & CEO**

All right. Thanks, Simon. And so let me come back to the question on CapEx. And thank you for recognizing that we have slightly reduced our outlook for capital relative to our last Investor Day. I think it's important to acknowledge that when we build our CapEx plans, we're very much focused on how do we deliver the greatest value from our opportunity portfolio. And we are constantly reassessing what those opportunities are, how they compete in the current market environment. And that's just an ongoing process for us.

What I'm pleased to say is on top of that, as we execute our capital programs, we're continuing to apply significant discipline and rigor to achieve efficiencies in those projects, just like we do on the operating expense side. You heard us talk a lot about cash expenses today and the very significant improvements

and efficiencies there. But we also bring that same rigor to capital expenditures. And it is through those efficiencies that we are able to deliver the same scope of projects, high-return projects, at a lower capital cost. And that allows us to then integrate new opportunities like the renewable diesel project at Strathcona within essentially that same level of capital spending. Again, it all just is reflective of our discipline.

Also worth noting, as Jon talked about, the cost as we see it today of that renewable diesel project is about \$500 million, spread over about 3 years. And so in any given year, it's a very nominal amount. And we're able to keep that within that \$1.4 billion to \$1.5 billion spend level.

**Greg Pardy – RBC Capital Markets**

Yes, many thanks for the thorough rundown. Brad, if Pathways was finalized tomorrow, what do you think the earliest year you'd see when you actually start to spend material capital on CCUS.

**Brad Corson – Chairman, President & CEO**

Yes. Thanks for that question, Greg. And I wish it were finalized tomorrow. We still have a lot of work we're doing both internally to finalize our plans and optimization. But also, we are, as we've talked about in the past, heavily engaged with both the provincial and federal government around their level of participation, the support we need from them in order to move these very large-scale investments forward. We're also working with the provincial government on finalizing access to pore space in the Cold Lake area. So we're not there yet, but we're making great progress.

But once we have more clarity on those areas, then we will be progressing really multiple projects in parallel. There is the core foundation project around the CO2 pipeline. That needs to go through the same steps that any major pipeline project would go through in terms of all the design work, all the necessary consultation work, the environmental studies, the permitting, that is typically a multiyear effort. But we fully expect that we could deliver that pipeline within kind of the second half of this decade. And so that's what we would be working towards.

But in parallel to that, there are several other kind of asset-based projects that would need to be progressed as well that are at the capture side of that overall program. So we need to install facilities at sites to capture the carbon, we need to transport it in the large pipeline that I just spoke to, and then we need to have the appropriate injection facilities at the hub in Cold Lake to inject the CO2. So we're targeting to have a very material emission reductions by the second half of this decade. But again, pending continued progress with the government agencies, both provincially and federally.

**Greg Pardy – RBC Capital Markets**

No, I think that addresses it. And maybe just to come back to Simon, I completely appreciate you flagging Kearn's perhaps a little slower start to the year. Could you maybe just explain a bit around causality on that? And then just whether you're basically back up and running at good rates today? Or is this something that's lingering a bit?

**Simon Younger – Senior Vice President, Upstream**

Yes. Happy to, Greg. And really, it relates to some of the commentary that we provided as part of our fourth quarter call. You might recall that we talked about some really severe cold weather that impacted us in December at Kearn and also impacted some of the other operators in the region. And then Brad had mentioned that some of that lingered into January. So we saw continuing effects of that into January. So a really tough start to the year because of that early year cold weather.

Now when we talked towards the end of January, operations had essentially returned to normal. We did subsequently have a couple of additional downtime events early in February. But certainly, nothing lingering now. If you look every month progressively through the quarter, our production has continued to strengthen and recover. And certainly, as we sit here today, very much normal operations.

**Nicolette Slusser – Goldman Sachs**

This is Nicolette Slusser on for Neil Mehta. So the first question would just be on capital returns and around the timing of a potential SIB. Would it be fair to say it would be around the May time frame after earnings? Any color you can provide there would be helpful.

**Brad Corson – Chairman, President & CEO**

I'll turn it over to Dan to kind of discuss our current planning basis there.

**Dan Lyons – Senior Vice President, Finance and Administration**

Yes. We talked about this a bit on the earnings call. I mean, clearly, we plan to renew the NCIB. We've exhausted our NCIB in January with about \$450 million return then in that month. Our next opportunity to renew is at the end of June. We certainly plan to do that. But clearly, given our cash balances and our cash outlook, we anticipate supplemental returns before that. That is before we renew the NCIB. And as we've said, we've heard the feedback from the market. The substantial issuer bid is a strong preference, and that's our base case. So that's what I could say about timing.

**Nicolette Slusser – Goldman Sachs**

Great. That's helpful. And then just a quick follow-up would be on the cost side. So long-term CapEx seems to be around the CAD 1.4 billion to CAD 1.5 billion range. Can you talk about any inflationary effects you may be seeing? And how IMO is planning on mitigating those impacts?

**Brad Corson – Chairman, President & CEO**

Yes. It's a really good question. Like, I think kind of many elements of society right now, there are inflationary pressures. And we are seeing those in our business as well. I would say they have not been as substantial as what we've heard in other parts of kind of consumer affairs. But certainly, we see increased cost from energy. That does impact us. We are seeing higher cost to steel. That has not been as big of a factor just because of the nature of where we are with many of our projects.

Jon talked about the Sarnia products pipeline that has a lot of steel associated with it. But it's mostly all

in the ground now and ready for commissioning and start-up. And so we haven't seen big effects there. One of the largest projects we have in the portfolio currently and for the next couple of years is our Kearl tailings project that Simon talked about, that though is mostly kind of an earthmoving project. And so again, we're not seeing huge inflationary pressures there either. In other basic supplies and services, we are seeing some moderate increases.

But I think what you also heard today was this kind of relentless commitment to managing our cost structure and continuing to strive for opportunities to lower that cost structure. And I think because we've been so successful in achieving that over the last 2 years, we talked about this \$1 billion improvement in our costs, that gives us continued opportunity to offset a significant portion of this inflationary pressures that we're seeing, with maybe one exception being some higher energy costs. But obviously, we're in the energy business. And so while there are some debits on our costs for higher natural gas prices, we do benefit more broadly from the higher commodity prices as well. I hope that answers your question.

**Menno Hulshof – TD Securities**

I'll just start with a question on emission reduction targets. Does the oil sands alliance's target of 1/3 absolute reduction to industry emissions allow for any production growth? And I'm asking the question in the context of calls for increased supply from the North American producers.

**Brad Corson – Chairman, President & CEO**

Yes. I didn't quite follow the first part of your question about the 1/3 reduction. The Pathways to Net Zero alliance were focused on a reduction to net zero by 2050. Now obviously, that will be a journey from here until 2050, and we've laid out a program that would achieve about 1/3 of the emissions reduction by 2030, another 1/3 by 2040 and the last third by 2050. So maybe that's what you were referring to.

**Menno Hulshof – TD Securities**

Yes. That's what I meant, Brad. 1/3 by 2030.

**Brad Corson – Chairman, President & CEO**

Yes. So that is our objective, and that's underpinned by a range of projects and many assets across Alberta, as well as additional reduction initiatives. I think it's always important to keep in mind that as we progress on this journey to net zero, we're not just focused on capturing CO2 and injecting it, but we're also working very hard at eliminating emissions before you have to even think about capturing. And that's where these in-situ solvent technologies play such a substantial role in our portfolio and enable us to minimize how much CO2 needs to ultimately be captured and stored.

**Menno Hulshof – TD Securities**

Okay. And that's a good segue into my second question just on CSP. That's always been a really exciting

technology for me given the potential for a 90% intensity reduction. And I believe you mentioned that it's already commercially proven. So why is it only being deployed in 2028? And is there any potential to accelerate this time line? And maybe you could also just remind us of scalability.

**Brad Corson – Chairman, President & CEO**

Yes. It's a great question. I'll ask Simon to comment on that.

**Simon Younger – Senior Vice President, Upstream**

Yes, happy to share a bit more detail about CSP. And you're absolutely right. It is an exciting technology. We have already successfully piloted it. In fact, we've had an active pilot up and running now for a number of years at Cold Lake. What it is, is it's a cyclic solvent process. So similar in concept to our heritage CSS process, but using instead of steam, a propane solvent. Now what actually though is true is that it is uniquely suited to the thinner sections of reservoir that are typically later in life in an in-situ reservoir like we have at Cold Lake. It is not as well suited to, say, for example, a large greenfield, a large resource, multi sort of billion barrel resource that you might see in some of these undeveloped leases that are out there.

So the timing is really related to when does that technology make sense in the overall development plan of that in-situ resource that we have at Cold Lake and other operators would have around us in that Cold Lake region. So it's certainly not a case that we're pushing it out for any other reason other than when is the optimum time to bring that into the overall development plan in such a way that it maximizes value and maximizes the emissions reduction potential.

**David Fernandez – Bank of America**

Dave Fernandez in for Doug Leggate here. I wanted to ask first on the CapEx on the Upstream side. It looks like the outlook for 2023, 2024, looks slightly below what you guys had last Analyst Day. Production obviously isn't impacted. So I kind of wanted to get some insight around what's driving what looks to be some pretty resilient production volumes at a lower cost, particularly given the inflationary pressures that we're seeing.

**Brad Corson – Chairman, President & CEO**

Yes, I'll ask Simon to comment on that.

**Simon Younger – Senior Vice President, Upstream**

Yes, absolutely. Happy to, and thanks for the question. And you're exactly right. I mean really that plan-on-plan reduction in our CapEx profile really just reflects the updates that we've made as we continue to refine and focus on capital efficiency that Brad's mentioned and really strongly emphasized. So essentially, it's the same activity plan, but we see lots of opportunities to not only offset the pressures, like inflationary pressures, but actually further reduce the cost. And I'll give you one really excellent example of that, and that's the Grand Rapids Phase 1 project at Cold Lake that we continue to progress.

As we've taken some of the time to pace that investment, and certainly the base performance of the field being much, much stronger has enabled us to do that. We've actually gone back and more thoroughly benchmarked and optimized the scope of that program and reduce the full program costs by over 20%. So versus the last time we talked in November of 2020, I communicated that Grand Rapids Phase 1 had a capital intensity just below \$30,000 per flowing barrel. We have subsequently reduced that by 20%. So that's one example. We see a number of other examples across our Upstream business, where we are laser focused on capital efficiency and squeezing more out of every capital dollar that we plan to spend.

**David Fernandez – Bank of America**

Perfect. That's really helpful. And if I can ask on the breakeven. So as you guys noted, the FX rate went against you guys, but you're still able to lower that breakeven. So at \$35, it's about half of what the back end part of the curve is kind of trading at right now, around \$70. So can you provide some insight around how you assess what is the right breakeven target particularly as it concerns managing the dividend, which relative to peers might be seen as not as competitive on a yield basis? So thoughts kind of around how you manage that breakeven target with both kind of like a long-term view on where you see oil prices as well as where you want to see that dividend and the role of that dividend.

**Brad Corson – Chairman, President & CEO**

Yes. Thanks for the question. I'll maybe make a couple of remarks, and then I'll ask Dan to supplement that. I would say, first of all, our objective is to drive that breakeven, all things being equal as low as possible. And the reason for that is that we operate in a commodity price world and we need the business to be resilient at a wide range of prices. And what we saw in 2020 really kind of tested that. And as a result of the discipline we brought for many years, we were able to weather kind of through the many financial challenges of the pandemic.

So we're always going to be looking for ways to fundamentally drive that breakeven lower because that ensures our long-term resilience and competitiveness. Now obviously, part of that breakeven, if you look at the \$35 number, includes not just cash breakeven for the operations, but then sustaining capital and our dividend. And what we've demonstrated is our ability to raise our dividend substantially but still achieve a very competitive breakeven. So I'll maybe pause there and see if Dan wants to add anything to that.

**Dan Lyons – Senior Vice President, Finance and Administration**

Yes. I mean, as Brad said, we don't have a specific breakeven target, sort of lower is better. I mean we don't want to further away good opportunities. Just breakeven itself is not a target, but generally speaking lower is better. At \$35, we're saying we can not only cover sustaining capital, but the dividend. And look, we also have a capital structure. So if there's some period where it's worse, we can still weather that, right? So we feel pretty good about \$35 in our current dividend.

And regarding the dividend philosophy, it's reliable and growing. And we don't want to get ahead of ourselves. But given our strong cash flow outlook, we thought the significant increase in the last couple of years were warranted. So we do think about sustainability, always. But I think the fact that we've increased the dividend shows our views on that. So I mean, that's a little bit of adding to what Brad said. No specific target. And we also have a capital structure to help us weather the storm should they occur.

**Dennis Fong – CIBC Capital Markets**

Great. I really appreciate the color and incremental details today. The first one just is related to in-pit tailings. You've obviously made a fair amount of significant progress in terms of reducing unit operating costs. So congratulations on that. Understanding that peak spending is here in 2022 and the kind of time line for the project kind of proceeds through to 2025, but I was hoping to get a little bit of incremental color around what's some of your expected cost improvements associated with the in-pit tailings happens to be, as well as how that potentially helps with mine planning and the timing of further potential production increases?

**Brad Corson – Chairman, President & CEO**

All right. Great question, Dennis, I'll turn it over to Simon.

**Simon Younger – Senior Vice President, Upstream**

Yes. Happy to give you a bit more detail on in-pit tailings. So we're probably about halfway through that project, maybe a little under that. Total spend will be in the range of CAD 750 million over the next number of years. Of course, we started 1.5 years ago. We will first go in-pit with the tailings in 2023, so start-up in 2023. And really everything is remaining on track from a capital efficiency standpoint. We are identifying and securing some cost savings as we execute the project. They're by no means as significant as the 20% example I gave you at Cold Lake. But we are seeing some cost efficiencies and do expect to bring that project in a little bit below the full funding estimate. So really positive news story there and safe, reliable execution is ongoing and very well.

Moving to in-pit tailings is not so much a part of the unit cost story. The reason to move in-pit is just a natural transition of the mine plan. That was always part of the original Kearn plan. Right now, we have an external tailings area, which really covers a start-up phase or sort of first 10-ish years of the mine. And ultimately, the safest and lowest cost opportunity or option for long-term storage of tailings is in the pit that you've obviously dug out to mine the ore. So long term, certainly in-pit is the safest and lowest cost option. It's kind of baked into the long-term mine plan for the asset. But when we transition from external to in-pit, that is not going to have a significant driver or impact on the day-to-day running or unit costs of the asset. I hope that answers your question.

**Dennis Fong – CIBC Capital Markets**

No, that definitely does. I appreciate the incremental color there. My second question here just relates to Cold Lake. We're seeing, or from your presentation, there seems to be a fairly significant GHG

emission intensity reduction while kind of maintaining production relatively flat or even growing slightly between 2021 and 2025 period versus 2026 to 2030. I was just curious if you wouldn't mind commenting a little bit about your expectations around absolute emission levels, and whether or not that includes, I think that there was a small inclusion in terms of CCUS within that, but just how much of a relative impact versus the application of lower-energy intensive technologies versus the implementation of CCUS within kind of those relative animation intensities.

**Simon Younger – Senior Vice President, Upstream**

Yes. Certainly. Happy to give you a bit more color there. And really, we are very proud of the transformational development plan that we've been able to put together for Cold Lake in this past year. On the back of a couple of years of pretty intensive work to rethink the development plan, look at where we could bring in more solvent technologies and SA-SAGD and then some of the other NCG and CSP that we've talked about as well, where we could accelerate those into the plan and really replace some of the CSS developments that were in our sort of previous and historical plan. We even tested things like rather than redeploying steam, shutting that steam in as we go forward.

And we were able to find and optimize that development plan. And really, what that told us was that kind of holding Cold Lake in that 140 to 150 kbd sort of plateau range but accelerating these solvent technologies in, really gave us a fantastic outcome from a value standpoint in terms of profitability, greenhouse gas compliance costs, things like that, so unit cost for the asset and also, of course, emissions. So you're absolutely right. The intensity is projected to drop by 25% in that second half of this decade versus the first half.

I don't have explicit absolute numbers for you across those same time frames. But what I could tell you is that specifically at the Cold Lake asset, the absolute emissions certainly are flat to down based on that rethink of the development plan. And more broadly, we're sort of starting to look at what that looks like and how that impacts the overall Imperial portfolio, obviously, from an absolute emission standpoint. But yes, the transformation at Cold Lake really quite significant and one that we're very proud of.

**Phil Gresh - JPMorgan Chase & Co**

First one, I guess this is for Dan. When I went back to the last Analyst Day, I think I asked a similar question around Downstream and Chemicals. How do you think about the contribution to the overall cash flow profile that you forecasted there at different price decks from Downstream and Chemicals? And has that changed at all from the last Analyst Day when you consider how strong the fundamentals appear to be, particularly on the Downstream side?

**Dan Lyons – Senior Vice President, Finance and Administration**

No. I mean, over the 5-year period, it kind of washes out. We had about \$1.5 billion of cash flow per year in from those businesses, and it's about similar in the most recent 5-year outlook. So I mean when we did it a year ago, we were looking out to the future and thinking about normal, sort of normalized margins and recovery. So we look at it a bit of a long-term basis. So in our outlook, that particular outlook, it's about the same.

Now if you were doing a near-term outlook, you might goose it some more. But we're going over 5 years. Chemicals has obviously had some cyclical to it. So no, not much change. That's not what drove the breakeven lower. What drove the breakeven lower is OpEx reductions, higher production, which I said more than offset the dividend growth and the ForEx headwind.

**Phil Gresh – JPMorgan Chase & Co**

Got it. And I recognize this is looking out to 2024 and beyond. But as you look at the RD project, how do you think about the range of possible outcomes in terms of the financial contribution from those? And do you have a view around what the carbon intensity scores could be based on your feedstocks, the use of blue hydrogen, et cetera?

**Dan Lyons – Senior Vice President, Finance and Administration**

I'll let Jon take that one.

**Jon Wetmore – Vice President, Downstream**

Sure. Yes, those are great questions. The project has the ability to make some substantial improvements to the profit loss for Downstream. There are a number of scenarios that we need to look at there, including the actual Clean Fuels Regulation, final version. It's difficult for me to quote you a number today around that P&L impact just because we do need to very much see what that regulation provides us with. The carbon intensity of the product, we're shooting in the low 20s range for the RD itself. We think that's competitive with anything available in North America, and it certainly will be better than an imported RD that goes to that very torturous supply chain that I mentioned coming from the U.S.

So from a carbon intensity point of view, there again, we need to see the final regulation to really get a confidence around how the government would see us pin a CI number to the product, but we believe it will be very competitive in North America.

**Phil Gresh – JPMorgan Chase & Co**

Got it. And Dan, I guess, given that it's in 2024, start-up, you probably don't really have much of anything embedded in your expectations there?

**Dan Lyons – Senior Vice President, Finance and Administration**

What we do embed the downstream projected earnings, which do include the renewable diesel project. And as Jon said, the returns that we're projecting are pretty attractive. So that definitely is a positive effect overall.

**Phil Gresh – JPMorgan Chase & Co**

Okay. Got it. If I could ask one last one just on operating costs in the Upstream business. Recognizing that you have targets to continue to reduce the operating costs in this type of inflationary environment, it sounds like you're pretty well contained on your capital spending. But how do you think about the

ability to achieve those targets in this type of price environment and on a per barrel basis?

**Brad Corson – Chairman, President & CEO**

You want to talk about that, Simon?

**Simon Younger – Senior Vice President, Upstream**

Sure. I can do. Yes. I mean I think the short answer is pretty confident. We feel pretty good about it. I mean I think if you look at an asset like Kearl, as I mentioned, I think we reduced our unit operating cost in 2020 relative to 2019 by over 20%. So we carry a lot of momentum through that. And are continuing, as I mentioned in the prepared remarks, to focus on bringing those costs down below USD 20 per barrel to be sustained for the long term.

Absolutely, there will be headwinds, and we currently see headwinds from inflationary pressures. There are other more physically related effects in the mine itself, like expanding the mine footprint and longer haul distances and things like that, that we also have to overcome. But that's where technology comes in. That's where our innovative and talented people come in. And I think building on or leveraging the momentum that we've already built, I feel very confident that we'll be able to continue that focus.

And the same goes for Cold Lake, I think, as well. And this sort of GHG transformation strategy that I've spoken a lot about today really is a big part of enabling that as well. We are seeing plenty of potential to reduce our unit operating costs at Cold Lake. That certainly goes beyond what would be required to offset things like inflationary pressures.

**Brad Corson – Chairman, President & CEO**

And then I might supplement that, Simon also highlighted in his presentation some of the objectives at Syncrude. And we are clearly striving along with the operator to achieve more efficiencies there, a lower cost structure. And again, all that enables more ability to offset inflationary pressures.

**Patrick O'Rourke – ATB Capital Markets**

Thank you for taking my call this morning. First-time caller, longtime listener here, a very thorough rundown that you guys have had so far today. I just want to ask a couple of quick questions here. Number one, with respect to the return of capital or the capital allocation priorities, obviously, you've got the dividend and NCIB, SIB and then growth to your sort of high-quality opportunity set. Thinking about the current context and potential context of the egress balance here in Western Canada, what sort of structural commodity price outlook starts to float capital allocation to growth priorities up the ranking here?

**Brad Corson – Chairman, President & CEO**

Yes, it's a good question. And I would say we don't have a specific threshold. We are constantly evaluating new opportunities relative to our existing portfolio of opportunities. And so we're testing their competitiveness within the portfolio. We're testing them across a wide range of prices. And so I

think that's more of an ongoing process. We're obviously benefiting from some high crude prices today. But we don't take that for granted. Our experience has been that we're in a very commodity-driven market. There's volatility to those prices. It wasn't very long ago that prices were below \$40. And now just a short time later, they're above \$100. And so when we make choices around growth opportunities, we're testing them across a wide range of prices. So we're going to continue to do that. I don't know, Dan, anything you want to add?

**Dan Lyons – Senior Vice President, Finance and Administration**

No. I would just maybe emphasize we don't just look at today's prices, if you're going to build something, it's a long-term deal. It takes 4 years plus just to build it. And so you got to have a balanced view on longer-term prices when you think about that and not be too biased by what's going on at the moment.

**Patrick O'Rourke – ATB Capital Markets**

Okay. And you just touched on the strategic value of the Strathcona renewable diesel here, expecting sort of an FID in 2022. Can you walk us through the remaining sort of hurdles and pressure points in terms of getting to FID on that project? And then wondering if agricultural commodities here have seen considerable volatility and strength, how that plays into the decision process?

**Brad Corson – Chairman, President & CEO**

All right. Well, Jon loves talking about SHRD. He's immersed in it every day. So I'll let him talk about it.

**Jon Wetmore – Vice President, Downstream**

Okay. Thanks, Brad. Yes, you'll hear that name SHRD. Apologies for it. It's not maybe the best acronym we chose for a project, but it stands for Strathcona hydrogen renewable diesel. But the renewable diesel project for the work that's coming ahead to get to full financial funding and final investment decision, it's really about seeing the regulation. As I mentioned, we've got to have a good hard look at the final details of that. It's got very important facets in it about the CI numbers of the crop sources, both in Canada and the alternative we have to actually bring some in from the U.S. I currently am biased that I would really like to see almost all or effectively 100% of our vegetable oil feedstock come from Canada, but we need to see how the government will treat those 2 different localities.

We've got to go our way through looking at the hydrogen project itself. It's a complicated project. We've got to look at not just the tier of hydrogen that we're going to take from that new blue hydrogen facility, but understand how it can build out its carbon capture steam, again, with the regulatory framework that the government of Alberta is still working on pretty actively in the Edmonton area. So lots of good work there. So between feedstock, hydrogen, and certainly, the facilities that we need to build at Strathcona, those are the big things between here and a decision later this year.

To your question about agricultural commodity prices, it's an excellent question. I've learned a lot about this business having dug into it for a couple of years now. I would still say that we need to continue to

grow our sophistication and maturity around this. We've got plans within the agreements with the vegetable oil producers to look at how to manage risk around the volatility in their seed prices going through to the vegetable oil markets. Vegetable oils are produced in Canada but oftentimes exported to China and to Europe. So those export values have a material impact on what we would pay for the vegetable oil coming out of the seed crush facility.

And then equally, as the owner of the trading business here at Imperial, we've got opportunity to look at hedging and other risk management processes to manage that agricultural volatility. So lots of work in that space to sort it out. I know certainly probably the origin of that question is looking at very high canola prices and other commodities, certainly recently, like grain have really shot up in and around the global geopolitical issues that are there. We're going to try our level best to make sure that we are insulated from a large majority of that, looking at the different options we have through the agreements and through other hedging mechanisms. So I feel good that we're going to be able to keep the projects strong economics within a tight boundary going forward.

**Travis Wood – National Bank Financial**

I'm wondering if you could give us an update on the sales process of the conventional portfolio that you announced recently. And to the extent, color around what types of buyers, private, public and maybe the size of the potential buyers as well. And then with that, as you think about the already robust free cash profile and the proceeds from a potential sale, how should we think about that recycling back into the business? And is there a scenario where we could start to talk about oil sands growth? Do you look to potentially look at extending the portfolio through M&A in the oil sands assets? Or do we start to talk about Aspen potentially coming back into the conversation as well?

**Brad Corson – Chairman, President & CEO**

Thanks for that question. As Simon mentioned, we are very far down the path in marketing those unconventional assets primarily in the Montney and Duvernay resource bases. We've had just tremendous buyer interest in those assets. I won't get into any of the details due to confidentiality, but it's a wide range of potential buyers from smaller players to larger players, Canadian-based, international-based, some that are mostly focused on Montney, some that are may be more interested in the Duvernay, some that are interested in both. Just tremendous interest.

We expect to kind of finalize the bids here before the end of the month, with sufficient time for all those interested parties to be in the data room and make sure they fully understand the assets and best position them to submit a competitive bid. As Simon said, we haven't made any decisions yet on whether we will sell ultimately or not. But again, the interest is very, very high. In terms of what we would plan to do with the proceeds, it really will just continue to support our strong cash generation strategies that we've laid out. We are obviously reinvesting in the business with our existing oil sands operations, and also in the Downstream and Chemicals business, as you heard as well.

In terms of does this fundamentally change the picture for M&A, I would say it doesn't change the picture for M&A, because as we've said in our strategy, our core focus is with our existing assets. But

having said that, the aperture is open. We are regularly evaluating other potential growth opportunities, which could include M&A. It could include things within our undeveloped resource base. You mentioned Aspen as an example. So we're continuing to evaluate those and test them against the efficiency of our existing capital program, which is already delivering growth. As Simon laid out, Kearn has delivered tens of thousands of barrels a day of growth over the last few years at a very cost-efficient manner. And so that's what we're weighing things against is how do they compete. But the aperture is open.

**Operator**

Thank you. I will now turn the call back over to Dave Hughes, Vice President of Investor Relations.

**Dave Hughes – Vice President, Investor Relations**

Thanks, operator. That brings us to the end of our program today. So on behalf of the management team of Imperial, I'd like to thank everybody for joining us on our webcast. Look forward to seeing you all, hopefully, in person in the very near future. Thank you very much.

**Brad Corson – Chairman, President & CEO**

Thank you.