Imperial 2023 Investor Day

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Welcome & Cautionary Statement

Dave Hughes

Vice President Investor Relations, Imperial Oil

All right. Good morning, everybody. Welcome to our 2023 Investor Day. I'm Dave Hughes. I'm with the Investor Relations team at Imperial. I'd like to be the first. I'm but probably not the last to welcome you to our first in-person Investor Day in what seems like forever. So want to extent a warm welcome to everyone, whether you're attending here in person or via the webcast. Certainly appreciate your interest.

I'd also like to acknowledge that as we gather today, we recognize that we are within the treaty lands and territory of the Mississaugas of the Credit and the traditional territory of the Huron-Wendat and the Haudenosaunee. Today, this land is home to many diverse First Nations, Inuit, Métis peoples from across Turtle Island, and we're grateful to work on the land.

I'd also like to introduce a couple of special guests we have with us today, Miranda Hubbs, who's a Board member of Imperial Oil; and John Floren, who will be standing for election to the Board at the AGM coming up in a couple of weeks.

Couple of administrative items. First of all, I'm not aware of any emergency drills. But in the event there is an emergency, first and foremost, we'll follow the instructions of the venue staff. But the emergency exit, if you're exiting through the back of the room, you go out the doors you came in on and the second door on your left is a staircase. If you're going out this door, go to your left and it will be on your right, the exit down. Now if that staircase is blocked in any way, the venue staff will redirect us to the alternate exit, which is on the other side.

In terms of washrooms, again, out the doors you came in second or first - first door on the left is the ladies room. Men's room the same spot, but at the other end of the hall to my right.

I'd also just as the second administrative item draw your attention to cautionary statements. You'll find them at the back of the presentation materials that are in front of you or that were posted to the website this morning, it contains important information regarding forward-looking statements, reserves, resources, risks and uncertainties.

Today's comments also include references to non-GAAP financial measures. The definitions and reconciliations of these measures can be found in the supplemental information. I highly recommend you have a look at those when you have a moment.

So I'll turn to the agenda. After I get off the podium, Brad is going to come up and offer some opening remarks. After Brad is done, Sherri Evers, our Vice President of Commercial Corporate Development is going to provide an update on Imperial's progress and its sustainability journey. Then after Sherri will be Simon Younger, Senior Vice President of the Upstream, who's going to give an upstream update for you. Then we're going to take a break, a short break, about 10 minutes. And after the break, we'll be back and Jon Wetmore, Vice President of the Downstream is going to provide a downstream business update, followed by Dan Lyons, who will provide a financial update. And then Brad is going to offer some closing remarks, and then we're going to open the floor up to Q&A.

So with that, I'll turn it over to Brad.

Opening Remarks

Brad Corson

Chairman, President and CEO, Imperial Oil Limited

Well, good morning, everyone. It's great to see all of you, and thanks for coming. Thanks for each of you in the room, but also thanks for the people that are joining us via the webcast today as well. I'm super excited to be here. This is the first time we've been together for an Investor Day in person for almost four years now.

In fact, the last time we were together was just as I was about to step into the CEO role, we were here in this building, and it was Rich Kruger's last Investor Day, and I had the opportunity to speak to the very last slide. And I was anticipating we're going to have several more of these annual events and then this thing called COVID came along and interrupted those plans for in person. We, of course, were able to have a couple of virtual Investor Days, and I think that serve the objective, but not as well as getting together in person. So it's great to be here.

So today, I'm going to lead off with the slides, but I'm still going to close as well. So I'm on both ends of it this time and responsible for everything in between. And it's great to be here also with the whole management committee of Imperial. I know many of you have an opportunity to, of course, interface on a regular basis with our Investor Relations team, who are all here as well. And then periodically, you get a chance to maybe engage with me or maybe with Dan or a couple of us.

But this is a great opportunity to see the whole management team, the senior leadership team of Imperial, who are all working so hard to create value for our shareholders. So please take advantage of that as we get into the Q&As, as we break for launch to meet the rest of the management team and just get to know everybody.

I'm also excited to be here today, not just because we're in person and to get to meet some of you haven't met before, but also to reflect a little bit on the great year we had in 2022. We set a lot of records as a company. I am just super proud of what we achieved. I'm super proud of all of the organization, all of the 5,300 employees that are working so hard every day to create value.

And I'm also excited, though, to now talk about where we're going. We've got a great platform we've built over the last several years. And hopefully, what you'll take away from today's discussion is we're extremely well-positioned to capture value as we go forward and to continue this path we've been on of creating shareholder value and returning surplus cash to our shareholders, which I know is a high priority for all of you.

And so before I get into some of the prepared slides, I just want to take a brief minute to acknowledge the situation we're dealing with at Kearl. I would expect many of you have seen a lot of media reports about two incidents we had at Kearl. One that dates back to May of last year, which was a seepage incident related to our tailing ponds and another incident in February of this year related to the overflow of a drainage pond. And when Simon gets up here to talk about the Upstream, he's going to give you a more wholesome update on that.

But as a CEO of the company, I just want to share with you, as I've shared with many how apologetic we are as a company that those two incidents have happened. And I'm especially apologetic that we, as a company, did not fulfill our expectations around the relationships that we've built with indigenous communities. We fell short of being very forthright and transparent with communications on the status update as we were developing mitigation plans for these incidents.

We followed all the required rules around reporting. But with our very important neighbors, the indigenous communities, we should have been providing regular updates. So I feel very bad about that. And I'm profoundly apologetic.

What I do want to convey to you today, though, is our management team has taken this situation very seriously. We are providing all the resources that are necessary to not only address the operational side of this and make sure we learn from it and make sure it doesn't happen again. But we are doing everything we can to rebuild trust with these important indeginious partners of ours. So that's all I'll say about it, and Simon will talk more about it.

But again, I want you to know that although we had this environmental protection order issued against us, it's the first in the history of Kearl's operations and I want it to be the last. One is one too many, and we're committed to make sure it doesn't happen again.

So with that, let me move into the prepared slides. And again, I'm super proud of what we achieved in 2022. We delivered, as you know, record earnings, record cash flow from operations. You can see the numbers there, $7.3 billion in earnings, a record for us, $10.5 billion cash from operations. And although we certainly benefited from a strong commodity price environment, some very strong downstream margins, we could not have achieved that level of earnings and cash flow had it not been for our strong operation - operational performance, strong safety, performance running those operations efficiently, reliably, making sure we are maximizing value from our assets, bringing strong capital discipline to our choices, bringing strong operating expense discipline. And that approach was critical to us through the pandemic.

But we have now leveraged that as we've come out of the pandemic. And as we're seeing a much more favorable price environment, we're maintaining that discipline, and that has allowed us to fully maximize the earnings potential from this more positive external environment. So I'm super proud of that. And I can assure you, and you'll hear this today that we are continuing with that theme of maximizing the value of our existing assets, looking for high-value accretive opportunities to debottleneck our assets, continue to improve on reliability, on throughput, continue to strive towards a best-in-class cost structure.

And again, we believe that will allow us to differentiate ourselves from our peers, from the competition and be able to take advantage of any scenario we're in, whether it be a high cost scenario - a high commodity price scenario or a low commodity price scenario, we want to demonstrate resilience through that whole spectrum. So we have a strategy that's very much focused on maximizing the value of our existing assets.

So this is the second, what I call the money slide. So what does that mean for you, our shareholders? Well, we set some additional records in 2022. And it really builds on this long-standing commitment we have of returning surplus cash to shareholders. You can see on the slide the dividends that we paid, over $850 million in dividends last year. We demonstrated our 28th consecutive year of growing the dividend.

In fact, last year, we had two increases in our dividend, both that were records for us. Early in the year, we raised the dividend by $0.07. And then at the end of the year, we raised at $0.10 per share. You put that together, it was a 63% year-on-year growth, quite substantial. We supplemented that with a very aggressive share buyback program. We've historically had the NCIB program, but we have a limit of 5% per year. As we looked at our cash flow we concluded we had additional cash that we wanted to distribute to our shareholders.

And so we implemented two different SIB programs, substantial issuer bid, one at the beginning of the year, one at the end of the year. When you put together the two SIBs with the one - with the other NCIB, we had a total of $6.4 billion of share buybacks, and that represents 14% of our shares that were repurchased about 90 million shares.

The market has rewarded us for that quite positively. You have rewarded us for that. And you can see that on the inset chart that shows our share price appreciation. Just last year, we saw a 45% appreciation of our shares. So when you combine that with our dividends, a 48% total shareholder return, TSR. So we're quite proud of that.

Obviously, it sets a high bar as we go forward this year. But I am pleased to say that we have brought a lot of momentum into this year. And I continue to be very optimistic about the company's earnings and cash flow potential and especially in the current price environment.

So just quickly, I want to highlight some of the things I am most proud of for 2022. And you'll hear more about this in the individual presentations but it starts first and foremost with safety. Safety is a core value for us at Imperial. We have an objective of nobody gets hurt. And we, as an organization, work tirelessly to achieve that objective. And when people do get hurt, we make sure we have a rigorous process to learn from those incidents and improve our processes, our approach to avoid the recurrence.

How that's translated for last year, is a continuation, of course, of a long record we've had with no fatalities. But then looking at our lost time incident rate, which is the graph that's shown, what we experienced in 2022 was our best-ever lost time incident rate performance as a company. So I'm super proud of that. This is one metric we look at, we look at a wide range of metrics. This is indicative of more serious incidents.

We spend a lot of time looking at the potential of incidents. Even if nobody got hurt or if it was just a minor first aid, what was the potential of that incident because that's an indication of the risk that we are managing, the severity. And I'm also quite proud to say that we have also – as we look at the highest potential incidents, we're also driving that frequency down as well.

So all that translates to a very positive safety culture, moving us on this journey of nobody gets hurt. And I believe that everything starts with safety. And when we have a strong safety culture that, that carries over into our operational culture as well. So strong safety performance translates to strong operating performance. And that's been core to us for a very, very long time.

And you can see that when you look at the next three pictures on the top of that chart. We set a lot of upstream records this last year. The best ever second half production at Kearl. We got off to a rough start due to some Arctic winterization issues at Kearl. We talked about that on the earnings call. But I'm quite proud of how we address those, we mitigated them, and we recovered with the best ever second half production at Kearl.

So again, rebuilding that momentum. Great production performance at Cold Lake, several quarters in a row above 140,000 barrels a day. We've continued to raise our production guidance at Cold Lake as we continue to see better and better performance.

We also, quite pleasingly, saw the highest annual production at Syncrude in its history. Of course, we don't operate Syncrude, Suncor operates that on behalf of the joint venture, but we spend a lot of time trying to influence the performance. And as you know, this is an area that we see significant improvement opportunities. And so we're regularly working with Suncor on how to capture those opportunities. So that's the upstream.

But it was also a great year for us in the downstream. We set records for refinery utilization in the downstream. We also took full advantage of some record distillate margins and made sure we were maximizing the amount of distillate we were producing. And so it was a great opportunity for us to leverage what we saw in the marketplace. And so Jon will speak more to that, but a great story there.

We completed a substantial project that we've been working on for multiple years called the Sarnia products pipeline, which gives us increased access and reliability into the high value Toronto market that we see in this part of the country.

And then one of the things I'm most proud of is the sanctioning, the final investment decision of the Strathcona renewable diesel project. And that's something we've been working on for a few years. We see a significant market opportunity. We're going to be Canada's largest manufacturer of renewable diesel with 20,000 barrels a day when we start that up in 2025. So just in two years from now.

And Jon will talk a lot more about that project, but we're super excited about it. We're making great progress already on it even though we just took that final investment decision a couple of months ago.

And on this slide, I just want to talk a little bit about what we're doing for energy transition because I think there's a lot of noteworthy progress we're making here as well. You've obviously read and heard us talk about our commitment to net zero in the oil sands. Our participation as a founding member of the Pathways alliance, which I think is a critical project for our industry, and I'm quite proud of the role that Imperial is playing in advancing that. But on top of that, here more recently, we've also announced a company-wide goal. So across all of our own operations, including the downstream to achieve net zero by 2050 for Scope 1 and Scope 2 emissions. So I'm quite proud of that.

We invested a lot of time over the last year in analyzing our downstream to ensure the viability of that. We obviously are still very dependent on supportive government regulatory policy. But we believe we have a viable path forward, and that's what gave us comfort in making this aspiration of net zero by 2050.

As we've talked in the past, as we think about energy transition, we're going to focus on opportunities that leverage our existing assets, leverage our skill sets, look at adjacencies because we are committed to delivering value to our shareholders. And so we want to pursue projects that we see are economic that compete for capital relative to other opportunities in our portfolio. And so renewable diesel is an example of that. But there's a couple of other areas that we're engaging to see if there is an opportunity for us.

One is you will recall an announcement we made about our partnership with E3 to pursue lithium extraction from brine and this is focused on actually one of our legacy assets as a company which is the Leduc field in Alberta, where Leduc No. 1 was the discovery that essentially began the oil industry in Alberta. And so that was something Imperial did decades ago.

We've since depleted that resource from a hydrocarbon standpoint. But it turns out that the brine in that reservoir has sufficient concentration of lithium that through this partnership with E3, we are going to test pilot whether we can commercially extract that lithium. So a great opportunity. Again, it goes back to our adjacencies, our assets, our capabilities with reservoir management, water management, to see if we can create a value proposition there. So time will tell. But with the first phase that we're contemplating, we would hope to produce 20,000 tons per year of battery-grade lithium.

And then we also announced a partnership with a company called FLO to look at expanding the network of electric vehicle charging stations across Canada. So again, that's another area that we're exploring, looking at leveraging our relationship with our branded wholesale model and our partnerships in the retail segment. So again, another great opportunity. And then I can't emphasize enough how important the renewable diesel project is, which you see there, 20,000 barrels a day.

So now I'd like to transition a little bit, talk about the current global environment for energy supply. Certainly, the global energy picture is complex. It's continuously evolving. And while the world has, to a large part, return to normal from an energy demand perspective coming out of COVID, there's still lots of supply challenges. We've continued to see a protracted period of underinvestment, meaning new sources of supply are not coming on stream at a rate sufficient to address trends in global demand.

Meaningful growth continues to be constrained as societal concerns about climate change and the uncertainty and changing landscape around the energy transition have really resulted in producers being more cautious about allocating capital in the more traditional forms of energy development.

And so with the market already tightening up, there's an overlay of geopolitical events that are having an influence on prices. Certainly, the ongoing tragic situation in the Ukraine and the resulting sanctions on Russia has added further tension in supply security. And we're seeing an environment now of increasing demand as things have largely recovered. China's demand is starting to increase and looking longer term, as we look at what we expect to happen with population growth around the world and a desire

to raise the standard of living in many underdeveloped countries. We expect all of that will place increased demand for energy.

And so given all that, we expect crude and refined product prices are going to remain supported in 2023. We all have different views on what those scenarios are. What's the low point, the high point, the midpoint. But I think the prevailing view is that it is directionally higher than where we've been the last couple of years, and it's resetting. So we - from our standpoint, we want to make sure we're positioned to take full advantage of that.

And we see Canada is well-positioned to be a key player in the overall energy market. One of the largest resource bases in the world. We also have, I think, very much a proven track record of environmental improvement, of innovation, of know-how. And then you overlay on that, some of the collaboration that we're undertaking like Pathways. And so I think there's a growing recognition that Canada is quite critical in the supply-demand picture.

In fact, some of you may have seen the press release on this, but Ipsos recently conducted a poll of 24,000 people in 18 countries at the end of last year, between November 18th and December 6th, to really test how well people understood Canada and the oil sands industry. Interesting enough, the results showed - and again, this is polling people around the globe, not necessarily Canadians, but around the globe, Canada is viewed as the number one preferred global supplier of oil, looking at all those factors, resource, what we're doing on ESG. So I think for us, Canadians, those of us that are producing here, those of you that are investing in Canada, you should feel quite proud and optimistic that there is a long pathway for Canadian oil producers.

And then bring that a little bit closer home for Imperial, we believe we're quite well-positioned to be the preferred supplier within that Canadian space as well. And so we're going to continue with that journey. And actually, my closing slide today, I'm going to highlight why I view Imperial as the preferred supplier, what is the Imperial advantage. So that's where I'm going to close the day.

And so now just wrapping up on my intro, just a little bit on what you're going to hear today from each of the management committee. And I've already been touching on these themes, but you're going to hear about the importance of resiliency through the cycle, and the value of integration that Imperial brings to the marketplace. And this relentless focus on industry-leading balance sheet strength, cost structure, again, maximizing the value of our existing assets. You're going to hear us talk a fair amount about our investment in technology and innovation and how we see that as critical to enabling us to achieve not just our sustainability goals, but also our cost objectives, and we see great value in our base operations from leveraging technology. And we have a long history of innovation through our research organization, and we'll talk a little bit about that.

We believe all that's going to translate to delivering superior shareholder value. And again, optimizing around our existing assets but also pursuing value-accretive opportunities. And that's been our track record, and we're going to continue with that. And we also want you to take away how we're engaged in the energy transition. We feel quite optimistic about the work we're doing around greenhouse gas reductions, both from an intensity standpoint, but also in absolute, and that's driving us towards this corporate-wide net zero goal, which we think is quite important.

And so with that, actually that's a great lead-in for Sherri, who's going to talk about sustainability for Imperial and what we're doing. So again, thanks, everybody. I appreciate your attention, and we got a lot to share with you this morning.

Sustainable Solutions

Sherri Evers

Vice President Commercial & Corporate Develoment, Imperial Oil

Thank you, Brad, and good morning, everyone, here in the room and those joining us on the webcast. Very pleased to be able to share with you today the advancements that we're making in the sustainability space and how we've worked to really evolve our climate strategy. And I think Brad has set up this conversation very well, just talking about the business environment.

As you think about back to the fall of 2021 and the disruptions that we were seeing in Europe, high gas prices, people concerned about can they heat their homes for the winter, the shortages that were occurring. And then that being further exacerbated by the invasion of Ukraine and just that volatility and that uncertainty that it has really created.

And when you couple that uncertainty with the energy transition, you really start to think about what is the most effective way to go about this, to create reliable, sustainable energy that is affordable and secure for people around the world. And one of the things that we need to be looking at as we do that are what are the available technologies that we have to us today. What are the things that are out there already in commercial deployment that are going to allow us to bend that decarbonization curve so that we can start to make substantial differences to emissions reduction, but do it in a way that continues to maximize returns for shareholders, for investors, but also continue to provide that economic benefit to nations around the world.

And I think no matter what forum you've gone to different industry meetings, you'll hear often people talking about, this isn't an either/or equation anymore. This isn't talking about, it's wind and solar. It's going to be everything. It's an end equation. It's going to take wind, solar, hydro, hydrogen, and traditional oil and gas and chemicals business. And so I think what you'll see today is our plan to really look to line out our future opportunities with the core strengths that we have.

We enjoy a relatively political stable environment here in Canada. And as Brad articulated, we see Canada's role as that reliable, secure energy provider in crude oil supply, and that was obviously further strengthened by the Ipsos study saying that people prefer the Canadian barrel when looking to others. And that comes through advanced regulations through climate strategies. And some might feel concerned about the fact that we do have a stringent regulatory environment where we have strong climate goals.

But what that helps to do is bring investment certainty and that's what we're all looking for, is how do you ensure that you have a strong framework that you can count on as you go to invest hundreds of millions or billions of dollars into opportunities. You still need to be able to provide that strong economic benefit and return but also be able to provide and maximize the returns to shareholders as you look forward. And so having strong fiscal supports being globally competitive, making sure that the framework that we have in Canada competes on that global scale. This is a global commodity. And it’s very important that we continue to be able to be competitive in that broader field.

So it allows us to make investments into new technologies, game-changing technologies to help further that progression towards meeting Canada's objective of a net zero future.

We're globally recognized as well as being leaders for our expertise in carbon management in Canada and the commercialization of that. And I think whether you look at whatever international agency, whether it's the Intergovernmental Panel on Climate Change or the International Energy Agency, everyone is pointing to the fact that oil and gas will be around for the longer term. They also point to the fact that those existing technologies like carbon capture storage are going to be important in order to build to bend that decarbonization curve.

Not only that, but the infrastructure that's going to be needed for other technologies like hydrogen fuel, for example, or even wind and solar on a large scale is going to take time. And so if we want to make a material difference on emissions reduction, leveraging those existing technologies that we have available to us today really help us to move forward.

And so it's not just obviously the fiscal policies or expertise in some of these existing technologies that are important. It comes down to collaboration. I think in Canada, we've been clearly able to demonstrate the power of working together with government, both at the provincial and the federal level, working with our industry partners, indigenous communities, technology providers that through working together, collaborating together to create the right frameworks and fiscal supports, we can continue to drive benefit for the Canadian economy and maximize those returns for shareholders.

So let me turn a little bit more towards Imperial and what we're doing. Last year, we shared with you our climate strategy, and it's really focused on four areas. First is around mitigating the emissions in our operations. And we'll talk a little bit more about pathways as we go and some of the activities we're doing, both in the upstream and the downstream. But this is really allowing us to bend our own internal curve towards the goals that we've set for our organization and ensuring that we do this in the most economic way going forward.

We also have a commitment to help our customers coming up with low carbon fuel products that allow them to address their own emissions, objectives. We obviously supply a lot of large industry, and they have commitments as well to reduce emissions in their operations. And so some of the fuel projects that we have like the Strathcona renewable diesel project really helps our customers think of those solutions to help bend the curve.

Of course, you can't do any of this without working together with the policymakers, partners and industry to help ensure that you have the investment security and the economic viability to develop those game-changing technologies. And the great news is, is that Imperial, along with industry, has well over 100 years of creating, developing, deploying these transformational technologies.

So Brad shared with you some work on the goals that we've set for our organization when it comes to greenhouse gas emissions reductions intensity as well as absolute emissions. And we've done extensive work over the last number of years, particularly focusing first on our upstream business, working to ensure the viability of our oil sands operations coming out with our goals. And we're on track for our 2023 target as well as our interim goal in 2030 to reduce the emissions intensity in our upstream oil sands operations by 2030 at 30% versus 2016 levels.

And as Brad mentioned, we're all extremely proud of the work that our teams have done to take that analysis and that road mapping exercise and extend it to our downstream business as well. And so we've set a number of clear strategies under a range of demand scenarios to figure out how do we also work to decarbonize the downstream assets in our portfolio. And through that effort and through that work, we are very excited to be able to announce a corporate-wide net zero goal in our Scope 1 and 2 emissions by 2050 earlier this year.

Of course, achieving a net zero goal in our Scope 1 and 2 emissions is going to require all hands on deck. It's going to require a lot of collaboration, obviously, with technology providers with our industry partners and, of course, ensuring that we have the right policies. You'll hear that time and time again that we're working with government to ensure that we have the right fiscal support to ensure that we have global competitiveness in order to make these projects economic and viable but help to work towards meeting both Canada’s and now our own objective of having net zero emissions in our operations.

Of course, that comes through that investment into innovation, working to create solutions for not only our own assets but also for our customers using lower emission technologies. Partnerships with indigenous communities also continue to be paramount as we move forward through that energy transition and thinking about economic reconciliation.

So, as I mentioned, our plans are backed by very detailed strategies and road maps, things that are looking at lower steam intensive operations into our Cold Lake facility, leveraging existing technologies that are out there like carbon capture and storage, using the strengths and knowledge that we have to look at low carbon-intensive opportunities like using hydrogen in our operations and building out customer solutions like the renewable diesel facility at Strathcona.

So we recognize that integrating sustainable solutions into our strategies really helps us to prioritize and capture opportunities in the energy transition, those that are aligned with the strengths that we have with our integrated operations with location advantages and, of course, through our skilled workforce. But our focus still remains on our core business. We're still obviously an oil and gas company. And so we're going to be looking obviously at opportunities in that space, but also taking a measured look across the spectrum of where can we bring our knowledge and skills to bear to create value for shareholders and other opportunities.

We want to be able to produce oil and gas at the lowest cost and get returns to shareholders. But we also want to make sure that we're positioned to grow and capture value in new and emerging spaces. And so when you look at this chart, obviously, you can see the more renewable sources of energy on the one side of the chart that are obviously a lower fit with our organization.

But when you look on to that right-hand quadrant, you see the upstream oil production, refining the chemicals business. And as I mentioned, in almost any international agencies view oil and gas continue to be a big part of the energy mix out into the 2050 time frame and plus. And so we're obviously going to continue focusing our business on that, ensuring that we're competitive in those segments.

But there's another area that's in that blue bubble in the right-hand side of the chart, but maybe not as far over, where you look at those things and you say, you know what, carbon capture and storage, hydrogen, renewable fuels and lithium are all actually well matched to the skill sets that our organization has today. And so we want to be able to look at those opportunities and say where is there value capture.

We're a company made of energy experts. We have geoscientists, reservoir engineers, refiners, major project developers and infrastructure operators - these are all key skills that can be fully leveraged into these opportunities. You think about in our company's history, 100 years of taking oil out of the ground, we can use that same subsurface knowledge and expertise and major project expertise to take a look at carbon and figure out how you can safely store it back in the ground.

And so we're well positioned for that. And obviously, being part of ExxonMobil and their 40 years of experience in carbon capture and storage experience, we can leverage their knowledge as well to help us safely go about that activity.

Our downstream business uses steam methane reforming, which is obviously a key part in hydrogen. And so when you take a look at those hydrogen opportunities, you look at our base refining operations. When you pair those things together, you can see how we can maximize value, particularly through the Strathcona renewable diesel project.

I talked about how we have experienced some molecule management in the upstream. Well, it's the same thing on our downstream business. When you think about bio feedstocks, this is really just another feedstock. So you can take that experience that we have in managing those molecules to a more plant-based molecule, putting it through our refining process and making renewable fuels. And renewable fuels are really critical for those hard-to-electrify segments in transportation. So think about the airline industry, long-haul trucking, heavy-duty equipment and mining, those are harder businesses to electrify.

So renewable diesel becomes an important transition fuel before you look at other opportunities that can involve hydrogen. So hydrogen not only can be used to help provide a lower source of energy and emissions into our own operations, but it can also be used in the market. And so we're exploring opportunities where hydrogen can become the transportation fuel again in some of these harder to

decarbonize segments like heavy-duty transportation, where you have high uptime, fast refueling and high payload issues or sensitivities, and this is a nice fit for that.

So we plan to play a key role in that energy transformation, again, ensuring that we have flexibility across the portfolio, focusing on our core business, what we do well, but taking those strengths and skill sets of what we do well into new opportunities that could create future value for the organization and help to ensure that we're maximizing and growing the value for our investors.

As many of you are aware, Imperial has a long history of investing into research and development and new technologies. We've invested more than $2.5 billion over the last 20 years into various types of technologies. And we're the only company that has two research facilities, one based in Calgary, Alberta that's focused on our upstream business, creating process efficiencies and improvements as well as environmental performance. And our other one located in Sarnia, Ontario, which is more focused on the customer fuel offer and how we can create low-emission opportunities for our customers. Sarnia research is also looking forward into the future and bitumen beyond combustion and carbon fiber opportunities as well. So we're obviously well-positioned as we look across the spectrum of opportunities.

And this chart is really meant to show you what were the things that we're working on today, things that you have heard about or will hear about more today, the boiler flue gas opportunities at Kearl, autonomous haul trucks, biofuel blending that we've been doing for a decade. Those are things that we've got ongoing. But then there are some of the other opportunities that require some further piloting like the enhanced bitumen recovery technologies, as well as things that require more policy and regulatory framework that need to be able to be proved out to be commercially and economically viable. And those are things like small modular nuclear reactors, where we're working within the Pathways organization to help evaluate that as well as direct air capture, which is obviously very costly. And how do you bring that down to scale and make that a more affordable opportunity in the long term?

So you can see that we're working across the spectrum. Jon and Simon will both talk more specifically about some of these opportunities that we're evaluating more specifically at our assets.

Brad shared in his opening comments, some of the key partnerships. And I think it's very clear to us that no one person, no government, no company can really go about the energy transition on their own. Nor is Imperial an expert in all these different technologies or different opportunities that we wouldn't probably be the smartest choice to jump in with both feet into all these areas. But that's where partnerships become important. Leveraging the experience, the expertise of other companies to partner with us to help round out the gaps across our value chain.

So I'll talk a little bit about a few of these partnerships and Brad touched on some of them as well. We're working with Finning to look at renewable diesel in our mine fleet at Kearl. And this - renewable diesel can actually reduce your emissions by as much as 70% versus conventional diesel, and this is really good in mining applications. And when you pair that with the proprietary technology for cold temperature that we'll be producing at our Strathcona refinery, that can really create a competitive advantage for us. We're also working with Finning on other technologies as well.

Brad talked about the FLO arrangement that we have, and certainly, we have business across the country coast to coast. And consumers are looking at the future changes in policy and more electric vehicle penetration. And this is really a nice alignment with our network of our Esso and Mobil stations to be able to bring FLO electric charging stations to this network and providing that solution for customers and consumers across the country.

I won't highlight the E3 lithium opportunity. I think Brad did a great job of highlighting that. But again, it's taking something that's part of our existing asset base, thinking about our strengths and skills and how we can develop that into future opportunity.

In the Aviation business, this is one of those hard-to-decarbonize sectors. And we obviously have a very large market share in a couple of the largest airports across the country. And so it's important to us

as we think about that segment and how do we help the airline industry bend the curve to find lower emission products. And so we joined the Canada Council for Sustainable Aviation Fuel to work to figure out how do we commercialize and find the right policies to support the advancement and the marketing of a sustainable jet fuel. So we're working with customers of ours like WestJet and Air Canada through this alliance to figure out how do we bring a low-carbon jet fuel to market and continue to meet the needs, expanding needs of consumers as jet is expected to be one of those products longer term that continues to see a growth projection.

We also announced last year our battery storage project. This is the largest battery storage in North America at 20 megawatts. This is being - has been built at our Sarnia refinery, and it allows us to capture lower cost, lower emission energy and use that as a disruptor, if you will, when higher cost, higher emission sources of energy are being used. So during those peak periods of demand, we're able to use power from this battery, and we expect to see the start-up of that battery in the coming months.

The other important partnership, obviously, that we have is through our majority shareholder, ExxonMobil. They have a tremendous amount of knowledge and capacity of research, technology, different partners that they work with that we are able to leverage. And when we think about these low-carbon opportunities in particular, we'll be able to really leverage that knowledge and expertise to help us grow and be successful in our business.

And of course, finally, have the Pathways Alliance, which really becomes a bit of a game-changer in terms of ensuring the longevity of the oil sands business, allowing us to be competitive on a global scale through building one of the world's largest carbon capture and storage hubs in the Alberta region. And so these are just a sample of some of the partnerships we have today and expect to continue to see those grow, those partnerships that really help to balance and fit with the knowledge and expertise that we have to grow those future opportunities.

So I'll now turn to the Pathways Alliance. And of course, this is one of those pillars to decarbonize our upstream business. And Pathways is really an unprecedented alliance. I can't think of anywhere else in the world that you have over 90% of industry coming together and saying, we have a shared challenge. If we want to see the longevity of our industry for decades to come, we need to figure out how do we solve the equation of the reputation that the oil sands have but also how do we work to bend that curve towards net zero emissions and then help Canada meet their goals.

So we've been hard at work at Pathways. We have over 500 employees and contractors working on the foundational project, which is really the pipeline and sequestration hub. We've begun engagement with indigenous communities, and this is obviously going to be a long road, but we're all committed to work together to work forward to figure out how do we bring economic reconciliation for long-term generational prosperity that they're looking for, and we're looking for those communities into the long term.

We've been actively engaged with governments, both provincially and federally, to look at how do we co-fund these opportunities to make them economic, to make them attractive and maximize returns and drive investments into Canada. And so we were proud to last year achieve the investment tax credit program. More recently, the Alberta government has extended their petrochemical incentive program to this. We have access to Net Zero Accelerator Fund, Clean Fuels Regulation and a number of mechanisms.

And I know a question I've had a discussion with some of you this morning. The IRA certainly seems much cleaner. You've got one number that applies. In Canada, we have what the federal government has referred to as a layer cake. But there are a series of mechanisms, and we continue to have ongoing dialogue with them, both federally and provincially to figure out how do we bring these projects to successful completion and ensure that these game-changing technologies can work.

We're also working with the Alberta government to secure the final approval for the sequestration space, and been working on the feasibility studies, environmental assessments and obviously the engineering work that will form a big part of getting that approval for the pipeline and hub. And we also completed two evaluation wells in the last - in March time frame to help prove out the fact that, yes, the

Basal Cambrian that sits underneath the Cold Lake area really does prove out to be a safe storage location for CO2 for the long term.

So there's still a lot of work to do ahead. There's a lot of engineering work, a lot of community consultation, scientific documents that need to be prepared, but we've made significant progress over the last couple of years in really advancing this project and bring it to fruition.

As we look ahead, there's obviously still much more work to do. We hope to submit our regulatory application for the transportation line and hub later this year. We'll be making capital commitments in 2024 for the pipeline with construction expected to begin on that pipeline in 2026 and having it in service and commissioned in 2029.

Now Imperial, while that major project work is continuing, is continuing to work our decarbonization efforts at our facilities. And I think we've had the discussion before that at Cold Lake, we hope to be one of the first to be able to bring CO2 emission storage locally in the sequestration space at Cold Lake. So we're working hard on that. As well as working to roll out further solvent technologies, so SA-SAGD or non-thermal recoveries like cyclic solvent processing and of course, the carbon capture plans that we have at Cold Lake, and Simon will talk more about that.

And at Kearl, continued implementation of the boiler flue gas activities as well as that consideration and evaluation of renewable diesel in our mine fleet at Kearl as well. I mentioned it several times, the relationship that we have with ExxonMobil. They today operate the largest carbon capture and storage facility at La Barge, Wyoming, and have a lot of experience in how to safely manage CO2 underground.

And so we've had discussions bringing those experts into Pathways to help share how we are going to do this work. So having that relationship really does provide some benefit and advantage for the Pathways Alliance.

So we continue to work hard alongside governments with indigenous communities with each other and technology providers. This is really phase one. But as we look to future phases and new technologies, we'll be continuing to work together on the advocacy with government for those fiscal supports to ensure we're globally competitive but also working on these new technologies to bring scale and making sure that those are economic opportunities looking ahead.

So just in closing, I want to leave just some final thoughts on our go-forward strategy and hope this is some of the takeaways that you've gotten from my discussion here today.

Canada really is a safe place to do business. We can be that global, reliable, secure supplier of crude. The policies that we have, the framework we have really should help to provide investment security. And I know as we talk with ExxonMobil about different opportunities, they see Canada as a strong place for investment, especially when we think about some of these low carbon opportunities because of the strength of the Canadian framework.

Collaboration continues to be important with technology leaders, with our industry peers, with indigenous communities, with the government to set the right competitive basis and the economic basis for us to continue to meet our combined goal of net zero emissions out to 2050. Transformational partnerships like the ones we've already talked about here today really are big enablers for us, and it help you see, especially with Pathways, we're making significant progress, as we work to provide that long-term security for the oil sands in Canada.

We're absolutely focused on maximizing the value from our core business, but we also have looked to see where are there opportunities that line up well with the expertise that we have in our organization to create new value and new opportunities, things that play to our strengths and to our skill sets.

I hope you see that our robust strategy really helps to ensure that we're working to maximize returns for shareholders for the long term that despite whatever path that the transition may take that we've got

flexibility in terms of what we're doing in the way - and our approach and the way we're looking at things to be able to manage through that transition and still ensure that we're providing strong returns, industry-leading returns to our shareholders.

And at the heart of Imperial's 140-year history is the ability to evolve, to meet the society's changing needs, leveraging the talented workforce that we have to be able to develop and deploy those game-changing technologies for the future.

So thank you for your time today, and I'd like to pass it over to Simon now to talk more about our upstream operations.

Upstream Outlook

Simon Younger

Senior Vice President Upstream, Imperial Oil

Thank you very much, Sherri. Good morning, everybody. It's my absolute pleasure to be here, and it's my honor again to represent the several thousand extremely dedicated and committed people that make up our upstream and who keep our business running safely, reliably, profitably every day for our shareholders.

My agenda today is going to be pretty consistent with what I've shared in recent cycles. We'll start with our strategy, our upstream strategy, talk a little bit about a recap on 2022 performance and outcomes. I'll then look at some overall messages around cash flow outlooks and capital. I'll do a spotlight on digital and innovation and technology. And then I'll finish up with a more detailed look at our specific assets, focusing in on Kearl and Cold Lake.

So going to the strategy, really the key message on this page is our upstream strategy is unchanged. We aim to be the best-in-class producer, maximizing cash flow and positioning ourselves for a lower carbon future. You can see some of the key elements of the strategy listed on the slide here. A key advantage is our long life, low decline assets that really enables us to optimize over time and target industry-leading unit cash costs and industry-leading reliability.

Our capital discipline remains key to our strategy, and I hope you see that come through in my discussion today. And we've got many compelling opportunities to grow and sustain volumes, but also allow us to profitably lower our emissions. We continue to see enormous potential in research and digital, I'll talk about that. And finally, and most importantly, is our dedication to operational excellence and responsible development.

And I'd just like to take a moment and pause and talk about the Kearl environmental protection order that Brad has already mentioned. As Brad mentioned, it relates to two incidents. The first was seepage, past our seepage interception system that we first started investigating in May of last year, and the second was a drainage pond overflow that occurred earlier this year.

I want to make it crystal clear, as Brad did also, that we placed the highest priority on safety and integrity of our people, of our operations. And of course, that includes care for the environment. And these incidents don't align to that. And for that, I'm deeply sorry. Our upstream organization is deeply sorry, and the entire Imperial organization is deeply sorry.

I would say we also preciously value the partnership that we have with our indigenous neighbors. We're going to listen, we're going to learn, and we're going to earn back the trust that we've lost through these incidents.

A little bit more detail in relation to the seepage incident. When that was first identified, we did notify the regulator and we did notify our neighboring communities. We then worked over several months with the regulator on investigating the incident. We did not want to go back to our neighboring communities until we fully understood the issue and had a mitigation plan, and that was a mistake. Given our time again, we would not make that mistake again.

Now we've cleaned up the overflow. We're well advanced with mitigation actions related to the seepage incident. Throughout all of this time, our water monitoring continued to show that drinking water remains safe. There's been no impact to fish or wildlife. But going forward, we've now taken an approach of extreme transparency. We've shared every data point that we have with the regulator, with the communities. We've invited all of our communities to site to undertake water monitoring of their own to see the response that we've got underway. Many of the communities have taken us up on that offer, and we've hosted many, many meetings at our site and also within our communities. So we're determined to make this right.

Okay. Talking about 2022 for the upstream. Overall, it was a strong year. At Kearl, we recovered from some extreme cold weather challenges early in the year. I'm going to talk more about that for you. But then we saw a really strong back half of the year, record performance in the second half. We continued our autonomous haul ramp-up. I'll talk a little bit more about that. And we continued our focus on emissions reductions with the startup of the second boiler flue gas project. We've got four more to start up.

At Cold Lake, really, an outstanding year. We outperformed our initial production guidance. We delivered 144 kbd at Cold Lake. That was through optimizations. It was through strong performance from some infills at the Mahihkan field and actually the photo on this slide is one of the Mahihkan infill pads that delivered - that helped contribute to that significant outperformance at Cold Lake.

And then the final highlight I've mentioned on this slide is we enhance the portfolio through the divestment of our XTO Energy Canada asset.

So staying on 2022 for a little longer at Kearl, there's been a lot of interest in the cold weather challenges that we experienced at the beginning of the year, really late 2021 and into the beginning first quarter of 2022. And there's been a lot of interest in what do we learn, what have we applied going forward? Maybe this is a little bit more detail than you want, but I'm going to take a little time here and share some of the perspective.

And I would just draw your attention to the right-hand side of the slide here and the table at the top, which really depicts our operating procedures when temperatures are lower than minus 25 degrees celsius.

So really, what this is showing, if you look at the first line in the table there in the green, when we have two of two crushers running on one plant side, so either K1 or K2, in that mode, we're balanced. And irrespective of temperature, we're delivering maximum throughput through the plants. But when we have only one of two crushers running on one side or the other then it depends. Our throughput will depend on temperature. It will also depend on some other variables like ore quality and also crusher chute level control, which relates to how the ore is bridging or sticking or agglomerating and how it's behaving on things like conveyor belts.

And somewhat ironically, the higher ore quality, that is the higher grade that we're seeing in our ore, the more challenges we have in the lower temperatures. So you can see there if we've got one or two crushers running and ore quality and level control are both good, then we're maximum down to minus 35, but below minus 35, we will see a reduced rate.

Beyond that, if there are further challenges with either/or quality or level control, we'll see further reductions, irrespective of the temperature below minus 25. So that's an example of the protocols that we now have in place, the learnings that we've applied. If you look to the lower side of this chart on the right-

hand side, I think you'll see an illustration of what we believe are the benefits of those new protocols and those learnings.

I'm comparing there the production in December 2022 to the production rate in December of 2021 and also January, the beginning of this year to January the beginning of last year, 2022. Similar average temperatures across those comparative months, a little bit warmer this past winter than it was the prior but not by much, but you can see much stronger reliability, much stronger production.

So there are a number of other improvements that we've made around this issue. A lot of them focused around maintenance and avoiding getting into these protocol situations in the first place. But I think this is an excellent example of how we've applied the learnings from the first quarter of last year and believe we're seeing the evidence of the benefits of those learnings.

Okay. This chart really emphasizes our long-life, low-decline asset base. I won't say a lot about this. I've shared this perspective with you in the past. As you can see, over a 10-year time frame out to 2027, we see continued low-cost growth even after divesting our unconventional business, which is the yellow wedge at the top of that chart. In fact, between 2017 and 2027, we're expecting 17% growth in low-cost volumes, inclusive of the unconventional divestment in the chart. And our outlook for 2023 is in the range of 410,000 to 430,000 oil equivalent barrels per day.

Okay. A little bit of a view on upstream cash flow outlook. As you all know, our business overall and upstream as well delivered extremely strong cash flow in 2022, around $5.8 billion of operating cash flow in the upstream. I'll draw your attention to the bar chart on the left. You can see there, we're showing a five-year average outlook for operating cash flow at $60, $80 and $100 per barrel WTI. I'm also showing you the CapEx forecast in the red diamond there on the chart, demonstrating that our cash flow far exceeds our planned investment.

And what's our outlook, obviously, is for robust cash flows across a range of prices, as I'm showing. We've got a pipeline of highly accretive investments that support that. We're focused on industry-leading unit cash and volumes growth, and we're resilient to low prices. So it's driven by that low-cost volume growth that I showed you on the prior page and also continued improvement in the business.

It is also, I would say, driven by some expected tightening in the differential. For example, with TMX coming online. And I'll just draw your attention to the footnote at the bottom of that chart. We've assumed, in this average outlook, a differential of about US$12 relative to a 2022 actual of around US$18 differential. So definitely some help in that cash flow outlook from that assumption as well.

In terms of investment, really, the key message here is that beyond our sustaining capital needs, we're investing for value through select volume growth and greenhouse gas intensity reduction opportunities. You can see in the graphic there, we're down slightly – expected to be down slightly this year versus last year. That's really more to do with the fact that we spent a little bit more in 2022 than our original plan as we seized on an opportunity to accelerate the Grand Rapids Phase 1 investment at Cold Lake, and I'll mention that a little later on.

And then I'm showing also an outlook from - average outlook from '24 to '27, and you can see a slight uptick in the spend there, really just based on the mix of those volumes growth opportunities that I mentioned.

Our sustaining capital moderates somewhat from 2022, where we're spending quite a lot on in-pit tailings investments at Kearl. Looking forward, key sustaining projects do include, though, a continued investment in in-pit tailings at Kearl, infill drilling at Cold Lake and the Mildred Lake expansion at Syncrude.

In terms of the greenhouse gas advantaged volumes and value growth wedge there, I won't read the list to you. I'm going to touch on all of those in some way, shape or form in the subsequent slides.

Okay. A little bit of a spotlight on digital. The key message here really is that we continue to make tangible progress towards our goals by leveraging digital technology. Draw your attention to the left-hand side of the slide here, really near-term focus and wins focused on optimizing production and greenhouse gas intensity, focused on improving reliability, focused on reducing costs. And last year, I shared with you that we'd achieved $400 million of cumulative value annually delivered. I'm really pleased to say now that we've passed the $500 million cumulative annual value mark in terms of what's being deployed.

And then you can see when you combine what's been deployed in the darker blue with what's underway in the lighter blue, we expect to be delivering in excess of $1 billion of annual value by 2027. On the right-hand side of this slide are some of the examples in each of those categories for what we're doing. I'll draw your attention first to what's been deployed in the lower list there on the right-hand side of the chart. And really, this list provides examples of what we've deployed, it's a mix of advanced data analytics, artificial intelligence, it's leveraging technology like drones to get our work done faster and smarter. And it's making workers more efficient with smarter tools, putting smarter tools in their hands and at workstations and desktops.

The list above is looking out to the future and what's coming, what's in the pipeline, what are we working on. And it's really more of the same. I think probably the best way to illustrate this is provide you with some tangible examples, and that's what I'll do on this next slide.

So you can see here, this is a mix of things that mostly deployed. Some of them are in the evaluation stage. You'll hear that come through as I describe them. And we've described the annual value that we're either realizing or targeting against each in the box there on the chart.

So starting at the at the top left, we're using digital field surveillance to make better and faster decisions and optimize and increase production. The example of Cold Lake, we've got specialized sensors that are monitoring and detecting pump jack and subsurface failures, and that's giving our field operators better insights into what's going on downhole in the subsurface. And we've got sensors combining with artificial intelligence to automate pump jack speed for maximum uplift and optimized power draw. Historically through Cold Lake's history, pump jacks have run at a constant speed and then been adjusted at incremental times by operations. Now that's real-time optimization.

Moving to the right. At Kearl, we built a model to predict the real-time bitumen extraction recovery in the processing plant based on inputs. That model predicts and highlights process control adjustments that the operators can make to actually increase recovery, again, based on inputs and provides that information to them real time in the control room.

Moving further to the right. And really, this is one of my favorite examples, I think one of the ones that has had the most impact. We've used thousands and thousands of data points to determine the optimum dig angle for our shovels based on, again, a range of inputs and for various conditions. We provide that information in the shovel cab to the shovel operator. What that does is reduce the power consumption of the shovel. It improves the productivity of the shovel, and it also reduces the maintenance cost and breakdowns in the shovel. So really impactful use of data and artificial intelligence.

Moving to the bottom part of the page, starting at the left, I think I've shared the digital twin work that we've been doing with you previously, but we've now expanded that. We've expanded the use of digital twins, laser scanned our full sites at both Kearl and Cold Lake. And that's enabling work to be planned, think about maintenance work planned, scheduled, optimized virtually even from our technical services center in India, which is what we're doing, using these digital twins.

Middle bottom of the page there, talking about maintenance effectiveness, where maintenance technicians now are receiving work tasks and instructions via apps on mobile devices. We're eliminating the use of paper. And we're even planning to trial parts delivery at site to workplaces with drones. We'll see how that one goes.

And then finally, on the bottom right, really based on our success that we've had with autonomous haul, and I'm going to talk a little bit more about that impactful example. We're this year planning to trial some semi-autonomous work with dozers. And like autonomous haul, we expect that not only will there be productivity improvements through that but also improvements to worker safety as well.

So that's my round up on digital. Changing gears now, and we'll talk a little bit about Kearl, where we're building on a decade of improvement. In fact, this year, Kearl celebrates 10 years of production. So an important milestone.

As has been mentioned already, we recovered from the extreme cold weather in the first quarter of last year, and I shared some of the details and some of the learnings that we've applied there. We saw an exceptionally strong second half of the year. We saw the highest single day production at Kearl of 360 kbd actually on December 29th, right at the end of the year and pretty cold weather conditions at the time. So that was reassuring and very satisfying for us to achieve that reliability, that sort of throughput.

And then Brad mentioned it. I think I have as well already. But we averaged 278 kbd at Kearl across the six months in the second half of last year, which is pretty impressive. We're continuing to increase capacity and remain on track to achieve 280 kbd next year in 2024. I'm going to expand on that a little bit here in a moment.

Unit cost is also really, really critical and important to us at Kearl as well, and we continue to target unit cash costs of below $20 a barrel. If we look at 2022, despite it being a very strong financially, in general, we definitely feel we left some value on the table at Kearl.

We should have produced over 260 kbd. That was our plan. If you correct for that and if you also correct for the energy cost increase that we saw in 2022 relative to 2021, then our unit cash cost would have been in the range of $24 a barrel. And that's the white diamond that I'm showing on the 2022 bar there in the chart. That's up about $1.50 relative to 2021 and just underscores our determination and the criticality of continuing to focus on unit cost and targeting unit cost below $20 a barrel on a 2020 energy and forex basis.

So a tougher year in 2022 from a unit cost perspective relative to 2021 for sure, but that our commitment and dedication to achieving that goal is unwavering because we know how critical it is.

So now let's take a look at our plans for the future of the Kearl asset, and we remain on track, as I said, to hit 280 kbd next year, and we're continuing to evaluate opportunities to increase production to 300 kbd. I'll orient you to the top left of the slide here, looking at the waterfall plot there, really just a bit of a brief recap on history. Recall that we delivered 263 kbd at Kearl in 2021. That was really mainly enabled by the supplemental crushers. Our path to 280 kbd builds on that foundation.

And you can see two stair steps there. The first is reliability. That really focuses on actually facility mods and further optimizations around our crushers, around our ore preparation, around our hydro transport facilities. Also focusing on mine fleet reliability is part of that stair step as well. And then the second stair-step is really around recovery and refers to optimizations in processing, largely enabled by some of the digital initiatives that I've already provided an overview on.

So then we're evaluating opportunities to increase to 300 kbd in the future, and you can see a couple of potential stair-steps in that waterfall as well. I would tell you there's two secondary recovery projects that, in combination, have the potential to add about 10,000 kbd, keeping all other things equal at Kearl. That is uplift from our coarse sand tailings bitumen recovery opportunity and also what we call flotation column cells bitumen recovery. The latter of which detailed engineering is well underway around flotation column cells. That's that digital graphic you can see on the lower left.

So we're targeting a 2026 start-up for flotation column cells. And then we're working on the coarse tailings bitumen recovery. We're working on commercialization of that opportunity after a successful pilot that we ran last year.

There will be other things that we need to evaluate and look at, mine infrastructure and fleet expansions I mentioned on the slide here and definitely will be needed and important. So we're evaluating that in support of higher volumes as well.

Okay. Before I leave Kearl, I think just a comment on autonomous haul, and we're extremely proud to announce that we are now the first fully autonomous oil sands mining operator. We've fully converted our entire active mine area to autonomous in May of last year. That was the milestone that we reached. And this is obviously also delivered significant improvements in safety.

So we've got 65 haul trucks converted to-date. That's most of our fleet. The remaining trucks are expected to be converted by around the middle of this year. We still see unit cash cost benefits of at least $1 a barrel with this technology. And we see potential for productivity upside around 10% to 15% relative to staffed trucks versus our going in assumption of 5% to 10%. I'd say we're still evaluating what that further upside can translate to but certainly optimistic and pleased to have further upside available to us.

On the right-hand side there, you can see the graph as you can see the full extent of our autonomous mine, a very large area, seven kilometers by six kilometers roughly. And at the inset there, just an excellent example of the sort of benefits that we're seeing from autonomous haul. So the digital graphic - the lower graphic there is lifted straight from our control system, straight from our optimization deck. And what it shows is a shovel with two trucks adjacent to it being loaded and a third truck at the left-hand side, they're waiting to back in to be adjacent to the shovel.

And then in the photo image above that, is a photograph in our mine of our autonomous trucks in exactly that scenario. And what's going on? As those trucks are loaded by that shovel and begin to move out, simultaneously, that waiting truck can start reversing in much, much more quickly than a staffed truck could do. And they can also pass by each other much more closely than you would ever allow with staffed trucks. So it really enables much faster loading and obviously, much higher productivity.

So just a really, really neat example there, I think, and then I'll draw your attention as well to the photograph of our control room at the bottom there. We now have a state-of-the-art mine control room. Experts designed this for optimum collaboration across all of the different parts of the autonomous system. This is where our remote operators build the virtual roads that the trucks will travel on to maximize their productivity, collaborate on KPIs to optimize those in real time and monitor the performance of the system and operation, obviously, 24/7.

So I think this is probably the most compelling, the most material example of digital-enabled improvement in our operations. And probably it would be one of the most compelling examples, I think, globally across our industry. So really, really proud of it. I hope you can tell that.

So let's talk about Cold Lake shifting gears again. Cold Lake, really, really strong year. I've already mentioned that for Cold Lake in 2022. Our performance is exceeding expectations and we believe sustainable into the future. In 2022, we saw the highest annual production actually since 2018 at 144 kbd. You can see the waterfall there, providing a little bit more detail on how that was accomplished.

I've already mentioned the Mahihkan infills, where we saw really strong performance, continued optimization and reliability enhancements, continued delivery from our innovative compact drilling program and all of that more than offsetting decline as you can see in the waterfall. It's not in the numbers on the chart, but we also completed the start-up of a butane blending facility, where we're blending butane into our dilbit to reduce the amount of diluent that we need to add.

This project cost us $25 million thereabouts. We started it up in May of last year. In the second half of last year, it added $40 million of value through improved bitumen realization at Cold Lake. So a really good project, a really good investment for us, and we'll continue to deliver value and allow us to optimize going forward.

So Cold Lake is really delivering continued robust cash flows through the cycles underpinned by operating performance, selective investments. And you can see some of the growth – volume growth that we're projecting in that lower left graphic.

Now I want to talk a little bit about Cold Lake's strategy and just really reiterate it. It's the same as what I shared with you in previous cycles. We talked a lot about it last year. The strategy is to maximize asset value and cash flow through a transformational greenhouse gas intensity strategy. So we're doing this by transforming the asset to lower unit cash costs, lower emissions, next-generation technologies to improve price resilience and maintain production.

Really, what that means is we're transitioning to SAGD and we're transitioning to solvent technologies. And if you look at the chart on the top left, you can see how those technologies are layering in from a volume standpoint on top of the base production that we see. So sort of starting from the left-hand side, LASER is liquid addition to steam for enhanced recovery. We've had that deployed now actually for a number of years. We've got new LASER coming on.

GRP1 is solvent-assisted SAGD. Leming is the SAGD opportunity. I'll talk more about both of those. We see a lot of future solvent-assisted SAGD opportunity space with the resource base we've got. And then the final layer there is - and Sherri has already mentioned it, the cyclic solvent process, which is a completely non-thermal recovery process that we've piloted and plan to develop.

We're also accelerating this journey through accelerating the Grand Rapids Phase 1 project. I already mentioned that we took that action last year. I'll expand on a little bit on the next page. And we're advancing the Leming SAGD redevelopment as well.

This obviously is integral to us achieving the 30% planned targeted reduction in greenhouse gas intensity by 2030, the goal that Sherri mentioned. And then the lower side of - the right-hand side of this slide is really the technology progression in tabular form showing the dates and stages. This is really unchanged from last year. So I wasn't planning to review it in detail with the exception of we've accelerated GRP1 at Cold Lake, and we've also added the CCS, the carbon capture storage opportunity at Cold Lake as well, and I'll talk more about that.

So that's the Cold Lake strategy. On this slide, we're just illustrating a little bit more of that transition, particularly with a focus on SAGD and SA-SAGD, and showing it in that volume wedge, expand a little bit for Cold Lake. Starting at the left with GRP1. This will be the first solvent-assisted SAGD in industry. We're expecting 15 kbd of production uplift. It will deliver a 40% reduction in greenhouse gas intensity relative to our cyclic steam stimulation process, which our legacy technology at Cold Lake. And we're well advanced with 65% of the way through construction. We've drilled all the wells, 21 well pairs. We're working through completions and we're targeting steam in before year-end. That’s the photo of the pad. If this first pad is as successful as we hope, we've got another 10 pads that we can develop in this Grand Rapids reservoir. So really a foundation and platform to move forward with.

In the middle of the page there, Leming SAGD, I talked about this last year. It's kind of a neat story. This is redeveloping an underdeveloped area in the Leming field. This is some of the thickest, best reservoir that we have in Cold Lake, and it's really leftover from the original heritage CSS pilots that were done in the 70s and 80s. So going back and catching some of that really high-quality resource, expecting 9 kbd of advantaged production at the peak, a 35% reduction in greenhouse gas intensity relative to CSS. We're working through detailed design. That's what that digital graphic is and targeting a 2025 steaming time frame for Leming.

And then at the right-hand side there, just sort of in conclusion on this topic, we've got a large resource base for continued future SA-SAGD development. These investments align with the available steam capacity and utilize our existing facilities. So they're very, very capital efficient in that sense. And we're expecting that this - we can grow this portion of Cold Lake's production to about 50 kbd by 2030, as indicated in the chart.

Okay. Before I leave Cold Lake, quick discussion on CCS. I'm pleased to give you an update on this subject, on this project. This will be a really important component of Cold Lake's emissions reduction strategy in combination with the solvent technologies that we just talked about on the previous two slides. This opportunity captures efficiencies with our existing Cold Lake operation. So it's very advantaged in that sense, geographically, geologically advantaged to be an early mover in CCS.

We've done feasibility work and we've now actually started feed this year. We're targeting capturing about a million tons of CO2 from flue gas streams actually focused at the Mahihkan field. That represents about 20% of Cold Lake's current emission. So a pretty material step here. And then we'll be injecting nearby into the Basal Cambrian within and as part of the Pathways evaluation pore space as shown in the graphic in the center of the slide there.

We're targeting mid to late 2020s start-up with this opportunity, and we think this will be one of the first CCS projects within the Pathways initiatives. So pretty exciting. We're excited about it.

Okay. Quick discussion on Syncrude and I'll be wrapped up here soon. At Syncrude, obviously, we're building momentum following the operator transition. Suncor assumed operatorship of Syncrude in September of 2021, had a full year of operatorship in 2022. Suncor is capturing value through this owner operator model. They've delivered $300 million in efficiencies achieved to-date with plans to capture substantially more.

One of the bright spots definitely, asset utilization has increased through improved reliability and also the interconnect pipeline, which was which was started up, as well as we're seeing upgrader utilization trending towards that 90% target at Syncrude. This saw the best ever production of 77,000 barrels a day, our share in 2022. Brad mentioned that as a highlight for us, and that included 3,000 barrels a day of alternate product sales facilitated by that interconnect pipeline system.

Another highlight for Syncrude, the assets are also focused on maintaining bitumen supply to the upgrader through the Mildred Lake West expansion, and that activity is well underway and on track for a 2025 start-up.

The final comment I would make on Syncrude is that we continue to focus on lowering the asset cost structure. All the owners and with Suncor as the operator, and certainly Suncor is driving the capture of additional synergies in support of that goal.

All right. Before I close, I'd just like to remind you of our significant and attractive future resource optionality that where we have a portfolio of growth opportunities with net zero potential. We talked about this in the last cycle. I want to give you a little bit more information here on some of the technology we're working on.

But as you likely know, we have a large inventory of top tier in situ opportunities discovered and undeveloped that really is measured in the billions of barrels. So very, very material, very significant. We are taking a strategic approach to the future development of these resources, where we're maintaining optionality at the leases, keeping everything live at the same time, evaluating the next generation of in situ technologies that really are aimed at making in situ development much more attractive - even more attractive is probably the best way to put it, both economically and in terms of greenhouse gas emissions.

So the most exciting of these is what we call Enhanced Bitumen Recovery Technology, or EBRT. And I'll draw your attention to the graphic at the top left of the slide here. I think of EBRT as being very similar to SAGD, but we replace the vast majority of the steam in SAGD with a heated diluent, a heated solvent.

We've modeled this recovery in our physical lab scale experimentation facilities. From that perspective, it works. We see the improvement. We've also got some really promising reservoir simulation outputs. And I'm showing an example of that on the lower left there. Reservoir simulation modeling is showing a significantly improved production profile. And the example here is comparing EBRT to SAGD for

a well pair. The heated solvent at the right pressure under the right reservoir conditions, much more effective at mobilizing the bitumen than even steam. And that's the benefit that we're seeing there.

You can imagine what that production profile does to the economics of an already attractive SAGD development, really, really significant material improvement in economics, also lowers the greenhouse gas intensity by about 50% relative to industry average SAGD.

So what are we doing? We're advancing a pilot here, a production scale pilot with up to three well pairs to validate the concept and prove commerciality, and we're planning to do that in the Aspen area, and we're targeting startup within the next few years. So 95% of my presentation today all around the focus on maximizing the value from our existing assets, but we've got some really exciting opportunities that are being worked as well looking to the future of in situ development.

Okay. As I conclude, I'd just like to reiterate a few key messages. And you've heard it, I think, now a number of times, but fundamental to our strategy is maximizing the value of our existing assets. What I would describe is grinding it out. And maybe that sounds a bit - a little boring, but it's a pretty good strategy when you've got the world-scale, world-class assets that we've got to grind on. So that's why that's a fundamental part of our strategy.

We see robust cash flow and resilience looking forward. We're pursuing volume - select volume growth. I'll describe it as with greenhouse gas intensity reduction. Our digital program passed $500 million of annual value delivered. So continue to feel really, really good about that ever-expanding portfolio. I talked about remaining on track for 280 kbd at Kearl in 2024 and accelerating the transition work at Cold Lake. And we have a large portfolio of in situ opportunities with net zero potential.

So with that, I would like to thank you for your attention, and I believe we are moving to a break now, Dave.

Downstream Outlook

Jon Wetmore

Vice President Downstream & Chemical, Imperial Oil

Okay. Welcome back, everyone, here in the room and on the webcast. My name is Jon Wetmore. I'm the Vice President of Downstream and Chemical for Imperial Oil. I had that pleasure of doing that for a few years now.

I will take you through a Downstream and Chemical overview. That business is constantly changing for us, and I'm happy to provide you a few updates. Our strategy is fairly consistent from what I've shown you last year, but hopefully, you'll find a few new pieces of information here about things that have developed in 2022.

I'll start first by describing strategies for the Downstream and Chemical business. So just like Simon for the Upstream are largely unchanged versus what I would have shared with you last time. Firstly, we always, always strive to deliver safety, reliability and efficient cost and reliable supply chains for our customers and all the operations that we have coast to coast.

Next, we're investing in specific product delivery logistics, those which can provide our customers with industry-leading supply reliability. We then build upon our brand strengths in Esso and Mobil for both fuels and lubricants to create industry-leading customer offers coast to coast across Canada.

We are increasingly focused on developing and implementing low-carbon offers for our customers right across the country. Equally, we're developing our own plans to meaningfully reduce Scope 1 and 2 GHG emissions from our operations. And we'll give you a quick update on that as we walk through the slides. We're taking advantage of industry-leading refining assets here at Imperial. We've got some of the best assets in refining anywhere in Canada. And we really try to exploit their capability to run different feedstocks, whether it be crude or increasingly even biofeedstocks in the future.

And then finally, we constantly seek to integrate our assets, and that's from refining to upstream, between our two refineries in Ontario and between our refinery and chem plant in Sarnia. So a ton of effort that goes into the strategic value of integration in our company.

On this slide, this is similar to what I showed you last year, but just a quick update on where this stands. There's a structural advantage for Canadian crack spreads in Canada versus the US and some international locations. And there's really three main reasons why the Canadian market is advantaged. The first there you see is efficient logistics that exist between the big refining centers, whether they're in Edmonton or Sarnia, out to the large urban centers where the demand is, and that can be Toronto, Vancouver, Montreal, Winnipeg, Calgary and such.

The logistics that feed those large urban markets, in our case, are largely pipelines. But it's really important that a pipeline isn't the only way to serve a market. It's really critical that you have large sophisticated terminals that sit in those urban locations. And what's so interesting about Canada is those urban locations and the terminals that serve them are owned by refining companies. It's a unique advantage, it's a real barrier to those that would choose to try to be a new entrant into the business.

If you could import product into Canada, one of the first barriers that you face is that those key terminals that serve those urban markets are owned by proprietary interest. And you need to negotiate your way in. And one of the challenges that many importers face is that there aren't efficient truck and rail logistics to even get to those terminals. So the Canadian market is a protected market. It's landlocked, and it has a very, very high barrier to entry for new entrants.

The cheapest crudes in North America come from Western Canada. That's been the case for many years now. That drives high demand for Western Canadian crudes across North America. And so you'll see often the pipelines leaving up are full. Most Canadian refiners have direct access to Western Canadian crude by pipeline, and that gives them an advantage over refineries that exist on the East Coast of the US or on the West Coast of the US, which can access Canadian crudes, but they will access them through very expensive marine or rail logistics.

And then finally, fuel products in Canada are priced at import parity. What that means is if you look at a rack price offer in any urban part of Canada, it starts with a US-based benchmark, whether it be Chicago or the New York Harbor. You then add transportation to get from that hub point up to the Canadian city. That's an import parity pricing mechanism, and it provides a structural cost advantage in Canada versus most of the US, which does not operate on an import parity model.

The bar charts that you can see there on the right-hand side just show this advantage mathematically. We've just tried to do an averaging here between the Canadian side, which we represented as a 50-50 mix of Toronto and the Edmonton markets, crack spreads. And then on the US side to represent the US, we had the New York Harbor and Chicago markets mixed at 50-50. And for both we used the same crude price basis of a light conventional suite.

And what you can see is that there's a structural advantage for Canada in that mix. It's there in 2022 in the first bar chart, but then it's there for the decade before that over many years. And it equates to about $10 a barrel on average. And just like any market difference, that will continue to move day-to-day, month-to-month, and we'd expect that volatility to continue. But over the long term, that structural advantage of about $10 a barrel is there for the Canadian market. And we're really well-positioned as Imperial because we are Canada's largest refiner.

Okay. A little bit of an update on demand. We wanted to talk a little bit about the longevity of the demand for the fuels products that we're making. Over the next 10 years, you can see some of the plots on the right-hand side. What we've done here is just index them. So if you see 2022, demand is anchored at 100% or 100 on that vertical access. What we've done here is used ExxonMobil's Annual Energy Outlook to underpin our forward view. And we've checked that and corroborated it versus other third-party demands, which are largely consistent.

And what you'll see is that fuel demand going out to 2035 continues to be relatively strong. If you look at gasoline in the first chart, you can see that it's down about 10% over that 12-year period. Diesel is going to decline, but by a smaller amount than gasoline. But then in the light material, you can see the bio content continuing to grow steadily over time, and that's really being driven by carbon intensity standards regulations at the Canadian federal level and as well at the provincial level.

So the advantages that we have as Imperial developing and producing distributing blended fuels is quite significant. We're positioned to gain market share from others because of those advantaged refining assets that I mentioned a minute ago, as well as the logistics advantage. And I'll show you a little bit more about logistics in the coming slide.

We've got coast-to-coast bio-blending capability. We've been working on that steadily over time. And as an example, the one last addition we've made is to put ethanol blending at our Dartmouth facility in Nova Scotia. Our Esso and Mobil branded wholesaler partners will get access to EV charging hardware from our new partner, FLO. They're one of North America's strongest EV charging companies. And so as electric motors start to replace combustion engines and passenger vehicles, what we expect to see is that the pivot toward EV charging with a strong partner, keeps traffic up at these retail locations. That sustains and keeps a healthy business that we have on the fuel side, equally with those branded wholesalers and allows us to have strong strategic relevant partners even as the energy transition pivots towards EVs.

For distillates, the demand you can see there in total grows. You can see the fossil fuel layer of that declining slightly over time and the bio-layer increasing steadily. And we, of course, plan to be a big part of the bio layer in future as part of our Strathcona renewable diesel project that Brad mentioned at the start.

So with those advantages, we're in a very good position to hold and then grow our market share over time as we see these demand trends change.

I think I've said this last year, but just to hit it again, Imperial is advantaged here in Canada with the refining assets that we have. All our refining assets are greater than 100,000 barrels a day, and they're all in the top half in the country in terms of size and complexity. Our two refineries in Ontario, so that's Sarnia and Nanticoke, they work together in an integrated fashion. They're connected by pipelines, and that allows the molecules in crude to be refined at the best location considering each site's configuration.

One of our greatest strengths is the huge amount of support that we get, both technical and operational from ExxonMobil. They are a global industry leader in refining, as you know. We have the benefit of not reinventing the wheel whenever we face problems. We've got a tremendously strong collaborative relationship with them. Each time that we hit a new issue, we work with them to develop their best practices ported into Canada. That is a huge unique advantage for Imperial here in Canada.

We really try to maximize heavy crude processing at our facilities. We have the only coking asset in a refinery in Ontario. So that's a big part of how we maximize the value of heavy crude upgrading into our sites. And in our Strathcona site, we manufacture diluent, and we do that as a source of diluent for our Cold Lake operations, so there's a domestic supply of cheaper diluent material that can be sourced from Strathcona domestically when imported material from the Cogent pipeline or Southern Lights into Canada is more expensive, and we pivot accordingly.

The chart on the right just shows our refinery utilization, and we're really happy to have said that in 2022, we set records. So in 2022, as Brad mentioned, a new record at 418,000 barrels a day of throughput and that was 98% utilization. In the fourth quarter, if you had listened to our earnings call, you may have

heard that we exceeded 100% utilization on average for the quarter, so 101%. And with that, what we've done is update our nameplate capacities. We do believe that, that's the right thing to do. When we set new records, we go back and re-evaluate how big are our facilities, and we've updated the nameplate capacities for the three refineries that we have.

The new total that we're using for 2023 is 433,000 barrels a day. And just for reference, it was 428,000 in the year prior. So we made it harder for ourselves to set records this year, but that's part of the process that we follow under the Solomon refining benchmarking rules for capacity reporting.

On the right side of the graph, you can see our 2023 guidance. The midpoint there is 400,000 barrels a day. It equates to about 92% utilization on the new basis. And at the bottom of the slide, you can see some of the turnarounds that we have scheduled for this year. So we're going to have a little bit of a lower utilization this year with the higher number of turnaround events that we have. The Strathcona event that you see listed there is underway now, and we're off to a really good start at that location.

So just talking quickly about our marketing presence in Canada. We've got globally recognized brands that we use here in Canada between the Esso and the Mobil brands for both fuels and lubricants. We're really fortunate to have had them. They're globally recognized in terms of both quality, convenience and a customer-centric approach.

Our branded wholesaler method of business under retail allows us to work with some of Canada's highest, most proficient retailers. These are companies that you heard of like Couche-Tard, 7-Eleven and others. And with the new partnership that we have with FLO for EV charging, we expect to add a further compelling layer to our offer to have some of the industry's best most reliable hardware positioned at some of our BW sites in Canada. So that creates an even more interesting compelling total offer for a large retailer to partner with Imperial.

Our strong fuels brands are further supported by our loyalty partnership with Loblaw. So to give you a sense, we've partnered with Loblaw for a very strategic reason because it is Canada's most powerful loyalty program on offer. It's got as many as 18 million members into the program, this PC Optimum. That's about half of Canada's population, if you think about it, and it probably equates to about 70% of all the households in Canada having some kind of relationship with the PC Optimum program.

So really powerful place to put down roots in the loyalty program. It's amongst the most recognized brands that you can think of in Canada. There's been polls done. Let's say, if you look at the brands that people can immediately rhyme from their memory, Amazon, Netflix, Google, the PC Optimum brand is within that list of the top 10 here in Canada. So we've consciously chosen to strategically partner with them that we're the only fuel provider within that program. And last year, based on the success that we've seen with PC Optimum, we chose to lay down our own heritage, Esso Extra proprietary loyalty program.

The good news since we've laid down Esso Extra, we've seen even more penetration of our loyalty points with PC Optimum into our fuel sales. So we're really confident that we've made the best choice there for our loyalty program. So our marketing program continues to be at the top of the downstream competitor base and gives us a compelling set of brands to help us reshape our product offers as the energy transition unfolds.

So the Strathcona renewable diesel product is something Brad and Sherri both talked about a little bit. So I'll just expand a bit upon that. But first, a bit of a reset. So this is a really transformative project for Imperial. As you heard Brad say, this is our first foray into making low-emission fuels ourselves. The project, as Brad mentioned, it will be the largest in Canada when it starts up in 2025 at 20,000 barrels per day of renewable diesel.

The feedstock for this material is locally sourced vegetable oils. So we're not looking at waste oils. We're really looking at vegetable oils. And we're confident in that choice because those are very prolific here in Canada. They're far in excess of what local North American food demand is. And we don't have any

concerns about there being competition for fuel versus food as we take some of these vegetable oils into our project.

One of the best items underneath the renewable diesel feedstock that we've chosen is that its carbon intensity is advantaged versus a lot of vegetable oils that can be sourced from the US or from other parts of the world. And when you add up their advantage, they add up to about an 80% or close to 80% reduction in the total life cycle of a renewable diesel product made from them versus a conventional petroleum-based diesel.

And if you add that up, again, we've mentioned this publicly before, that equates to about three million tons a year of total GHG abatement or the equivalent of about 650,000 cars being removed from the road each year.

So construction on that project started. You can see the little photo there on the right, who are into the middle of site preparation and some civil work there going on. So not a lot of new hardware to look at yet, but we're in the early stages of getting the thing built. We've ordered all the long lead time equipment. So that's great to see that we're not exposed to that market any further. And we are planning on start-up in the first half of 2025.

Just a quick comment on startup. Startup for us is really well integrated with our other partners on the project. So that's the blue hydrogen facilities that need to be built and started up in the Edmonton area and new refining of those vegetable oils to reach the quality grades that we need to be running as feedstock. So there's multiple partners involved in this venture and all of their start-ups need to coincide in the early part of 2025 for our project to be successful.

So a few of the advantages for this project, and I wanted to take a bit of time on this because I know there's been many questions that have come into our IR team. And as I've done some interviews with your folks, I know that there's been a lot of interest on this project. So let me take a minute here.

Really, before we start on why this project, it's important to start with what's driving it. And what's driving it is the regulations here in Canada about lowering the carbon intensity of the fuels that we use. So if you start at the federal level, the clean fuel standard is lowering the carbon intensity of products between 2016 and 2030 by 15%. And then if you go to a province like British Columbia, they're looking at an even deeper cut of about a 30% CI reduction between 2010 and 2030. So significant reductions in carbon intensity that are being asked of industry over the next 20 years. and right up to 2030.

And so when you look at the different options to comply with carbon intensity reduction, there's a few ways to do it. One of the most readily available imminent capabilities that you can do is biofuel. And biofuel of any type will work under most of these programs. So that would be ethanol of various types and shapes, biodiesel, which is not the same as renewable diesel, but it's equally a product that can allow compliance. And then what we're choosing to do, which is a renewable diesel made from vegetable oils.

Renewable diesel, one of its most attractive attributes is that it's a drop-in fuel. And what we mean by that is that it can be used in existing diesel applications, engines in Canada with very, very little if zero cost of capital. And that's significant. If you look at our customers that we're dealing with today, and these are large mining, forestry, agriculture companies, they're all staring down a very difficult set of choices. They know they want to decarbonize. They have plans to reduce Scope 1 and 2 for their own shareholder interests. But at the same time, they're looking at novel technologies, which are really unproven, large battery-driven vehicles, sometimes hydrogen-driven applications, all of which have questions about the source of the power, the source of the hydrogen, the longevity and the reliability of the equipment.

And those are all very large capital beds. So it makes it really difficult if you're a diesel consumer today to know what to bet on. And when you look at a product like renewable diesel, it's very appealing from the point of view that with very little capital, it provides you with the time to abate your Scope 1 and 2 GHG emissions while you see how the market works out. And so that's why we've called this project

potentially a bridge step to other technology that might exist 10, 15, 20 years from now. But as that bridge step, it is incredibly reliable and available in the prompt, and that's what makes it so compelling.

If you look at the reason why we're doing this project, it can come down to one really simple statement. We're doing this because we can produce and refine renewable diesel cheaper ourselves than it would cost us to import that equivalent product from the US, just a really simple reason why we're doing this project.

Starting with the feedstock. We're planning on using oilseed crops here in Canada, like canola or soy, and they're very prolific, as I mentioned, in food and fuel value chains. The crops are really manufactured for global exports, and so we'll be pulling from that layer, which is export parity priced into our facilities. And they're extremely attractively priced when you consider alternatives that would be internationally available, whether it would be waste oils or palm oils or others that could be brought into North America.

Crops in Canada under oil seeds carry a carbon intensity advantage. And that's something the federal government has recognized over time. If you look at the predominant farming practices in Canada, whether it be fertilizer usage, tilling practices, all of those things put together, you can see a carbon intensity advantage for crops that are sourced here in Canada versus the US. And that's part of what we intend to continue to work on with the government to recognize that advantage.

One of the most critical parts of our project, though, is to produce this material from blue hydrogen. We view that as being essential to have a carbon intensity of RD at the end that is advantaged globally. And when you look at the GHG emissions that come from producing hydrogen, it's a really large part of the supply chain. So we partner with our products to get blue hydrogen as a source to refine these bio-feedstocks and that provides us with a significant advantage over US RD producers, which in some cases are using gray hydrogen as their source.

We also plan on using ExxonMobil catalyst to dewax this material. Dewaxing, as you might imagine, is really just there to break up wax molecules that are in vegetable oils and be able to make them work at very cold temperatures where they would otherwise start to create cloud point issues or gelling. So what we're doing here is we're building facilities with catalysts that ExxonMobil has been cultivating for more than a decade to be able to dewax this product to a deeper level than the renewable diesel that's being used in Canada today. And that's very important.

If you think about where renewable diesel is today in Canada, it's being used regularly right across the country. It will be in the blended 5%, 10%, 15% depending on where you are. But one of the most interesting things is that it's been - the renewable diesel that's there is an imported renewable diesel from the US Gulf Coast in most cases. And that product, although it can work in Canada, it doesn't work well in Canada. It can only be used in the summer months and in the spring months.

When you get into winter time temperatures, it's just not dewaxed sufficiently to work in cold weather climate year-round in Canada. We intend to change that paradigm. We'll be using this dewaxing technology, proprietary catalyst to be able to do deep dewaxing in this material and be able to use it year round, including in northern remote locations. So that provides a structural advantage for our customer base.

So if you add all these advantages together, the feedstock, the blue hydrogen, the dewaxing capability, our blending capability coast-to-coast through our network and then our intimate knowledge of customer usage of this material, we think we've got many structural advantages to apply to this project.

One thing I get questions on quite regularly is the US Inflation Reduction Act and whether the incentive to produce RD in the US is so great now that it would compete against the Canadian producer as we plan to be. We've studied as many scenarios as we can think of underneath how those incentives would apply to renewable diesel production in the US. We are confident based on all that analysis that in almost

all scenarios, our project will continue to run with a healthy rate of return, and it will run at high utilization for its lifespan.

But beyond renewable diesel, we're trying to do new and different things. And these are a lot of what Sherri mentioned in her explanations of the different products that we're trying to step into as time goes on.

The one on the left that I wanted to start with, and I'll comment later on it as well is in advanced recycling. This is the idea of taking waste plastic and turning into something new. And we've got a really advantaged piece of hardware in our refining network, which is our Sarnia coker that has that capability to break down plastic waste molecules, turn them back into diesel, gasoline, jet fuel and even feedstock to make new plastic. So I'll talk a bit about that as I come to a later slide.

Next, we're taking vegetable oils into our refinery with a process that we call the industry calls co-processing. It will be very similar type of feedstock that we're using for our Strathcona renewable diesel project. So there's some real scale advantages for us to be able to buy vegetable oils, not just for the Strathcona project but for this coprocessing as well.

Here, we'll be using canola or soy or something similar in the way of vegetable oil. We'll be buying it at scale with a trading portfolio. And we'll be refining these vegetable oils alongside conventional fossil fuels to be able to create lower carbon intensity, gasoline, diesel and jet fuel, as I mentioned.

We're equally looking at ethanol as a feedstock. When ethanol comes into a refinery process as a feedstock, it breaks down into the same kind of constituents that are there as feedstock to make plastic. And so it's a potential for us to create a bio or renewable layer of feedstock underneath our plastic manufacturing.

We continue to do lots of collaborative trials, and Sherri mentioned this as well. One of the most compelling we thought was Finning and their appetite to try renewable diesel in a heavy haul application like a mine. And of course, we were a great partner to work with Finning. We're operating the Kearl site, and we're also stepping into RD manufacturing ourselves. So that collaboration was very natural and easy to get started.

The trial we conducted last year was in August-October of 2022. We put 100% renewable diesel into a series of trucks and shovels at Kearl, trialed them over about eight weeks. We saw fantastic results. The idea of a drop in fuel is one where it's basically invisible to those that are using the equipment, and that was the conclusion that they reached was it was essentially invisible to them, the difference between petroleum products and that renewable diesel.

We then stepped into a locomotive application with CP Rail. They've been a great partner to work with. They wanted to try biodiesel. That's not something we intend to manufacture, but we are importing it today. And they wanted to try that up to a blend of about 20%, which is close to the range of what their OEMs for locomotives would recommend that they trial. And they had a fantastic result there as well. And so we'll continue to work with them around continuing to trial biodiesel blends and renewable diesel blends in locomotive applications.

And then one which was really novel, ExxonMobil engineering are looking at next-generation lubricants that are being used in wind farm applications, and they wanted to partner with the Wind Energy Institute in Canada in Prince Edward Island and had some very successful trials with those next-generation lubricants.

And then finally, we're studying sustainable aviation fuel. I think we've talked about it in the past. It's interesting as the market develops over time. The large airlines realize, as Sherri mentioned, that this is by and large their only mechanism for GHG abatement that's available in the next 10 or 15 years. So it's clear the industry needs it, but we're waiting to see the marketplace develop, and some of the regulatory standards we see as being important for that SAF market to really develop in Canada. But we know it will

be there. It's just a question of when, not if. And so we'll work that over time and really confirm that that's the approach that we're going to take in the SAF market.

Okay. Just on our capital portfolio, and I'll hit this pretty quick. If you look at the bar chart, we're spending about $500 million a year of capital, and this is again the Strathcona renewable diesel project ramping up. And then it drops down to about $400 million or in that range between 2024 to 2027. The capital project in growth in green doesn't confer that we are expanding out the size of our refineries. It's really important that you understand that for us growth in the downstream at this point in time means more biofuel blending, higher capability in our supply chain and our logistics, the flexibility to run different crudes, but increasingly, the flexibility to run bio-feedstocks, as I mentioned, like co-processing. So that to us is what's underneath the green bar definition.

All of our projects in the Downstream are focused on high-return, smaller investments. Co-processing is one of them, as I mentioned, more biofuel blending, aviation fuel production and studies under that - and then equally, we're looking at Scope 1 GHG abatement for our refineries across Canada. And we're in the early stages of looking at that, but we've got a wide variety of options to choose from and development work is underway.

So Downstream profitability has been very strong of late, as you're aware. If you look at our refineries, they've been consistently profitable over a wide variety of market cycles over time. On the left, you'll see our net income results. That shows the 2020 result, which is lower, but we're really proud of that number. You might say, well, why wouldn't you be as proud of 2022? But I take equal pride in 2020. It's a period of time where a lot of competitors in the Downstream were negative on net income. So we're really proud to say that that's the resilience of our business at a true bottom of cycle condition.

Then you see the growth coming out of 2021 as demand comes back and the second half of the year in 2021 was stronger than the first. But then 2022, just remarkable, absolutely remarkable, record-setting profitability, driven by a unique set of market conditions. But it's really important to stop and say, well, is it purely the gift of the market condition that resulted in that 2022 result for Imperial? And it wasn't at all. It was us setting utilization records for our facilities to take advantage of those crack spreads.

Brad mentioned at the beginning that not only did we try to push the most through our facilities that we could but we took extra steps to try to tune the operations to maximize distillate production. And if you can remember back, what was the big remarkable set of spreads in 2022 was the massive growth in the distillate spread in the back half of the year. We changed our operations purposefully to hit that potential spread. We saw it coming. We took the changes earlier in the fall to get there. And by the end of the year, we were setting new records in distillate production for our facilities. So really great work by the asset teams to take advantage of a very unique market condition.

Okay. I'll pivot a little bit now to the Chemicals business. Our Chemicals business is entirely situated in Sarnia, if you've heard me mention that before. We're really the only company in Canada that links a large-scale refinery with a large and diverse chemical plant. So we've been that way for a long time, and we really seek to get maximum advantage by these two things working together. And I think I've commented before that that saves us almost $10 million a year in feedstock costs than if we were consuming ethane and propane from third-party sources to make ethylene and polyethylene.

We then also integrate our chemicals assets with our Upstream. And I don't think that's well understood. We actually produce a bit of the solvent that Kearl needs for paraffinic froth treating at our Sarnia facilities. And that provides a really secure source of that solvent for Kearl's needs because it's a critical product for them. But it's also a high-margin niche product that we've been able to extract value from as well.

On the next slide, I'm going to talk a bit about the market that we serve for our particular type of plastic, which is rotational injection molded polyethylene. And you hear me use that acronym RIM PE. That all delivers, putting it together, a net income history that you see on the right-hand side. For 10 years, you can see the cycles of up and down that we've had in this business, but it's consistently profitable.

We saw a very severe bottom of cycle conditions like most of the market did in 2020. That led to an unprecedented amount of demand destruction as well as pricing abatement. But then in the year following, you can see, as demand came roaring back and the price spreads improved, we saw record results. So at the very bottom of 2020, a little under $100 million in net income and then a record-setting result in the year that follows. And that's the nature of the Chemicals business, very cyclical, constant volatility, but what we're really pleased to see is that our business remains resilient at the bottom of the cycle.

So just to talk about that market proximity. I don't think that's well known to investors. I think I spoke last year with a bit of detail about the type of product that we make. It's a non-commodity grade of polyethylene that we use in this particular application, rotational injection molded. So that's the case where you take resin, melt it down, put it at high pressure into a mold and then you spin the mold in order to get the plastic to go into all directions and corners of a given mold. So a really unique application. And the properties of the resin over time have been technologically developed and engineered to fit that very particular application.

But instead of talking about the application itself, here I want to talk about the market and location that we serve. Most of the plastic made in Canada is actually made in Alberta. It's made in places like Joffre or increasingly in Fort Saskatchewan. And if you think about that location, it makes really good sense from the proximity to feedstocks, whether ethane, propane or butane. And that's why I think a lot of competitors have chosen to locate plastics facilities there.

The downside of being located in that location is that it's incredibly far from the market. It takes many days to get product from that Alberta production point out to where plastic is needed in North America. Even worse if the plastic is required and your market is Asia, it's weeks and weeks of supply chain time to get a product from that location there. So the benefit that we have of choosing Sarnia as our location is not only the cheaper feedstock that comes from the refinery, it's the fact that we're in very close proximity to where plastic is needed.

This little heat map that you see here is just trying to show the locations where the demand is strongest for plastic and the RIM plastic in particular that we do here, so rotational injection molded. You can see that it's really focused in the Midwest and in Massachusetts. And all those locations are within one day's trucking of our facility in Sarnia, which is, of course, right on the border of the US-Canadian border for easy access. We see fewer weather disruptions as a result of our supply chain. We carry lower inventories as a result of that location, and we realize higher net margins as a result of low cost.

The other part of this that works very well is that our technical staff that sits in Sarnia are very close to their customer base. And so within one day's travel to sit and work with them about all the different products that they're trialing to make that RIM plastic work as best as possible in their applications. This doesn't just apply to polyethylene. There's a number of other products like solvents that we make in our Sarnia facility that are equally within one day's trucking of that large North American demand around the Great Lakes. So our location advantage of Sarnia is a meaningful part of our business that I wanted to describe to you this year.

Chemical premium products is something I've described in the past, again with this customer intimate model on plastic. But this year, I'm going to try to change a little bit to talk to you about circularity in plastics, which is a really, really important trend in the business. There's a really important distinction to make at the start of this, which is Imperial's production of polyethylene is not going into single-use plastic. There are lots of cases of polyethylene doing that around the world, often packaging is the case for where polyethylene goes. Our products are going into durables. And there's some photos at the bottom, just simple indications of what we mean when we say durables, products that are going to be around for 10, 15 or even 20 years or longer in terms of their life span.

And the resin itself is being purposefully engineered for those applications. So to give you an example, we purposefully, over decades, have been fine-tuning our plastic production so that it's resistant

to ultraviolet light. And we've done that because examples like garbage bins or kayaks, of course, you know they sit under the sunlight for months and months at a time. And UV light over time will deteriorate the quality of the plastic.

Over time, as we've engineered the capability for UV resistance, we've created products that can have resilience and last 15, 20 years according to consumer needs. But what that means is that they are not anywhere close to their recycling point anywhere early in their lifespan and then they're hitting that much later in time. But all those plastics, of course, will hit a point where they need to be recycled, they'll be end of life. And that's where our plans for plastic circularity come in.

We're working with waste plastic aggregators to put together new and efficient supply chains to collect, wash, sort, shred and pelletize that material to make it useful for our next step in the operation, which we call advanced recycling. And when we say advanced recycling, what we're seeing is taking that waste product and using it as a feedstock, breaking the molecules down through our coking application that we have in Sarnia and turning them back into gasoline, diesel, jet and again, feedstock for more plastic.

This provides a significant advantage over simple mechanical recycling that's been around for decades, and then you all know the limits of it. Today, in North America, only about 10% of plastic can be mechanically recycled. It's just very difficult to find ways in which to dilute away that lower quality of plastic in with virgin material and still end up with the product quality that customers and consumers expect here in Canada around the world.

By breaking the molecules down through our refining process, we change that paradigm. We're back to a broad quality of plastic that will continue to meet consumer expectations. And that's a really key part of how we think that the supply chain can be adapted over time to an increasing demand by customers deal with waste plastic wherever you can.

So we're working with waste plastic aggregators here in Canada, but we're really working well with ExxonMobil, who are well out in front of this process. They've just started up in Baytown, Texas, the world's largest advanced recycling facility. They're going to be doing as much as 80 million pounds a year of recycled plastic. Doing that through, again, collectors and aggregators of waste that will properly wash, shred, clean, pelletize that material for their use.

So as they've been up and running with that early mover model, we'll adapt from their business, bring that to Sarnia where we plan to do about 60 million pounds a year of recycled plastic through this advanced recycling process. And we're really confident that learning from them about how to set up that supply chain, making the manufacturing process work and then turning that back into the customer offer, who are going to be very keen to understand is there a meaningful change in the quality of the plastic that comes from the process. So with that lead start from ExxonMobil, we're really well positioned in this space.

So we can tell that with this whole process, we're really trying to adapt, over time, to expectations in the consumer trends, but to also make sure that we're using all the strength and technological capability that we have when we look at this opportunity.

So just to sum up, I think we've talked a little bit about the strength of the business. It's really about advantaged crack spreads that we have in Canada versus the US and internationally. It's about strategically located assets that are close to market centers, flexible supply chains. Having very strong brands and loyalty programs, coast-to-coast supply chains that can be really difficult to replicate by importers and new entrants.

We're developing low carbon product offers that are compelling to our customers and allow us to meet advancing regulations at a lower cost than our competitors. And we built businesses with structural cost and margin advantages over time, and they make them profitable in almost any market condition that we can see.

And finally, we're using the strength of ExxonMobil with its brands and its technological capability to bring all that competitiveness to our business here in Canada.

So thanks very much for your interest. I'm now going to hand off to Dan Lyons, and he'll take you through the financial outlook.

Financial Outlook

Dan Lyons

Senior Vice President Finance and Administration, Imperial Oil

Thanks, Jon. Good morning, everybody. So I'll spend a few minutes running through our financial outlook.

Starting with our financial profile, you can see there the tag line on the upper left, the resilient business model with upside leverage. If you look at the graphic on the upper left, you can see our balance between upstream and downstream. We've shown this graphic for a number of years, and it's been pretty close to 50-50, and integration clearly helps reduce our volatility. But we're not only integrated. We also have an advantaged business model, as I think you've just heard from Jon with the Downstream and Chemical, the advantaged margins, logistics, integration, the proximity in the case of chemical to customers, premium products.

In the case of the Upstream, Simon talked about, our low-cost growth opportunities we're pursuing, our long life, low decline assets. And we also have an advantage from this - Jon talked quite a bit about our relationship with ExxonMobil, which is a large global company with presence around the world. We can leverage all their scale, expertise and know-how here in our business.

We also are built for the cycle. We have a disciplined investment profile. You've seen some of that already. I'll talk in a moment more about that. We have an industry-leading balance sheet. You can see the graphic there on the lower left, looking at our debt to capital versus competitors. We have a low corporate breakeven. And obviously, I'll talk a little bit more about that. That industry-leading balance sheet to low breakeven, obviously, give us a lot of downside resilience.

And you look, of course, we have unhedged production and a fairly favorable royalty regime. So we are really leveraged to the upside as well and strong commodity price environments. And lastly, John talked a bit about this. We have flexible refining, we can adapt our crude slates and product slates to the market conditions at the time.

And regarding the energy transition, you've heard a lot about that. I would say we have a thoughtful, pragmatic approach. We're deeply engaged. Sherri talked a lot about it, and you've heard it in the other presentations as well. But we still have an economic lens. We're not going to pursue projects in this area unless they have attractive returns. And we'll stay engaged as things evolve over time. And lastly, reliable shareholder returns, which I'll talk some more about.

So looking at our results in 2022. You've heard a lot about these, the strongest year in company history. You can see the bullets there. You can see in the chart, we show our operating cash flow. 2022 was clearly a record year. So great numerics, we're very proud of those. But we're also really proud of the work we did during the year to focus on our core businesses and strengthen those businesses. We divested our unconventional assets with the XTO Energy divestment. And as you've heard, we've pursued attractive investments in our core business to build them for the long term. And we've talked about the Kearl

debottlenecking quite a bit, all the work going on at Cold Lake, including the Grand Rapids project acceleration. Brad mentioned the Sarnia products pipeline, which we put in place early in the year, which really is a key piece of infrastructure for the critical Toronto market. And of course, the Strathcona renewable diesel, which you just heard about in some detail. And we also took the proceeds from the XTO sale around a $1 billion and use those to reduce our debt by about 20%, repaying $1 billion. And obviously, that gives us even a stronger balance sheet and makes us more resilient to whatever may happen in the future.

So we'll go to talk a little bit about cash operating costs. You can see that they are up from 2021 to 2022. That is largely driven by a 50% increase in our energy costs with rising commodity prices. Obviously, we win on balance from that. The other large factor looking at non-energy costs was the inflationary pressures out there, which averaged about 5% for us over the year.

We are quite focused lowering unit cash operating costs. I think you heard this throughout the presentations. Obviously, the low-cost debottleneck is a key part of that, get the volume, get the denominator up, all the digital initiatives Simon talked about, energy efficiency projects across our operations and the low-cost solvents technologies that Simon talked about.

Our corporate breakeven remains low, $25 on an operating cash basis. And if you add in our dividend sustaining capital, about US$35 WTI. Obviously, integration from our Downstream and Chemical operations help us out there. We also benefit - because the $35 includes the dividend, we benefit from all the share buybacks we did in the past, obviously, making our dividend more affordable. So our business remains quite resilient to low prices.

Looking at capex. You've seen this from Jon and Simon just kind of rolling it together. You can see the profile there, our 2023 target is $1.7 billion, as has been previously communicated up a couple of hundred million, really due to accretive logistics scope we added to our Strathcona renewable diesel project as well as the acceleration of Grand Rapids to have steam in by the end of this year.

2024, we expect to be again around that $1.7 billion level. And you go further out 25 plus around $1.6 billion. Our sustaining capital average is just over $1 billion over the period, mostly Upstream, as you'd expect. And our upstream sustaining capital is about $5 a barrel.

Looking at growth capital, it averages about $500 million a year over the period, and we've talked about a lot of these projects, the Kearl debottlenecking, the flue gas at Cold Lake, Grand Rapids, Leming a little bit later in this period, the carbon capture and storage that Simon talked about, and of course, over the next couple of years, heavy spend on Strathcona renewable diesel project.

Let's talk about our capital allocation priorities. This chart should look pretty familiar because it's been the same for a while more or less, as it says there in the top of the chart, we are committed to returning surplus cash to shareholders. It starts with a reliable and growing dividend. You can see a chart there on the upper left, the blue bars are the dividend. The orange line there is our share count.

Regarding the dividend, 28 years of consecutive increases. And our dividend just a couple of years ago, in the first quarter of 2021 was $0.22. Now it's $0.44. So we've doubled it in a relatively short period of time.

Next in the priority list comes our sustaining capital, which we talked about, a little over $1 billion a year. And then what I'll call, high-return capital efficient investments in our core assets. We've run through those really attractive opportunities. And next is everyone's favorite line, return surplus cash to shareholders. I think we've had this philosophy a long time. We've demonstrated it certainly in 2022 with a record returns of over $7 billion. And if you look on the graphic on the lower left, you can see our payout ratio over the last five years versus our competitors, and we are significantly higher.

And of course, we retain optionality to invest in larger, really attractive, truly accretive investments that present themselves. We certainly have the financial capacity to pursue those where they make sense.

Looking at cash flow. You can see on the left there is our annual cash distributions. I like the slope of that chart. Obviously what underpins those cash distributions is free cash flow generation. So we sort of chart free cash flow on the right. And you can see that we generate substantial free cash flow under a range of price scenarios. And consistent with our capital allocation priorities I just talked about, our intention is to return free cash flows to the shareholders.

But I would say we don't tend to bet on the comp and get ahead of ourselves, ahead of our skis, whatever metaphor you want to use, we generate the cash then we return it. But with this robust free cash flow outlook, we would certainly anticipate substantial returns to shareholders over the course of this year and going forward.

Last page is just our corporate guidance, which has been out there. I won't go through it in detail. I will just mention second quarter has a pretty significant turnaround activity. We'll certainly start a turnaround at Kearl. Syncrude turnaround – one of their cokers was underway. Then we have our Strathcona refinery turnaround, which Jon talked about, also underway in the second quarter.

So with that, let me turn it back to Brad.

Closing Remarks

Brad Corson

Chairman, President and CEO, Imperial Oil Limited

All right. Where has the morning gone? We've been on a bit of a whirlwind tour here, and hopefully, you found it informative. I've got just two charts to wrap up with, and I want to go through them pretty quickly because I want to get to the Q&A and make sure we've got time for that.

The - and before I get to this chart, I just want to kind of come back to where I started and use the opportunity to thank all of the employees of Imperial for what they're doing to deliver these just great business results. And equally, I want to thank our business partners, the contractors that are working with us, the indigenous communities that are supporting us, the many customers we have in the downstream part of our business. It takes all of that to deliver these sort of superior results, and we're obviously quite proud of that. And that translates into great shareholder value that we then distribute to you, our shareholders.

The strategy I've outlined on this chart is nothing new or revolutionary versus what we would have shared last year. And that's because it's working. We feel quite comfortable and confident that the path we're on is going to continue to maximize shareholder value. We're going to continue to evolve and tweak and adapt it a bit, but fundamentally it's the same as I've been talking to you about for a couple of years. And it starts with continuing to focus on our existing assets, maximizing value from those assets through a wide range of optimization, debottlenecking strategies that you've been hearing about today, looking at where there are opportunities for high-value accretive growth within those existing assets.

We're going to apply very disciplined financial management as we operate the businesses. And you heard several times today about targeting leading industry cost structure that's fundamental to what we think will allow us to not only compete successfully, but be resilient over a wide range of operating scenarios and price environments. This resilience is key to us and then ultimately allows us to deliver significant shareholder returns.

And you just heard Dan talk about our commitment to that strategy of delivering surplus cash back to you through dividends, through other mechanisms like share buybacks, and we're quite optimistic as we look to the future.

We are going to continue to evolve our approach around energy transition. And hopefully, you took away this morning that we are actively engaged, but we're doing that in a very thoughtful way in a way that continues to not only preserve value of our existing base but creates an opportunity for us to grow value as we see societal expectations evolve as we see market shift, we want to be there with our assets to take advantage of that, to leverage those situations, again, to create value.

And the access we have to ExxonMobil, I think, is quite key here. And for those of you that follow ExxonMobil, you'll hear them talking a lot about their low-carbon solutions organization and the value opportunity they see there, where we are plugged directly into that as Imperial. And within Sherri's organization, we have our own team that are working hand-in-hand with ExxonMobil to look at where similar opportunities exist in Canada that ExxonMobil may be looking at around the world. So that's quite key to us.

And ultimately, it is around creating optionality, flexibility for us. So those are the key tenets of our strategy.

So this is my closing slide. And I mentioned this earlier, why Imperial? Why should you have confidence in us? Why do we have confidence in the future, and again, it comes back to our existing asset base, high quality, long life, low-decline upstream assets underpins the value proposition in the upstream. We've got advantaged downstream assets, which you heard Jon talk about. And we have significantly integrated that asset base with our upstream with the chemicals business, all those things together create a competitive advantage. And that allows us to deliver high return growth opportunities that will continue to allow us to evolve each of these portfolios.

We're driving shareholder value. And again, this pragmatic approach to energy transition. So I think we're ticking all those boxes. I think we provide a superior proposition, and it's working, and we're going to continue the path we're on. So hopefully, you take away this morning that we do have a very strong foundation. We're executing it well, and we've got bright prospects for the future, and we're very confident in that.

So I'm going to stop there. Again, thank all of you for your attention, for all of our prepared remarks. We do want to spend some time on Q&A right now. I think we've allocated, I don't know, maybe 30 minutes, something like that. And then we're going to break for lunch, which will serve behind us. I don't expect we'll get to everybody's questions in that 30 minutes, but we would welcome the opportunity as we're having lunch also to continue the conversation. So don't feel like if you don't get all your questions answered here, that you've lost that opportunity. We want to continue to engage in the next room.

So with that, I'm going to sit down. We'll start taking your questions. And really, the questions are for all of us on the management team. So again, thank you.

Q&A

Dave Hughes: Okay. So just quickly, there's a microphone. Would ask it you wait for the mic just so the folks on the webcast can hear your question as well. And then if you just wouldn't mind introducing yourself, who you're with if you could start with a question and one follow-up. Just so we can get as many in as we can. Thank you.

Doug Leggate, Bank of America: Thank you, Jason. Thanks, Brad. Thanks for your team for all the information today. It's Doug Leggate from Bank of America. I want to ask you a high-level question, if I may, because we hear managements talk a lot about creating shareholder value, maximizing shareholder value and so on. So my high-level question is, how do you define what that is? When you say create shareholder value, can you put some parameters around that? Is it free cash flow expansion? Is it sustainable free cash flow? Just what are the definitions around creating shareholder value?

Then my follow-on is for Dan. Good morning, Dan. Didn't get a chance to chat earlier. But the dividend philosophy and the buybacks, clearly, you have a lot of flexibility to change or to accelerate that dividend growth as you did last year. But when you think about market recognition of value, the dividend I think DDM (dividend discount model) type of approach has a big role to play in now. So what can we expect in terms of where you think the right dividend burden is on the business?

Brad Corson: All right. Thanks for that question, Doug. There are several aspects to delivering shareholder value. But to keep it at the highest level, it starts with the investment choices we have made over time as a company, where we have invested in very specific upstream assets, downstream assets and infrastructure to connect them and connect them to the market.

And through our operating strategies, what sort of cash and profitability are we generating from those investment choices we made. So ultimately, creating superior cash flow streams that then puts us in a position to not only sustain those assets for the long term, but then provides surplus cash that we can return to our shareholders. So again, at the highest level, it's making smart investment choices that deliver superior returns, superior cash flow and returning that to our shareholders. Yes.

Dan Lyons: Yes. Thanks for acknowledging our dividend growth. I appreciate that. And I know you're focused on the dividend discount model. And I would say - you're saying what's the right level, what's affordable. That's always a difficult question. When we set the dividend, we certainly look at our past experience and we look at our future forecasts and the range of scenarios.

While we've increased dividends pretty significantly recently, we tend to take a somewhat conservative approach. We know we never want to be in a cut situation. I think we're way far away from that. We paid under $1 billion in dividends last year. We bought back 14% of our shares. So clearly, that amount of payment is affordable. And as our earnings and volumes grow over time, the affordability will continue to increase.

So I can't give you a model and tell you what number is the right number for us, but we are committed to continue to grow our dividend as we have for a long time. And we have regular discussions with the Board about what is the right level of dividend, but we want to increase it significantly and sustainably over time. So maybe that's as much I can tell you. But it's a super important part of our shareholder value proposition, right? And there are folks just look at the dividend discount model, and we realize it really is quite important. We just don't want to get ahead of ourselves. So we're a bit cautious but focused on continuing increases over time, for sure.

Sorry, I didn’t have my mic on. Well, for those of you out of the room, I gave a great response. You can read in the transcript. I gave precise details of our dividend increases over the next 10 years, just kidding.

Greg Pardy, RBC: Indeed, thanks for the session today. So Greg Pardy at RBC. So I'm going to ask two unrelated questions. As it relates to the Kearl seepage problems and so forth, what stage of resolution is that at now? And can you just perhaps technically explain causality? That would be kind of question one. So just trying to better understand what happened and why it won't happen again.

And then the second question is, again, kind of related to shareholder returns. So you've got a bunch of cash tax due, that would have been in the last quarter. When you think about SIBs, are you willing to fund those on the balance sheet because you got almost no debt? Or should we sort of think about that as is really coming out of a free cash flow stream on a go-forward basis. So you can probably tell we're getting a ton of questions on what are they going to do, when, and how are they going to do it? And so we're just trying to better understand the philosophy around those two things pretty much.

Brad Corson: Yes. Great questions, Greg. I'm going to ask Simon to talk about the status of the seepage and the overflow fundamentally quite well advanced in addressing those.

Simon Younger: Yeah. Happy to do that, Brad. Thanks for the question. So the first part was what stage are we at in terms of addressing the issues. And as Brad just mentioned, very advanced. So in terms of the overflow incident. We've essentially completed that cleanup, just looking for a final certification of that with the regulator.

And in terms of the seepage issues at the four isolated locations, well advanced there as well. In fact, completed at two of the four locations and very well advanced at the remaining two. We now have pumping in place at all four locations, mitigating the seepage. So - and by the end of - not even the end of May, through the month of May, we'll essentially be complete, I would say, is the way to look at that.

Part of your question was on causality. Again, I'll treat the two incidents separately. The drainage pond overflow, and I want to be crystal clear with it. It should not have happened. That was an operational and process control, process measurement failure that we now fully understand and have fully mitigated not just at this pond, but at all of our ponds. And we have already done everything we need to do to ensure that never occurs again. But that's fundamentally what happened there.

The seepage is much more complicated, I would say, and that's why we investigated that for many months. We drilled monitoring wells. We did a six-month geochemistry study to understand what was going on. What we've concluded is that the seepage interception system that was part of the original design for our tailing system. So seepage was always anticipated. But our seepage interception system was set at deeper groundwater layers.

And what we've discovered in these four isolated locations is that the seepage is occurring at shallower layers at the base of the structure. And so what we need to do is expand our interception system with some trenches and some monitoring wells and interception wells to address those isolated locations.

Brad Corson: And then Dan, you might –

Dan Lyons: Yes. I mean I think if I understand your question, it's where we go borrow money to reduce cash returns or are we going to take it out of free cash flow that we have on hand? And I think the answer is the latter. We never rule anything out, but our practice has been let's get the cash and return it. But we are very confident about the future. I think that's what you can expect from us.

Brad Corson: And maybe one other comment to add to that. One of the things I think we shouldn't lose sight of when we think about the resilience of our business model is, during COVID, when we experienced some very challenging market conditions, we came into that period with a material amount of cash on the balance sheet. And that amount of cash gave us flexibility through the very challenging times of COVID to make smart, long-term decisions. We didn't have to make rash decisions that were suboptimal to maintain viability during that period. And that also allowed us to preserve the dividend, not have to cut the dividend

like many of our competitors did, not have to take on incremental debt like many of our competitors did, but it starts with having this disciplined approach of maintaining sufficient cash on the balance sheet.

And so as we go forward, I think you'll see us continue with that sort of approach because we've been there before, and I don't know when it might happen again, but we want to maintain that robustness such that if we ever find ourselves in that situation again, we're resilient to it. And likewise, it also gives us flexibility to make, if you will, countercyclical investment choices that maybe others can't make and be opportunistic. So having that strength in the balance sheet is really important to us.

Dennis Fong, CIBC: My name is Dennis Fong, I'm a research analyst over at CIBC. The first one might be directed towards Jon and maybe to a lesser degree, to Simon. When we think about the very strong utilization from your refining operations in the second half of last year, as well as, I guess, the more recent strong performances from those assets, how does that change the maintenance plans associated with those assets if you're running a lot harder than you may have been in the past to try and capture margin. How does that change your maintenance schedule and the way you think about maintaining those assets in the future?

Jon Wetmore: Yeah. Sure. I'll start. I think it's a really good question. I think a lot of refiners across North America as they've hit these peak margin windows, they'll oftentimes wonder how far can we push the envelope and what kind of sacrifices are we making then to our operations over the next several months.

We've been really careful to make sure that if we chose to push to the edge of what we're capable to that we immediately understand ramifications of doing that. This is one of those case examples of what I mentioned for ExxonMobil support. They have decades and decades of experience of knowing what deterioration mechanisms are. We call them equipment strategies. They're all about how long do you operate at a given set of pressure, temperature and yields. What kind of deterioration comes with that? And how can you model, what kind of run length expectation you can get.

Through the period of the fourth quarter of last year, we studied this really hard, and we've not changed anything in the way of our turnaround intervals and our run like expectations. Our key unit that has probably one of the shortest run lengths and one of the most carefully managed operating envelopes is our coker in Sarnia. It's a fluid coker. It's a different animal than a delayed coker. It's got about a three-year run length and that's been years of improvement work that's going on.

We ran that pretty close to the edge and a lot of distillate maximization and we're very confident we're going to make the three-year run length that's going to occur later this year. So I'm not aware of any changes in our turnaround strategies that have come from trying to push the envelope around maximizing yields.

Simon Younger: Yeah. And maybe I could just add for the Upstream. I mean, I think it's the exact same approach. Probably the difference in the Upstream is that we're really always trying to maximize utilization and always trying to maximize production. I think the only time in my entire career have I experienced a different approach than that was in 2020 when we actually looked at and did proactively extend some turnaround activities, particularly at Kearl, but also did some of that at Cold Lake. And at that time, that was unprecedented low demand for the product and the focus was on finding the lowest cost way of executing that turnaround work.

So we're back - I would say, back to normal now and the upstream, the game is maximize utilization, maximize production. And so it's the same approach, as Jon mentioned, equipment strategies. We use the exact same approach in the upstream. And it's finding and managing very carefully that right balance between how much scheduled and preventative work you need to do to maximize the reliability and the utilization when you're up and running.

Dennis Fong, CIBC: Great. Thanks. And my follow-up here, maybe also address to you, Simon. When we think about the go-forward plan with Kearl, there's obviously a large focus on improving utilization between lengthening times between turnarounds and so forth. How would you characterize the incremental cost

improvements either by higher throughput from the facilities versus I don't want to say tangible because I think both are tangible, but tangible, we'll call it, absolute cost reductions that you're seeing whether through the variety of we'll call it grinding impacts that you're focusing on?

Simon Younger: Yes. No, it's a great question, Dennis. And I think I was asked the same question the same way last year and I think it's really both, and it's probably equal doses of both, to be honest if you - we've been very, very clear about our objective at Kearl, in particular, is to get to $20 a barrel and below. And that's our goal. That's our target. We believe that's where we need to be in keeping with our objective of industry-leading unit cost, really important that it's a unit cost game.

And as you've observed, you can achieve that through increased throughput, and you can achieve that through absolute cost reductions. And honestly, for us, it's both. And I would characterize as in equal doses, really key that we get to 280 kbd. We're thinking about even beyond that, as I outlined. We're also, as you said, grinding it out on finding cost efficiencies and finding structural cost reductions. And we need both to get that - to achieve that goal.

Nicolette Slusser, Goldman Sachs: Hi. Can you guys hear me okay?

Brad Corson: Yeah.

Nicolette Slusser, Goldman Sachs: Great. I'm Nicolette Slusser, I work for Neil Mehta with Goldman Sachs. Thanks so much for taking the time. So Brad, you mentioned that Canada plays a significant role in the broader supply and demand dynamic from a crude perspective. And you obviously have these great assets, Kearl and Cold Lake, with both performing above initial expectations at different points last year. Can you just talk about maybe where you would see a potential for a project like Aspen maybe fitting into the Imperial portfolio over time? And any color you can share around that? Thank you.

Brad Corson: Yes. Thanks for the question on Aspen. We do see that as quite a value-accretive project for us. It's been in our portfolio for a while. And obviously, we were prepared to advance it several years ago, but decided to pause it because of concern with external conditions, if you will, market conditions, both in terms of egress to move those barrels to the highest value markets, which we saw as being the US and the Gulf Coast. And then also regulatory uncertainty around environmental requirements.

As we sit here today, we feel much better about the egress aspect of those choices. There's been significantly more pipeline capacity that's come online. The Alberta government has kind of laid down their curtailment policy because of that, surplus pipeline capacity or additional pipeline capacity. And so we feel a lot better about that. I don't see that as a barrier.

We still have questions and there's uncertainty about the regulatory environment we find ourselves in. I'm optimistic we'll work through that. But as you may be aware, the government of Canada has proposed their emissions reduction plan, which as currently drafted would require a significant reduction in emissions by 2030, goes beyond what we have developed as what we believe is an aggressive plan with the Pathways work. And so a lot of advocacy underway to try to bring more balance and realism into that emissions reduction plan, but it's still a question mark for us.

We need to see that get resolved and hopefully in a positive way. But in addition to that, let's say even that gets resolved by the end of the year, and we're comfortable with it. We're still very much focused on how to maximize the economic value of our investment choices. And so although, as I said, Aspen is very much an accretive project for us. As we look at this new solvent technology that Simon spoke to on one of his last slides called EBRT, and he talked about the pilot test. When we look at the potential application of that technology, we see it creating even more value for Aspen than what was our prior base case of SA-SAGD. We see it as lower operating costs, lower capital cost. We see it as higher resource recovery in a given time, and then lower greenhouse gas emission intensity.

So when you put all those things together, it's a much better value proposition. And when we make an investment choice around the technology, we're going to live with that for several decades. So we believe

it's worth taking some additional time a few years run the pilot, commercialize that technology, and we're optimistic about it. And that will then allow us to invest in Aspen with the very best technology that delivers the best returns.

So that's kind of where we are with Aspen, still very much front and center in our portfolio. And as we look at other opportunities, we often get a question about M&A. And for us, when the aperture is always open for M&A, but we're always comparing those opportunities to something like an Aspen, which is already in our portfolio. And so how do those choices compare to each other? And we want to choose what will create the maximum value for our shareholders.

Nicolette Slusser, Goldman Sachs: Very clear. Thank you. And then can I just ask one follow-up? So switching gears a little bit to the renewable diesel side of things. I think you guys mentioned first half of 2025 start-up at the complex a couple maybe projects in the US have had some difficulties with startups. I know there's partners in the project. What kind of gives you guys the confidence that you're starting up in that 1H '25 time frame? And then also as we're thinking about this year, what are key milestones we should be looking for towards the end of 2023 maybe?

Brad Corson: Take that, Jon?

Jon Wetmore: Sure. Yeah. Great question. I think as I mentioned, we've got multiple stakeholders in our RD projects that need to come together all for startup. And blue hydrogen is probably the one that we're going to watch the most, and it would be the milestones that we would communicate as we go through the rest of this year. The good news about air products is that they've got experience building large-scale facilities in a modular fashion, almost anywhere in the world.

They're choosing to build their facility here on top of the gray hydrogen grid that's in Fort Saskatchewan because it's got all the infrastructure and the competency locally that they need. They're going to be building modular components to that in the Edmonton area. So they're really well advantaged of not having long supply chains from Asia or otherwise to get the modules into that area. That's probably the biggest issue that we're going to continue to monitor is their alignment with our schedule in the first half of the year.

They've got many moving pieces and the facility they're building is bigger than ours. Just so for reference, right? They're building a facility, it's well over $1 billion. Our local RD plant within the refinery is about $720 million. So we'll be working with them carefully.

The other partner that we're working with - partners, plural, would be feedstock providers that are going to be building pretreating facilities to take vegetable oils up to the quality that we need in order to be ready for processing in our site. We've got two or three partners there, and they're all working on different facilities in various shapes and sizes. What we'll plan to do as the year goes on is to give you regular updates as to where we are and the commissioning of our own facilities, the build-out and commissioning of our own as well as where those partners are. And we'll try to give you a sense as to whether one is leading the other and where the critical path is.

But we're feeling very confident just because the permits are in place for not just our facility, but for all of our partners' facilities as well. The hardware set that they know they need has been ordered already, and it's on its way. The modularization and the build-out in the Edmonton area is also very helpful. So there's a lot of reasons that we're feeling more confident than some of the US sites as you mentioned, they've had some struggles getting themselves up.

Nicolette Slusser, Goldman Sachs: Very clear. Thank you.

John Royall, JP Morgan: John Royall from JP Morgan. Thanks for the presentation today. So I just had a follow-up on capital allocation. You put up the five-year chart on slide 62, with the combined payout ratio, including the buyback of looks like something around 65% to 70% over that time period. Your competitors have generally put out kind of rules-based frameworks for payout ratios. What do you consider your optimal

payout as we look forward, given I think you're probably happy with where leverage sits today and I imagine within that 65%, 70% you see on the chart, there's a period of deleveraging in there, so maybe it's biased higher.

Dan Lyons: Yeah. I mean I would say we haven't put out a formula, but in our formula as we return the free cash flow to shareholders. So I would say that's it, right? Our free cash flow is largely going to go back to shareholders in the form of dividends and other returns of surplus cash. And that's going to bounce around. But yeah, it's going to be operating cash flow, obviously, you have to subtract CapEx. But after that, most of it's going to go back.

We showed the CapEx outlook of $1.6 billion, what have you. So operating cash minus that to whatever that ratio is. And I think, yeah, the last five years are pretty indicative. So that's where we'd land on that one.

John Royall, JP Morgan: Great. Thanks. And then my follow-ups on CapEx. You have a little bump in your forecast beyond this year for both Upstream and Downstream. Just if you can talk about any moving pieces there? I know on the Downstream, you have the RD projects inflation that you guys have discussed a lot. But just any other moving pieces there either on Upstream or Downstream that difference between last year's plan and this year's?

Dan Lyons: Yeah. I mean I think I talked about the bump up in 2023. And 2024, a lot of that is the renewable diesel project, which is the big spend in the next couple of years. So I think that - those are kind of the factors that make '23 and '24 a bit higher than we project just after that.

John Royall, JP Morgan: Thank you.

Tarek Saad, BMO: Hi. Tarek from BMO Capital Markets. I've got two fairly unrelated questions. The first being, last year, we saw you guys accelerate your NCIB throughout the third quarter then initiate an SIB in the fourth quarter. Given that the NCIB comes back in June of this year, can we expect a similar theme for 2023?

And then my second question is, is there a working time line you guys have in place for getting Kearl up to that 300,000 a day mark?

Dan Lyons: So yeah, regarding the cash returns, I would say we talked about the NCIB being base case, which it certainly is. And then we used other mechanisms like the SIB to turn surplus cash beyond what we can return through the NCIB. So that is the general rule, right? We are committed to return surplus cash. NCIB is a nice simple efficient way to do that.

Now we plan to continue utilizing that. And to the extent we have surplus cash beyond that, which we certainly hope, we will use other mechanisms and the timing will depend on when the surplus cash is generated. So that's probably the best model I could give you.

Brad Corson: And on the 300 kbd, I'm going to turn it over to Simon, but I tell them as soon as possible. That's what we're driven towards the sooner the better, but there are a lot of considerations. Why don't you talk to that?

Simon Younger: Yeah, notwithstanding the obvious instructions from Brad. We have - I mean the direct answer to your question is, no, we haven't laid out that time line. I started to and try to give you some of the pieces today, some of the detail, filling in some of the gaps. But the truth is we've got to continue to evaluate that.

I did mention that one of the stair steps is the secondary recovery projects and one of those we're targeting start-up by 2026. So perhaps that gives you a bit of an indicator of at least one component and the timeframe for that. But there really is quite a bit to evaluate and figure out. But we'll continue to - you got the signal clearly from Brad that I get every day. It's important for us to look at.

Brad Corson: This probably is the first time we put it so boldly on a chart the 300,000. Up until now, our focus has been on the 280,000. And we've had a very structured plan and approach to get us to 280,000. We now believe we're going to get to 280,000 a year earlier than we had previously projected. And so all of those results give us increasing confidence that 300,000 kbd is achievable. At this point, it's still a bit aspirational until we come up with those detailed plans like we have to get to 280,000. But again, the track record gives us confidence and optimism.

And so that's why this year, we put the 300,000 on a chart because not only is this management team focused on it, but we want the entire Kearl organization focused on 300,000 kbd, and they absolutely are.

Patrick O'Rourke, ATB: Hi guys. Patrick O'Rourke from ATB Capital. Just a quick question here. In the presentation, you're using a $12 WCS differential. You've been fairly thoughtful in terms of your forecasting an economic modeling. I'm wondering if you can unpack some granularity on that. And then especially with respect, I think people are curious with respect to TMX. You talked about product value maximization on the Gulf Coast, how that changes with respect to tolling and sort of market opportunity for those barrels. And I have sort of a technical follow-up.

Brad Corson: Yeah, that's good. Do you want to talk to that, Jon?

Jon Wetmore: Sure. Yeah. So in part of my business, I look at it in the downstream, is I'm selling all the oil that Simon makes and so all the trader group that we have in Imperial comes through me. And really, what we're looking at when we pen a $12 differential is looking at long-term trends around egress from the basin in Alberta and then the likely outlets and the market drivers that occur in those basins.

And when you think about the Gulf Coast today and the predominant sources of heavy that compete with West Canyon barrels in the Gulf Coast, we've imputed backward to be about a $12 differential over the longer term. That contemplates Line 3 expansion that's already well underway and kind of proving itself out. It contemplates a small amount of creep on the Keystone project, which has been up and down and been through a little bit of a spill last year, but we feel confident about where it is, considering their use of drag-reducing agents.

And then if you look at the Trans Mountain Expansion project that you've mentioned there, that's also a layer but not a huge layer. It's important to it in context. It's a moderate layer of crude that will be placed between California and the Asian markets. You back your way into that into the basin, and we believe that's part of why we're confident in a $12 differential. We've got a presence on the Trans Mountain expansion project. We've got a small layer of committed shipments that are there.

We still feel that the Gulf Coast is our key market going forward. We know that the netbacks will be stronger there considering the toll basis that's there for the Trans Mountain Express project, as well as the other opportunities we have to grow what we can sell into the Gulf Coast. So Gulf Coast ends up being our key market, but that kind of set of different market parameters back their way into Edmonton is where we've ended up with the $12 number.

Patrick O'Rourke, ATB: Okay. And then sort of a more operational question here. I know the government of Canada has put out emissions reduction targets that I think some of the partners in Pathways have espoused are probably not financially or technically feasible at this point in time. Things like the trunk line and storage are fairly obvious to us. What are sort of the key milestones for Imperial specifically in the field that we should be watching for? And then sort of how does the capital outlay cadence play into this plan that you have through 2027 in the presentation?

Brad Corson: You're referring to milestones for Pathways?

Patrick O'Rourke, ATB: Specific to Imperial, like more at the wellhead.

Brad Corson: Right. Do you want to talk a little bit?

Sherri Evers: Yeah, I can talk a little bit about it as well as Simon might want to comment on some of the specific projects that are in place. But I guess the key milestones right now are working to really get the approval for the pore space itself so that we can use that as sequestration space. So those evaluation wells that we drilled in March were a key part to help us confirm that the sequestration space really has the geological requirements to be able to safely store that CO2 long term. So that's all part of the engineering work, the environmental assessments that we're doing and the - building out of regulatory framework for that. So that's one of the key milestones for us.

And then, of course, I had talked on - Simon touched on more specifically what we're doing at our asset base in terms of working towards meeting those 2030 objectives. And the 2030 objectives that we've outlined as a corporation for Imperial for Upstream assets is very much aligned with what we've placed into the Pathways portfolio of opportunities. So that comes down to the use and deployment of some of the solvent technologies that Simon spoke to as well as carbon capture and storage opportunity at Cold Lake, which would be one of the first deployment.

And the plan right now is obviously to build that pipeline, 400-kilometer pipeline from as far north as the Kearl assets all the way down into that Cold Lake region. But Cold Lake itself is sitting on advantaged geological space being right above the Basal Cambrian. And so we can begin to do direct injection into that hub in advance of that pipeline being built. And I guess Simon can talk more about the opportunities there.

And then, of course, when you look at Kearl, our mitigation plans really involve around continuing the implementation of the boiler flue gas, a system which is a 30% reduction in emissions intensity as well as that consideration of using renewable diesel in our fleet with all those advantages that we've talked about today that can drive a 70% reduction versus conventional diesel.

So I don't know, Simon, if you want to comment further on the Cold Lake carbon capture opportunity and the milestones there?

Simon Younger: Yeah. I mean I think you've really said it all, Sherri, and as I shared in my comments, we're targeting a start-up of the Cold Lake CCS somewhere in the late 20s. As Sherri pointed out, the advantage of that project is it doesn't require the trunk line to be built. We're right there above the injection subsurface structure. So very, very advantage from that perspective. But that is really the biggest near-term piece for us as we look forward, at least in terms of CCS.

When the Pathways trunk line is built, we'll definitely have opportunities to look at flue gas recovery at assets like Kearl for injection into the pipeline in that - in the following decade. So that would be the next big component to think of in terms of our assets.

Dave Hughes: So part of this job is being the bad guy with the clock. We did manage to squeak a few extra questions in beyond our time, but as Brad mentioned, it was important to the management team to have an opportunity to interact, chat a little further, maybe a little less formally over lunch. So we're going to draw this to a close.

On behalf of the management team and on behalf of the Investor Relations team, thank you very much for joining us this morning. Thank you for your interest and your continued support. If anybody has any further questions from this point forward after today, please don't hesitate to reach out. We'd be happy to continue the discussion. Thank you.

Cautionary Statements

Forward statements:

Statements of future events or conditions in this report, including projections, goals, expectations, estimates, business plans and descriptions of strategic and emission reduction goals are forward-looking statements. Similarly, emission-reduction pathways are dependent on future market factors, such as continued technological progress and policy support, and also represent forward-looking statements.

Forward-looking statements can be identified by words such as believe, anticipate, propose, plan, goal, predict, estimate, expect, strategy, outlook, future, continue, likely, may, should, will and similar references to future periods. Forward-looking statements in this report include, but are not limited to, references to Imperial's strategy of maximizing existing assets and progressing select value-accretive growth; being well-positioned to thrive in current business environment to maximize shareholder returns; Imperial's company-wide Scope 1 and 2 net-zero goal by 2050, and greenhouse gas emissions intensity goals for 2023 and 2030 for its oil sands operations, including the expected technologies to achieve these goals; the company's climate strategy over the short, medium and long term, including the timing, development, and impact of specific technologies and R&D activities for in-situ, SA-SAGD, EBRT, CCS, hydrogen, small modular reactors, bitumen beyond combustion, asphalt, lower carbon fuels, lithium and using offsets to reduce residual emissions; the impact of partnerships on lower-carbon solutions, including with FLO; the impact of the renewable diesel facility at Strathcona, including capital investment, production, reduction of CO_2 emissions, projected start-up in 2025 and ability to take advantage of increasing renewable diesel demand; the impact of participation in the Pathways Alliance including timing of phase 1 efforts and other collaboration efforts; Upstream strategy of maximizing cash flow, positioning for lower carbon future and being a best-in-class producer; Kearl activities related to the recent environmental protection order; Upstream and asset specific production outlooks for 2023, and anticipated growth to 2027; cash flow from operating activities outlook and ability to strengthen cash generation; projected capital expenditures from 2023-2027; the value and impact of digital technology and innovation activities; Kearl future unit cash cost targets, production outlook of 280kbd in 2024 and evaluating future potential to 300kbd; autonomous haul conversion target and potential productivity upside; the Cold Lake long term strategy, GHG intensity reductions and technologies, production outlook to 2027, the timing and impact of select capital investments including CCS and key sustainment investments like GRP1, Leming SAGD and SA-SAGD; Syncrude efficiencies from operator transition, volumes projections, Mildred Lake Expansion West and focus on lowering asset cost structure; Future resource optionality with EBRT technology, including advancing a pilot project; Downstream strategy to increase profitability across the value chain and focus on enhancing margins, flexibility and efficiency; industry fuel demand; strategic advantages in the Canadian downstream market and the impact of industry leading brands; innovation delivering shareholder value and the development of lower-carbon product offerings; downstream capital expenditure outlook to 2027; Chemical integration advantage and demand growth for key products and potential for advanced recycling; resilient business model with upside leverage; corporate WTI breakeven outlook and progression of cost reduction opportunities; total annual capital expenditure outlook to 2027; capital allocation priorities and commitment to return surplus cash to shareholders; free cash flow scenarios at various prices; corporate guidance summary; and the company's disciplined strategy to maximizing shareholder value.

Forward-looking statements are based on the company's current expectations, estimates, projections and assumptions at the time the statements are made. Actual future financial

and operating results, including expectations and assumptions concerning future energy demand growth and energy source, supply and mix; commodity prices and foreign exchange rates; production rates, growth and mix across various assets; production life, resource recoveries and reservoir performance; project plans, timing, costs, technical evaluations and capacities, and the company's ability to effectively execute on these plans and operate its assets; plans to mitigate climate risk and the resilience of company strategy to a range of pathways for society's energy transition, including the accuracy and effectiveness of roadmaps to 2050 and the ability for emission reduction pathways and business plans to deliver benefits to the company, customers and shareholders; the adoption and impact of new facilities and technologies on capital efficiency, production and reductions to GHG emissions intensity, including but not limited to next generation technologies using solvents to replace energy intensive steam at Cold Lake, EBRT, boiler flue gas technology at Kearl, Strathcona's renewable diesel complex and support for and advancement of carbon capture and storage, and any changes in the scope, terms, or costs of such projects; for the renewable diesel facility, the availability and cost of locally-sourced and grown feedstock, hydrogen produced with CCS and the supply of renewable diesel to British Columbia in connection with its low-carbon fuel legislation; the amount and timing of emissions reductions, including the impact of lower carbon fuels; that any required support from policymakers and other stakeholders for various new technologies such as CCS will be provided; applicable laws and government policies, including with respect to climate change, GHG emissions reductions and low carbon fuel legislation; that regulatory approvals will be provided in a timely manner; refinery utilization, energy use and greenhouse gas emissions; cash generation, financing sources and capital structure, such as dividends and shareholder returns, including the timing and amounts of share repurchases; general market conditions; capital and environmental expenditures; the company's ability to effectively execute on its business continuity plans; and capital and environmental expenditures could differ materially depending on a number of factors.

These factors include global, regional or local changes in supply and demand for oil, natural gas, petroleum and petrochemical products, feedstocks and other market factors, economic conditions or seasonal fluctuations and resulting demand, price, differential and margin impacts; political or regulatory events, including changes in law or government policy; environmental risks inherent in oil and gas activities; environmental regulation, including climate change and greenhouse gas regulation and changes to such regulation; government policies supporting lower carbon investment opportunities, or the failure or delay of supportive policy and market development for emerging lower-emission energy technologies; the receipt, in a timely manner, of regulatory and third-party approvals; the results of research programs and new technologies, including with respect to greenhouse gas emissions, and the ability to bring new technologies to scale on a commercially competitive basis; unexpected technological developments; availability and performance of third-party service providers; third-party opposition to company and service provider operations, projects and infrastructure; unanticipated technical or operational difficulties; the impact of future consumer choices on roadmap trajectory and timing; availability and allocation of capital; management effectiveness and disaster response preparedness, including business continuity plans in response to COVID-19; project management and schedules and timely completion of projects; reservoir analysis and performance; the ability to develop or acquire additional reserves; operational hazards and risks; cybersecurity incidents; general economic conditions, including the occurrence and duration of economic recessions or downturns; and other factors discussed in Item 1A risk factors and Item 7 management's discussion and analysis of the company's most recent annual report on Form 10-K and subsequent interim reports on Form 10-Q.

Forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties, some that are similar to other oil and gas companies and some

that are unique to Imperial. Imperial's actual results may differ materially from those expressed or implied by its forward-looking statements and readers are cautioned not to place undue reliance on them. Imperial undertakes no obligation to update any forward-looking statements contained herein, except as required by applicable law.

Forward-looking and other statements regarding Imperial's environmental, social and other sustainability efforts and aspirations are not an indication that these statements are necessarily material to investors or requiring disclosure in the company's filings with securities regulators. In addition, historical, current and forward-looking environmental, social and sustainability-related statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change in the future, including future rule-making. The statements and analysis in this document represent a good faith effort by the company to address hypotheticals despite significant unknown variables and, at times, inconsistent market and government policy signals.

Actions needed to advance the company's 2030 greenhouse gas emissions intensity reductions plans are incorporated into its medium-term business plans, which are updated annually. The reference case for planning beyond 2030 is based on the ExxonMobil's Energy Outlook research and publication, which contains demand and supply projections based on assessment of current trends in technology, government policies, consumer preferences, geopolitics, and economic development. Reflective of the existing global policy environment, the Energy Outlook does not project the degree of required future policy and technology advancement and deployment for the world, or Imperial, to meet net-zero goals by 2050. As future policies and technology advancements emerge, they will be incorporated into the Outlook, and the company's business plans will be updated accordingly.

In these materials, certain natural gas volumes have been converted to barrels of oil equivalent (BOE) on the basis of six thousand cubic feet (Mcf) to one barrel (bbl). BOE may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf to one bbl is based on an energy-equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different than the energy equivalency ratio of 6 Mcf to 1bbl, using a 6:1 conversion ratio may be misleading as an indication of value.

The term "project" as used in these materials can refer to a variety of different activities and does not necessarily have the same meaning as in any government payment transparency reports.

All reserves and contingent resources estimates provided in these materials are effective as of December 31, 2022, and based on definitions contained in the Canadian Oil and Gas Evaluation Handbook (COGEH) and are presented in accordance with National Instrument 51-101, as disclosed in Imperial's Form 51-101F1 for the fiscal year ending December 31, 2022.

Except as otherwise disclosed herein, reserves and contingent resource information are an estimate of the company's working interest before royalties at year-end 2022, as determined by Imperial's internal qualified reserves evaluator.

Reserves are the estimated remaining quantities of commercially recoverable oil, natural gas, and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical and engineering data, the use of established technology, and specified economic conditions, which are generally accepted as being reasonable. Proved reserves are those reserves that can be estimated

with a high degree of certainty to be recoverable. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves.

Supplemental Information

Debt-to-capital ratio

Debt, defined as the sum of "Notes and loans payable" and "Long-term debt", divided by capital, defined as the sum of debt and "Total shareholders' equity".

Capital and exploration expenditures

Capital and exploration expenditures (or capital expenditures) represent the combined total of additions at cost to property, plant and equipment, additions to finance leases, additional investments and acquisitions; exploration expenses on a before-tax basis from the Consolidated statement of income; and the company's share of similar costs for equity companies. Capital and exploration expenditures exclude the purchase of carbon emission credits.

Non-GAAP measures

Listed below are definitions of several of Imperial's key business and financial performance measures. The definitions are provided to facilitate understanding of the terms and how they are calculated. These measures are not prescribed by U.S. Generally Accepted Accounting Principles (GAAP). These measures constitute "non-GAAP financial measures" under Securities and Exchange Commission Regulation G and Item 10(e) of Regulation S-K, and "specified financial measures" under National Instrument 52-112 Non-GAAP and Other Financial Measures Disclosure of the Canadian Securities Administrators.

Reconciliation of these non-GAAP financial measures to the most comparable GAAP measure, and other information required by these regulations have been provided. Non-GAAP financial measures and specified financial measures are not standardized financial measures under GAAP and do not have a standardized definition. As such, these measures may not be directly comparable to measures presented by other companies and should not be considered a substitute for GAAP financial measures.

Free cash flow

Free cash flow is a non-GAAP financial measure that is cash flows from operating activities less additions to property, plant and equipment and equity company investments plus proceeds from asset sales. The most directly comparable financial measure that is disclosed in the financial statements is cash flows from (used in) operating activities within the company's Consolidated statement of cash flows. This measure is used to evaluate cash available for financing activities (including but not limited to dividends and share purchases) after investment in the business.

Reconciliation of free cash flow

millions of Canadian dollars	**2022**	2021	2020
From Imperial's Consolidated statement of cash flows			
Cash flows from (used in) operating activities	**10,482**	5,476	798
Cash flows from (used in) investing activities			
Additions to property, plant and equipment	**(1,526)**	(1,108)	(868)
Proceeds from asset sales	**904**	81	82
Additional investments	**(6)**	-	-
Loans to equity companies - net	**10**	15	(16)
Free cash flow	**9,864**	4,464	(4)

Cash operating costs (Cash costs)

Cash operating costs is a non-GAAP financial measure that consists of total expenses, less Purchases of crude oil and products, Federal excise taxes and fuel charge, Financing and costs that are non-cash in nature, including Depreciation and depletion, and Non-service pension and postretirement benefit. The components of cash operating costs include (1) Production and manufacturing, (2) Selling and general and (3) Exploration, from the company's Consolidated statement of income. The sum of these income statement lines serve as an indication of cash operating costs and does not reflect the total cash expenditures of the company. The most directly comparable financial measure that is disclosed in the financial statements is total expenses within the company's Consolidated statement of income. This measure is useful for investors to understand the company's efforts to optimize cash through disciplined expense management.

Reconciliation of cash operating costs

millions of Canadian dollars	**2022**	2021	2020
From Imperial's Consolidated statement of Income			
Total expenses	**50,186**	34,307	24,796
Less:			
Purchases of crude oil and products	**37,742**	23,174	13,293
Federal excise taxes and fuel charge	**2,179**	1,928	1,736
Depreciation and depletion	**1,897**	1,977	3,293
Non-service pension and postretirement benefit	**17**	42	121
Financing	**60**	54	64
Total cash operating costs	**8,291**	7,132	6,289

Unit cash operating costs (Unit cash costs)

Unit cash operating costs is a non-GAAP ratio. Unit cash operating costs (unit cash costs) is calculated by dividing cash operating costs by total gross oil-equivalent production, and is calculated for the Upstream segment, as well as the major Upstream assets. Cash operating costs is a non-GAAP financial measure and is disclosed and reconciled above. This measure is useful for investors to understand the expense management efforts of the company's major assets as a component of the overall Upstream segment. Unit cash operating cost, as used by management, does not directly align with the definition of "Average unit production costs" as set out by the U.S. Securities and Exchange Commission (SEC), and disclosed in the company's SEC Form 10-K.

Components of unit cash operating cost

	2022				2021				2020			
millions of Canadian dollars	Upstream (a)	Kearl	Cold Lake	Syncrude	Upstream (a)	Kearl	Cold Lake	Syncrude	Upstream (a)	Kearl	Cold Lake	Syncrude
Production and manufacturing	**5,491**	**2,353**	**1,344**	**1,563**	4,661	1,902	1,117	1,388	3,852	1,585	920	1,107
Selling and general	**-**	**-**	**-**	**-**	-	-	-	-	-	-	-	-
Exploration	**5**	**-**	**-**	**-**	32	-	-	-	13	-	-	-
Cash operating costs	**5,496**	**2,353**	**1,344**	**1,563**	4,693	1,902	1,117	1,388	3,865	1,585	920	1,107
Gross oil-equivalent production (thousands of barrels per day)	**416**	**172**	**144**	**77**	428	186	140	71	398	158	132	69
Unit cash operating cost ($/oeb)	**36.20**	**37.48**	**25.57**	**55.61**	30.04	28.02	21.86	53.56	26.53	27.41	19.04	43.83
USD converted at the YTD average forex *2022 US$0.77; 2021 US$0.80; 2020 US$0.75*	**27.87**	**28.86**	**19.69**	**42.82**	24.03	22.42	17.49	42.85	19.90	20.56	14.28	32.87

(a) Upstream includes Kearl, Cold Lake, Imperial's share of Syncrude and other.