## [BACKGROUND NOISE]

**ANDREW RIKER:** Good morning and welcome. Thank you all for attending Dow's 2024 Investor Day. We're very pleased to have you here. My name is Andrew Riker, Dow's Vice President of Investor Relations, and I'm very excited to be back in this space working with so many friends in this room, for now, at least. Getting into the day, there's one thing I want to touch on before we go into the agenda. We've got a very unique product and innovation gallery walk setup in the room here. We also have a virtual gallery walk setup online. Please find some time to make your way and look at the products we've brought. These products will be featured prominently in the materials today and we think it really highlights the growth we have ahead of ourselves and what makes Dow very unique. Now, getting into the agenda. We're going to cover four main topics today. We're going to start with our strategy and path forward. We'll then go through a series of leadership presentations and spotlight videos covering our business operating segments, and we'll do a little bit deeper dive into our cross business, go to market approach and MobilityScience<sup>TM</sup>. We'll then give you a thorough update on our Path2Zero strategy and we'll wrap things up with our consistent, clear and disciplined financial priorities. We'll also leave ample time for your questions. So, please jot anything down throughout the day because we will be here for a while. Three housekeeping items before we get the meat of the agenda going. Number one, safety and I truly mean this. This is priority number one for Dow. If we should unexpectedly need to exit the room, please make your way to the back. We have exits on both sides. Please make your way into the hall and there'll be someone from the stock exchange staff that'll get us to an appropriate location. Secondly, there's a lot of material we put out today. Please go to our investor website. Everything will be housed there. We'll also have updated capacities consistent with what we did in 2018 and 2021, and we'll also have a lot of the press releases you saw this morning. So, please take some time and take a look at all that. The last item and I think it's something everyone in this room here is frequently is regarding the forwardlooking statement disclaimer. Please familiarize yourself with this in the slides we've posted and to make sure we're all on the same page. This applies to both the presentations and the Q&A. And with that, I'd now like to turn it over to our Chair and Chief Executive Officer, Jim Fitterling.

**JIM FITTERLING:** Thanks, Andrew. Welcome everyone and thank you for taking time to be here with us today. I'd like to welcome some of our Board of Directors who are here and all of our leadership team who are in the room with you today for all that they do to steward our strategy, performance and help us manage risk and govern your company. Today, we're going to reflect briefly on the five years since we spun out in our path forward and we're going to talk about the value that we intend to create for shareholders.

It's been three years since we last had an investor day and five years since Spin and, in that time, we've delivered a stronger, more resilient and more innovative Dow. We accomplished this by operating with discipline and focusing on value creation and cash generation, significantly reducing our debt levels, de-risking our pension plans and returning cash to shareholders. Strengthening that financial foundation has allowed us to invest in higher return projects that will deliver more than \$3 billion in underlying annual earnings by 2030, capitalizing on Dow's distinct competitive advantages. In doing so, we're also committed to maintaining that strong

foundation of financial discipline. Importantly, we will only put projects onto our balance sheet that we're confident will deliver to our shareholders in line with our capital return targets. As you listen to team Dow today, there are four things that I hope you'll walk away with. We're a stronger Dow, competitively advantaged, financially resilient, committed to value-creating ESG opportunities, and we have a winning culture. We're poised to grow our earnings as we take advantage of the cycle and capitalize on these growth investments. Our operating systems and disciplines are underpinned by a strong digital foundation that is helped by more than two decades of traditional AI deployment and the addition of generative AI and there's a lot of upside from here for higher shareholder returns.

Let's start with the progress that we made since Spin. Team Dow has generated more than \$20 billion of cumulative free cash flow. We've added capacity that will deliver \$800 million per year of mid-cycle EBITDA and we've achieved an average return on invested capital of 12% since Spin, all while keeping CapEx within depreciation and amortization. We also returned approximately 90% of our operating net income, about \$15 billion, to shareholders. That's well above our 65% target, while reducing our net debt and underfunded pension liabilities by \$9 billion.

This performance is the result of a proven playbook which has enabled consistent resilient cash generation through the economic cycle. In periods of strong demand, we leverage our materials science expertise, our low-cost positions, our global reach and growth in attractive end markets. In periods of slower demand, we adapt quickly, adjusting operating rates, reducing costs and maximizing cashflow. Two clear examples of how we've done this are by lowering our cash commitments since Spin by \$1 billion and the \$1 billion of targeted cost reductions that we took in 2023 in a very slow macro environment.

Today, our balance sheet is in the best shape it's ever been at this point in the economic cycle. We have the financial flexibility to cover capital allocation priorities at the bottom of the cycle and we're investing counter-cyclically in lower risk, higher return projects to position ourselves for organic growth as the cycle improves. Our industry typically leads into an economic slowdown, but we also lead out into a recovery. And given our current financial position and the in-flight investments, we're in an even stronger position to capture that advantage as the global economic recovery takes hold.

Now, let's look forward. I want to emphasize the differentiation in Dow's portfolio that underpins our industry-leading performance and allows us to grow businesses across the economic cycle. First, we're focused on attractive market verticals where the underlying demand trends are compelling. Together, these trends represent large addressable markets that will be more than \$800 billion by mid-decade. We have leading market positions to innovate with our customers to capture this demand across four broad market verticals: Packaging, Infrastructure, Mobility and Consumer.

The strength of Dow's portfolio is defined by our world-class manufacturing and engineering capabilities and our materials science expertise, as well as our advantage feedstocks and site integration positions which anchors our low-cost position in every part of the world. In Dow's

Packaging and Specialty Plastics business, we're well positioned to benefit from the shift towards circular and low emission solutions. In our Industrial Intermediates and Infrastructure segment, we're poised to take full advantage of the shift to the energy transition with more sustainable and efficient products across the end markets. And in Performance Materials and Coatings segment, they're driving the future of mobility, electronics and personal care.

With leading low-cost positions and the best feedstock flexibility in the industry, we're positioned to capture growth and optimized margins through the cycle. Today, about two-thirds of our capacity is in the cost advantaged Americas where our access to growing US natural gas and natural gas liquids production and large oil to gas spreads allows us to capture margin momentum. Our assets in Canada and Argentina also provide highly competitive feedstock and energy positions which will further expand with the addition of another first quartile world-class asset in Fort Saskatchewan by 2027. And in Europe, we have the widest feedstock flexibility in the industry, a distinct advantage over naphtha-based assets. Globally, 85% of our capacity worldwide has light cracking capability and we have cost positions that are leading or low cost in every region. By 2030, with the additions of our Path2Zero project and the growth investments that you'll hear about today, approximately 70% of our capacity will be in the cost-advantaged Americas.

As we invest in profitable growth, I want to stress that we will maintain our disciplined and balanced approach to delivering on these financial goals. More pointedly, our capital allocation priorities remain consistent. They've served us well since Spin, and they'll serve us equally well moving forward. As a result of our action, the balance sheet strength gives us the flexibility to strategically invest while returning cash to shareholders.

Let me give you an example. Our strategic early cycle investments are primarily focused on high value areas with greater market attractiveness and demand resiliency. Since 2021, we've invested in capacity that will generate an additional \$800 million of mid cycle earnings by advancing growth in areas like Packaging and Specialty Plastics, Industrial Solutions and Consumer Solutions. By mid-decade, we expect the remaining near term growth investments to add another \$1.2 billion to that. These investments will add approximately 1.4 million metric tons of capacity to Dow's global footprint, about 5% of our total output. Our Fort Saskatchewan Path2Zero project is expected to add another \$1 billion to underlying EBITDA earnings by 2030. This will add approximately 2 million metric tons of capacity, an increase of about 10% of our total output. In total, our organic growth investments will deliver more than \$3 billion in incremental earnings by 2030 and add more than 15% to our total output.

Decarbonization and circularity are good for our business. They will enable us to have a clear path to deliver shareholder returns and profitable growth over the next economic cycle. Our Path2Zero project will enable Dow to capture sustainable growth, deliver on our 2030 emissions reduction targets and keep us on track to be net zero by 2050. We'll implement these in a phased approach with disciplined project and CapEx management to keep CapEx within depreciation and amortization across the economic cycle, targeting returns greater than 13%. To date, we've already increased our use of clean energy to 1 gigawatt of power, renewable power. That's approximately 40% of our total purchased electricity demand, and we have developed emissions

reduction plans for our top 25 sites globally. In addition, we're continuing to pilot and develop next generation technologies that you're going to hear about later today.

Looking at our Fort Saskatchewan Path2Zero project, this is the largest hydrogen carbon capture project to ever reach final investment decision in the world, and it will create the world's first net zero cracker and derivatives complex. We expect it to have a lower capital intensity and deliver similar returns to the world leading Texas-9 project that we started up in 2017. Texas-9 is a leading asset in terms of reliability, cost and carbon emissions intensity with the best return on capital in our fleet at greater than 15% per year since startup. The success of Texas-9 gives us the confidence in our ability to deliver Path2Zero on time and on budget. In addition, I just want to emphasize the team, the team, the team. The same team that executed our Texas-9 project is on the ground in Fort Saskatchewan together with the next generation of our engineering and construction leaders to shepherd this project.

We're also advancing our Transform the Waste strategy through a partnership approach, leveraging collaborations of different sizes and shapes across the value chain to develop and scale innovative technologies. Demand for our circular and renewable solutions is directly tied to top consumer brands targets for recycled content and changing consumer preferences. Demand is expected to grow for these materials by greater than two times GDP by 2030. We remain on track to commercialize 3 million metric tons of circular and renewable solutions annually by 2030 and generate over \$500 million of additional underlying EBITDA through those investments. Altogether, our organic growth investments will raise underlying earnings by more than \$3 billion per year by the end of the decade. This includes the approximately \$2 billion from the near-term organic growth investments, another \$1 billion from the Path2Zero project in Fort Saskatchewan and more than \$500 million from our Transform the Waste strategy.

We have very clear levers to capture attractive growth and two big advantages. First, our Dow management team has a strong track record of delivering on our commitments. And second, because we're investing counter-cyclically, we'll be ready to capture the up-cycle growth as the recovery takes hold. The guiding principle behind all of these actions is our goal of value creation and best in class performance and it is bolstered by our ambition to be the most innovative, customer-centric, inclusive and sustainable materials science company in the world. Just to give a few examples. In 2023, we launched about 1,000 innovative new products, many of which are showcased in the gallery walk here today or on the website for those of you who are online today. Dow's new products command on average 800 basis points of margin differential based on product advantages, performance advantages, intellectual property protection. This shows up in our annual margin benchmarking which we just released last month. Over 90% of our R&D innovation projects delivered sustainability benefits without sacrificing any element of performance. We also achieved our highest customer experience satisfaction score since we started this journey in 2018, and we continue to be recognized as a leader for inclusion diversity and equity by recently being named by Great Place to Work and Fortune, as one of the 25 World's Best Workplaces. That makes Dow a very attractive destination for young people in the next generation of Dow leaders who want to join this great company.

Together, this team has built a very compelling investment opportunity. It's no secret that our industry has faced some volatile market conditions over the past few years, but Dow has continued to execute its playbook, deliver on our capital allocation priorities and advance our long-term strategy. We have significant financial flexibility to continue investing in areas that will raise underlying earnings, reduce emissions and drive circularity. And as the cycle dynamics improve and we unlock the full benefit of these growth investments, we see significant upside to generate higher shareholder returns and we're committed as a team to doing all of that and being as disciplined moving forward as we have been over the past five years. Today, you're going to hear directly from our team on Dow's distinct advantages on opportunities to capture value across the economic cycle and on how they're driving best in class performance, how we intend to deliver that top and bottom-line growth as the economic recovery takes hold while maintaining that operating and financial discipline that have become the hallmark of our company, but you don't have to take my word for it. Before I turn it over to Karen Carter, President for Packaging & Specialty Plastics segment, I'd like for you to hear from a few of our customers from around the world.

## [BACKGROUND NOISE]

**ALLISON LIN:** We have a lot of innovation where we're trying to move towards monomaterial, and there's a couple of things that our suppliers can help us with there. So, one, better resin and better virgin resin so that we can have better performance for the materials, even though we're taking out some other materials that we're giving the performance that the pouch had before. And then two, recycled content to also meet our recycled content goals.

**WEI LIU:** [FOREIGN LANGUAGE 00:19:19] We chose to work with Dow because of its high-performance products and solutions, and its leading strength in the industry. As a leading supplier of PEO, Dow's strength in technological innovation has also been deeply experienced by JD Solar. Dow is also the only supplier with production capacity globally, which is very conducive to the global development of photovoltaic companies.

**JAMES HODGES:** At Procter and Gamble, our priorities are to reduce our footprint, develop products that will enable consumers to reduce their impact through less water, less energy and less waste. Dow has the technical resources and innovative mindset to bring these solutions to life. We are excited working with Dow about finding solutions that will help people, the planet and the industry.

**RENATA NASSIF:** [FOREIGN LANGUAGE 00:20:15] Our packaging, they are made of plastic. Today the company is committed to reducing these materials and their impact on the environment. So, in synergy with Dow and Pack Studios, we are seeking innovations and accelerating this journey in search of development to eliminate or reduce this impact on the environment.

**CORBETT WALLACE:** I really believe the biggest competitive advantage is to move fast, to be the first, to lead the way. Part of the reason of working with Dow is another leader in the industry is that we can work together to deliver these solutions and the other piece that I think

separates Dow away from some of the other material science companies is their focus on the end customer and the end applications. Dow puts a lot of focus on that and by understanding the needs of our customers can help us to deliver solutions that our customers and consumers really care about.

## [BACKGROUND NOISE]

**KAREN S. CARTER:** Good morning. I am Karen S. Carter Dow's President of Packaging & Specialty Plastics and it's a real honor to be here with you this morning. I recently celebrated 30 years with Dow and have served in a variety of roles globally as well as across the enterprise, but I began my career right here in P&SP. So, it's a particular honor to be leading this business at this exciting time. And what you just heard from key players across the value chain demonstrates why this business and the solutions we provide are essential to meeting the evolving needs of consumers and the entire market.

So, during the time that I have with you today, I'm going to cover three main points. First, that P&SP is a formidable franchise that has consistently delivered strong financial results and, since our last investor day in 2021, we've implemented growth investments across the portfolio to add \$400 million of incremental EBITDA and an ROIC of 20%. Second, the markets where we play as well as the overall polyethylene market continue to grow above GDP. However, and this is important, that demand is shifting towards circular and low emission solutions which has created a significant opportunity for us to lead and capture value. And then finally, I'm going to walk you through the strategic actions we're taking to further strengthen the franchise, grow our top and bottom line and deliver more than \$2 billion of incremental EBITDA by 2030.

So, within P&SP, we have a broad portfolio that includes polyethylene and functional polymers that serve and add value in a variety of markets, for example, lightweighting in cars, extending the shelf life of food and even making baby diapers softer and our downstream solutions are made even more competitive by our upstream integration and hydrocarbons and energy. And then importantly, there are a number of market drivers some that you see here on the slide that are leading to above GDP growth which is creating opportunities.

And to capture these opportunities, we will leverage our competitive advantage which includes three key elements. First, we have a low-cost position which is based on our scale, our asset integration and our strong commitment to reliability and safety and this cost advantage is further enhanced by the fact that more than 70% of our ethylene production is located in the Americas utilizing low-cost ethane, and in all regions where we operate, Dow is advantage versus the industry as illustrated in the chart.

Our cost advantage is driven by our investments and flexibility which further sets us apart. So, the ability to capitalize on preferred feedstocks, as well as our breadth of process technologies enables us to optimize the what, where and how we produce our products to best serve our customers around the world. Dow's proprietary solution process technology is a unique example of this in action, where we make a wide range of products from high density polyethylene to plastomers or elastomers on one asset and we do it affordably, which means we avoid

unnecessary downtime and minimize off grade production. No one else and, I mean, no one else in the industry has demonstrated this capability.

Our low-cost position and flexibility led to our differentiation. Our leadership in catalysts innovation and diverse product portfolio allows us to meet the increasing performance requirements of our customers and value chain partners. So, this supports our go to market strategy which extracts a premium and it enables us to continue to outperform our peers. And in 2023, we expanded this premium by four cents in operating EBITDA per pound of capacity versus one of our largest competitors, as highlighted in the chart. So, the combination of these three elements has laid a really strong foundation of competitive advantage to position us to capture growth and our target and markets.

So, as I mentioned before, the market is growing above GDP and so are our key end markets where we are targeting high value applications, such as food packaging, pressure pipe, high voltage cables, all that have really high-performance requirements that our products deliver. And polyethylene, of course, plays a really key role across all of these, making it a good proxy for overall demand and it too is outpacing GDP.

This growth, as I mentioned before, is shifting. So, the world is demanding more sustainable solutions, particularly in the segments where we participate and, as you can see on the slide, these emerging trends are accelerating the shift towards circular and low emissions. This is creating new demand that is largely unmet, resulting in a really unique opportunity for both first movers, as well as those that deliver differentiated solutions.

And so, given this reality and opportunity, we are taking four strategic actions to deliver more than \$2 billion in incremental EBITDA by 2030 and I'm going to walk you through them, starting with invest to grow. So, we've talked about our feedstock flexibility being key to our overall competitive advantage and we are investing to take this to the next level. Example, in Terneuzen, where we are expanding our ability to crack more lower cost propane to displace higher cost naphtha, we're also upgrading assets and adding new capacity to capture higher value demand. So, in Tarragona, we recently converted an asset to produce elastomers and that allowed us to expand in photovoltaic films where we have grown 50% and sold more than 1 billion pounds, 1 billion pounds since our last investor day. Between 2021 in the middle of the decade, we will have realized around 800,000 tons of additional capacity through a combination of expansions as well as operating efficiencies and one way we are improving reliability is through digital and I'm really excited about this because piloting the use of predictive analytics to reduce unplanned outages as well as the duration of downtime in our crackers and that will unlock more capacity. So, these actions are focused on supporting near term growth through low capital, high return, quick payback projects that will structurally improve our earnings across the cycle.

Now, in the back half of the decade, we will also grow through our Path2Zero project in Alberta, the world's first net zero emissions complex. All the top brands listed here have made bold commitments to reduce their emissions, and our first mover advantage can help accelerate their progress. So, in addition to decarbonization, this investment will grow our ethylene and polyethylene capacity by 15% and I'm excited to share that this will include our next generation

proprietary process technologies to deliver even better performing resins at lower capital intensity, and the technologies we are building are the world's largest solution and gas phase dual reactor trains and these assets will enable us to double down on targeted applications like pressure pipe, wire and cable and food packaging. Importantly, this project also extends our low-cost ethane feedstock advantage, allowing us to serve growing demand around the world and we will do all of this at net zero, Scope one and Scope two emissions and our five-to-seven-year head start puts us in a really good position to help the market and these and other brand owners meet their emission reduction commitments as well as capture additional value.

So, delivering low emission solutions is only one side of the coin. We know that circularity is also needed to address the shift the industry is facing. So, the same top brands who have emission reduction targets also have aggressive recycled content commitments and it's for this reason that we are focused on ramping mechanical and advanced recycling, as well as bio-based and renewable feedstock through direct investment and partnerships. And we've already contracted or enacted of negotiations for almost half of our 3 million metric ton goal in terms of supply, which is slated to become available between now and 2030. Today, we announce our intent to expand our existing 37-year relationship with Siam Cement Group to include an end-toend circularity partnership. Now, what makes this unique is that SCG has access to plastic waste feedstock in Asia and then we bring deep application knowledge with access to high value end markets. And then together, we will have the ability to transform more waste and maximize value through a combination of mechanical and advanced recycling technologies which will improve overall efficiency as well as production yields. We also recently announced the formation of a joint development agreement with P&G to invent a new proprietary dissolution recycling technology for polyethylene. Now, this innovation will target hard to recycle plastic packaging, transforming more waste and upgrading the post-consumer recycle or PCR quality beyond what mechanical recycling can deliver today, and we're going to do all of this with lower emissions. Now, this will expand the playing field of applications PCR can be used in because of a near virgin resin quality. So, we're investing in partnerships and opportunities that will change the game, but also accelerate our progress towards our Transform the Waste goal.

Last but not least, breakthrough reservation in catalyst, process and product technologies have been and will continue to be essential to our success. And as a matter of fact, since 2021, P&SP has delivered over 50% of the revenue derived from new products sold at Dow. One example of this is our recently commercialized INNATE<sup>TM</sup> resins. Traditionally, toothpaste tubes have been made with a multi-material structure using an aluminum layer which means they cannot be recycled. But INNATE<sup>TM</sup> has changed that by enabling a full plastic solution that retains the packaging performance and also enables it to be fully recyclable, and we have an example of that over in the gallery walk. We're also advancing process technologies like EDH designed to make on-purpose ethylene with 20% lower capital cost and 40% lower emissions as compared to our best-in-class cracker Texas 9. And then REVOLOOP<sup>TM</sup>, which is our family of mechanically recycled resins where we can dial in the performance that customers need while increasing recycled content rates and this family, product family, is expected to contribute one-third of our Transform the Waste goal or one million metric tons by 2030. These types of breakthrough innovations are not only helping us capture value today, but are also setting us up really well for the future.

Successful delivery of all of these strategic actions will result in more than \$2 billion of incremental EBITDA per year by 2030 and this includes near-term growth efforts that are estimated to deliver \$600 million, Fort Saskatchewan Path2Zero which will deliver about \$1 billion towards the end of the decade and our Transform the Waste efforts which are planned to deliver more than \$500 million as we scale our supply, accelerate our innovation and meet the pent-up demand. The end result of all of this will be a business that is more profitable with higher earnings and market share and an even stronger competitive advantage as we deliver value growth for you. Now, it is my pleasure to hand it over to Jane Palmieri, President of the Industrial Intermediate and Infrastructure Segment.

JANE PALMIERI: I'm Jane Palmieri, President of Dow's Industrial Intermediates and Infrastructure Segment. With over 30 years of experience in industries ranging from automotive, building and construction, renewable energy and consumer goods, I'm honored to be representing a portfolio as diverse as II&I. The two businesses we'll discuss today are leading franchises for Dow's market position, global reach and customer intimacy continue to maximize earnings for Dow. When coupled with our extensive innovation capabilities and best-in-class integration, these businesses provide Dow with growth and flexibility to upgrade ethylene and propylene and capitalize on everchanging market trends. For Dow Industrial Solutions, we'll share several growth opportunities that are the result of Dow's leading position and purified EO and alkoxylation coupled with strong fundamentals in markets such as cleaning and pharma as well as solutions that support the energy transition. For this business, we're excited to have Pankaj Gupta with us, a familiar face to many of you here today in his new capacity of Vice President of Dow Industrial Solutions. For Dow Polyurethanes, I'll highlight the efficiency and cost improvements and several sustainability innovations that have been our focus. Ultimately, you'll see how our allocation of resources across II&I provides Dow with near and long-term growth opportunities in key markets. We're taking intentional actions to improve Dow's competitive position which allows us to capture additional value in the future as other markets begin to recover. And now, I'll turn it over to Pankaj.

**PANKAJ GUPTA:** Yeah. Thanks, Jane. Thanks for that kind introduction and it's great to be here, great to see many of the familiar faces that I used to interact with not too long ago in my past immediate role as Investor Relations. I'm very excited to join our DIS business, Dow Industrial Solutions business which is what we'll be talking about here. It's a business that's very familiar to me. I've spent almost, I would say, a little over four, maybe under five years in my past stints in this business with nearly about two decades or so that I have with Dow as well as the industry. DIS represents the ethylene side of the II&I portfolio, something that Jane just covered and it builds on the ethylene integration that we heard from Jim as well as from Karen in her remarks on the plastics segment.

On this next slide here, these are the messages we want to cover today in terms of what this business does. We have a cost-advantaged portfolio that is tilted towards purified ethylene oxide derivatives and that participates in value chains which are very constructive from a supply and demand perspective, so something that we will also talk about in terms of looking at our cost positions versus our peers. We have a broad participation in many of the attractive markets

where clean energy transition as well as sustainability are drivers for growth in the coming years, and we'll talk about a few applications as well as markets and how that is possible. That puts us in a good position then to grow our earnings going forward in the next few years with the capacity expansions that we are doing and we'll talk about that as well.

Let's take a look at the business in this next slide. Here's an overview of the business. DIS upgrades and further diversifies ethylene at scale as the world's leading producer of purified ethylene oxide as well as the derivatives. The global participation, we have our assets in cost advantaged locations. Primarily, I would say North America where we have the shale advantage, something that you heard from Jim earlier today. And in Western Europe where we have the LPG advantage that both Jim and Karen talked about in their presentations as well. So, we combined that very cost advantage because the cost positions we have with our high margin derivative chemistries in diverse markets that are growing faster than GDP. Together with the long-term market trends, as well as our growth investments, which we'll talk about here, DIS is very well positioned to grow earnings over the next several years.

Let's talk about our playbook that will allow us to win in the marketplace. Our strategy is to produce more purified EO derivatives and limit our participation in the monoethylene glycol or MEG segment. Cash margins of purified EO derivatives are consistently advantaged over MEG as you can see on the chart on the left side of this slide and the combination of constructive supply and demand dynamics for purified EO derivatives along with recent chem MEG capacity additions in the industry, especially in Asia, further amplifies this advantage that we have. This is exactly what differentiates us from our peers, so in the chart in the middle you will see the industry is definitely tilted more and more towards monoethylene glycol or MEG whereas our participation is very, very limited. We applied this competitive advantage to our delivered solutions across a broad portfolio of applications at scale. These include fast-growing, higher margin, consumer, mobility, energy, pharma, industrial and agrochemical markets. Let's take a look at few of these applications on the next slide.

Across all of these applications and there's a lot of opportunities here that we're very excited about, across all of these applications, we see sustainability as well as clean energy transition as the drivers for growth. Let's take a look at the applications on the top left, thermal management. This is where Dow's an industry leader and we see huge growth potential in the data center market, especially as -- data center cooling market, I should say, especially as the world's pushed to advanced cloud computing and advanced AI technologies takes hold. Ethylene carbonates is another opportunity for us. That's in the top middle there where we are looking at battery electrolytes. Ethylene carbonates is a component to make a battery electrolyte. That's an emerging opportunity for us, especially with US government's push into onshoring the battery value chain here in North America. More importantly, Dow's manufacturing process captures 90% of our Scope one and two emissions from the EO manufacturing process, combines that with the CO2 to make a usable product that will then enable the transition, I would say EV transition in the automotive segment. We're also the industry leader in energy transition applications with our long-established amines technology in the natural gas treating where we take amines, combine them with CO2 and other acid gases, and we're going to combine that expertise, our product portfolio and enable blue hydrogen production and that becomes very

relevant as IAA incentives kick in here with all the hydrogen hubs that have been announced recently. And then on the consumer side, we have our polyethylene glycols. They continue to serve the consumer and the farmer markets, and the growth there is backed by many of the household consumer brand names that you and I are very familiar with. Now, we have trends in terms of looking at dioxin-free, which is where we have the regulations coming in, looking at PFAS-free as well as some of the APE-free. APE as in alkylphenol ethoxylate-free, alternatives and surfactants in that space will allow us to grow our earnings and our business in that space, especially in the consumer cleaning as well as the industrial cleaning segments. And then across our portfolio, we are applying new technologies as well as AI and digital solutions to run our plants more efficiently and more reliably. Many of these technologies are on display here in the product gallery to my right, and you can see that we have won R&D 100, Edison, CIO 100 as well as big IAI awards that recognize our innovation, recognize our digital offerings that we have in this space. For those joining on the webcast, please do check our website because we do have a virtual product gallery as well so that you can take advantage of looking at some of the offerings that we have in many of these markets. Between our technical expertise, the product mix as well as the growth that we see in these markets, we are very well positioned to grow our earnings here in the foreseeable future.

What are we doing in terms of enabling growth? We are adding capacity. Since 2018, we have been investing to win by growing our capacity downstream in the purified EO derivative space, especially adding alkoxylation capacity. By mid-decade, we will have added about 70% more alkoxylation capacity in Western Europe as well as in North America, and that allows us to grow in these different spaces that we were talking about. These are mostly faster payback brownfield investments, also very high return as well. For the growth project pipeline, we have already completed our first wave of capacity additions, that's about 125 KTA as you see in this slide. That was in Europe and in US Gulf Coast, taking advantage of those cost positions we talked about, and that serves many of those pharma and cleaning sectors. The second wave is currently in flight, that's about 200 KTA additional capacity that will be in Seadrift, Texas, down in US Gulf Coast as well as in Terneuzen, Netherlands, our flagship site in Europe that takes advantage of the LPG, well, cost position that we have. That will give us good runway to grow volume as well as earnings into 2025 and '26 and even beyond. In all, these brownfield investments from here onwards will add another \$175 million of mid-cycle EBITDA in the next two to three years. And then in the short term, we anticipate a safe return of our glycol 2 in it down in Louisiana that if you remember was due to an outage, went offline since mid of last year. That will come online end of this quarter and that then gives us more volume growth in the second half and then beyond. Short-term and medium and longer term, we are positioned to grow volume in earnings in this business.

Let me summarize, 2023 was a tough year as we know. We think that this was the bottom of the cycle and as we climb out, DIS is definitely well positioned to capitalize in all of the drivers we just talked about. We have our low-cost integrated positions. We have markets that are growing faster than GDP. We are looking at supply chains or I would say supply and demand balances, fairly well-balanced in the industry. We don't have a length in terms of what other players have. And lastly, I would say that with the growth investments, the 200 KTA that's on flight, we'll continue to add earnings here going forward. With that, let me turn it back to Jane.

**JANE PALMIERI:** Thank you, Pankaj. Dow's Polyurethane business is a globally integrated industry leader, well positioned for near-term upside. Our short-term focus is to pursue efficiency and productivity in light of the current trough levels. Simultaneously, we're executing targeted investments to deliver growth and increased margin resiliency in the longer term. PU Chemistry is also essential to the decarbonization efforts taking place around the world. So, our third priority is innovation with an eye towards sustainability. Global consumer durable and construction demand are at cycle bottoms and there is considerable supply link in the associated PU Chemistry chains. These dynamics coupled with headwinds from our JVs are reflected in the 2023 financials.

We serve multiple markets that continue to grow above GDP as polyurethane technologies address global challenges, from population growth and sustainability, to energy consumption, to name just a few. Dow is the leader in propylene oxides and polyols globally as well as the global leader in propylene glycol where we see higher resiliency. With Dow's extensive R&D capabilities and deep application expertise and network of system houses, we have the ability to solve locally and commercialized globally. We win by consistently serving our customers ever intensifying needs.

As I mentioned earlier, we are committed to continuous productivity improvements. We are optimizing our footprint and lowering our fixed plant costs with meaningful capacity reductions in both PO and our downstream derivatives. We're focusing our participation in the highest returning PO derivatives. And with institutionalized and efficiency culture that runs throughout the cycle, our working capital initiatives have yielded record low inventories over the past two years, relying on investments in new digital tools and capabilities, and our digital investments also enable growth. For example, our Edison award-winning predictive intelligence platform which uses advanced analytics to accelerate the polyurethane R&D formulation process. This new technology enables Dow to turn what used to take months of resourcing intensive lab trials into seconds of data enabled innovation, improving speed to market and yielding higher returns.

We've also strengthened our portfolio through targeted investments in several key areas of growth. For example, our new MDI distillation and prepolymer facility in Freeport, Texas provides 30% additional monomeric MDI, increasing both overall margins and margin resiliency. We also recently completed our Thailand propylene glycol expansion to serve profitable demand in food, personal care and pharmaceutical applications. This expansion represents 60% lower capital intensity compared to a greenfield build. Additionally, we completed several investments that will provide EBITDA uplift in the next cycle upturn including projects like our US Gulf Coast Aniline de-bottlenecking and our Latin America caustic business. These actions and many more, set the business up well for the future while maintaining CapEx below D&A levels in the coming years.

Sustainability and circularity are increasingly important to our customers, and here, PU Chemistry has a critical role to play, whether it's mobility, where Dow polyurethanes assist in the lighting of vehicles or provide unique performance profiles for EV battery assemblies. For consumer markets like furniture embedding, where Dow is out in front with new circular

business models, like our Renuva Mattress Recycling innovation. In food and fragrance, we provide sustainable propylene glycol from circular and bio circular feedstocks, verified by ISCC Plus and the mass balance approach. And construction markets also benefit from Dow polyurethanes and construction chemicals which are ideal for energy efficient insulation and roofing solutions. What we know from previous downturns is that when indicators such as interest rates begin to meaningfully decrease, spending on consumer durable products picks up substantially and quite rapidly. Because inventory levels across the value chain have been heavily reduced, there is typically an added bull whip surge in demand from restocking to more normalized levels. So, we've been working diligently to prepare ourselves for the coming recovery, having sufficient market reach and head space for growth to respond to the building coiled spring in demand.

In closing, the near-term growth investments Pankaj highlighted in the DIS business and our improvement actions in Polyurethanes gives us confidence that we will deliver value for both our customers and shareholders. Our actions will deliver growth of over \$250 million of EBITDA from current run rates in additional to the uplift we will see from cycle recovery. I'd like to thank you all for your time today. Up next, you'll hear more about our third and final operating segment, Performance Materials and Coatings.

**BRENDY LANGE:** Good morning. My name is Brendy Lange and I'm president of Dow's Performance Materials and Coatings segment which includes two businesses, Dow Consumer Solutions and Dow Coatings and Performance Monomers. I was honored to be named to this role in April after previously leading Dow's Industrial Solutions business. In that capacity, I was passionate about the growth opportunities that you heard from Pankaj just a minute ago. And similarly, I'm equally excited about the growth potential that we see in Performance Materials and Coatings. Over the next few minutes, you'll see two businesses that are world leaders in their respective chemistries with cost-advantaged upstream integration. You'll see a focus on attractive markets with secular drivers that as we look ahead, we see above GDP growth. And third, you'll see structural actions including higher return, faster payback growth projects that will lift the earnings of this segment by more than \$300 million over the next several years resulting in a higher growth, more profitable segment as we look forward.

I'd like to start with some background on the PM&C segment. In 2023, the businesses is delivered EBITDA of \$1 billion and this was a level that frankly was reflective of a challenging macro and the impact of interest rates in some of our applications. But as we turn the page and look ahead, we see demand drivers like those that you see on this page such as connectivity and green building that are increasingly requiring more advanced silicones and acrylics to achieve higher sustainability and performance requirements. We are well positioned to respond to that demand with our broad portfolio of high-value solutions and a world-scale footprint that gives us a platform to innovate and grow with our customers. For those markets that are still impacted by weak macro, we will maintain cost discipline to maximize what is our industry-leading footprint. You'll hear all of this throughout the next few minutes. I'd like to begin first by inviting Joanne Sekella, Business Vice President for our Coatings and Performance Monomers Business to share some highlights of the business that she leads. Welcome, Joanne.

**JOANNE SEKELLA:** Hey, thanks, Brendy. After more than 30 years with Dow, I was thrilled to take over leadership of this portfolio last year. Dow's Coatings and Performance Monomers Business is the industry leader in acrylic coatings. We have broad, global reach and hold leading positions in both acrylic binders and waterborne additives. We remain squarely focused on our hallmark, commercial and operational excellence focusing capital and resources on attractive end markets where we know we can win. We are well positioned to grow the top and the bottom line as the housing market recovers.

Here, you'll see that we have clear differentiators that strengthen our position as the go-to partner across high-growth markets. We're applying our materials science capabilities and our deep market knowledge to grow our position in the paints and coatings value chain. We're focused on areas where our innovation is valued such as pavement markings and paper barrier coatings. This affords us the opportunity to meet that increase in consumer demand for more circular and renewable solutions, improved health and safety and lower carbon emissions, all while enhancing or maintaining end product performance.

Architectural coatings, these represent roughly two-thirds of our global sales and with the industry's broadest product portfolio, we've been the go-to innovator for more than 60 years. Our footprint is focused on our highest return, most cost competitive and most versatile assets. We have strong partnerships and a seat at the design table with leading global brand owners and we're working and driving across the organization to move the industry forward creating growth opportunities where paint offers both enhanced performance and enables a more sustainable world. On the bottom right, you can see that this market has evolved significantly, particularly in the United States. The last four years have whiplashed from a demand peak in 2020 driven by an unprecedented spike in DIY during COVID to a supply-constrained trough in 2023 on interest rate induced stagnation in existing home sales and new home builds. However, current industry projections forecast a steady climb towards pre-pandemic levels over the next several years. As macro conditions and interest rates improve, we see significant top and bottom-line growth.

We're also expanding our reach into new attractive end markets. Our pavement markings for parking lots, public roads, airports and other applications are enabling more durable, more sustainable solutions that improve road safety and support the transition to autonomous vehicles. Our FASTRACK<sup>TM</sup> resins have painted millions of miles of roads globally in every major geography. As the regulatory environment continues to drive towards improvements in road safety and durability, this will create additional demand for our business. Our paper coatings for packaging is yet another very attractive market opportunity. Barrier coatings allow paper packaging to resist oil, grease and other liquids for to-go, shelf stable and frozen foods all while enabling recyclability and re-pulpability, meaning that greater than 80% of the original wood fibers are able to be recovered during the recycling process so that new paper can be made with the same performance qualities. Demand for new barrier coatings is going to continue to grow at a rapid rate due to the global recyclability and circularity trends. To capture this increasing demand, we will bring online new capacity next year.

To recap, we have narrowed our focus on markets where we can win and we have taken actions to strengthen our cost position. We are expanding our reach into new market segments and we'll

continue to deploy innovation and digitalization capabilities to further improve our customer experience. We will continue to grow with our key strategic partners while building new relationships and continuing to gain share. Collectively, this sets our path to sustainable earnings growth across the cycle. And with that, I'm going to turn it back to Brendy.

**BRENDY LANGE:** Thanks, Joanne. Okay, I'd like to turn now to the other business in the PM&C segment Consumer Solutions. There are three key messages that I'd like you to walk away from the next few minutes and these are three things that have stood out to me since I joined the business. First, silicones is great chemistry and we are seeing demand for this technology increase as society transitions to a more connected and sustainable world. Second, as the world's leading silicone player and really Dow is in a class of its own, we are uniquely positioned to benefit from that growth. And third, we have a strategic playbook that was focused on attractive markets and high return capital investments that will drive \$300 million of earnings by the mid part of this decade.

I want to jump in and I want to talk about the chemistry. We are seeing strong demand increases for silicones in fast-growing markets like electronics, mobility, building and construction, consumer products. These are markets that are going through transitions and those transitions are requiring more and more silicone. The result is an addressable market that's growing greater than GDP and in fact, greater than many of the market indices that you see within the silicone segment. Think more silicone per vehicle, think more silicone per electronic device, think more silicone per building. As the largest producer in terms of annual sales, we have the scale relevance that we combined with a downstream portfolio and the industry-leading digital capabilities to meet that demand and serve our customers.

I want to unpack the competitive advantages that set this franchise apart. You can see on this page on the left-hand side our industry-leading footprint with back integration all the way to silicon metal. This gives us both cost and sustainability advantages versus our peers. We are the only silicones player with a world-class integrated footprint in three major regions, North America, Europe and Asia. This is a strength and it enables us to be the most competitive producer in each of the regions we participate and importantly, it means that we have sufficient upstream capacity to support all of our downstream growth without any additional capital investment. And our low carbon silicon metal production in Brazil gives us carbon advantage downstream products, which is a value proposition that we are commercializing in the marketplace today. So, the scale and the breadth that you see on the left hand side of this page gives us relevance in the value chains and a seat at the design table that translates to a robust innovation pipeline that you see on the right hand side of the page. This is an innovation powerhouse. On average, we launch approximately two new products per week based on customer pull, and sustainability is the catalyst for new product development.

So, as we look ahead, our strategy is to translate these unique capabilities and focus them in targeted markets that are growing disproportionately fast. And I'd like to bring that to life with just a couple examples of some market opportunities that are charting the future for this business, and I want to start with mobility. This industry is going through a well-documented transformation towards electrification and decarbonization. And whether it's electric vehicles,

hybrids, internal combustion engines, all vehicles are requiring more silicone. And this translates into a demand for silicone materials into this application that's growing at five times faster than overall light vehicle sales. And I think one example really brings this to life, and that's airbag coatings and bonding materials, where Dow is the industry leader. Today's vehicles have at least three times more airbags than prior generation models. And so, this results in more silicones per vehicle more opportunities for Dow.

Shifting to the electronics sector, which is another market that's growing at a multiple of GDP and this is an area where Dow's end to end innovative silicone solutions are essential to enabling a more connected, automated and digital world. As this chart shows, the electronic sector did stall to some degree in 2023, but we are seeing the market recover and importantly, the mix start to shift. Personal devices were the main demand driver for silicones in the past. But as we look ahead, data centers and augmented and virtual reality will make up approximately two-third of the silicone demand into this segment moving forward. So, this trend creates more opportunities for Dow as our silicones dissipate heat and ensure stable performance of data centers, chips, devices so much better than competing materials.

And last, building and infrastructure. This is a large \$12 billion addressable market, and Dow today is the number one provider of silicone adhesives and sealants into high performance building. And the stat that I love is that, 70% of the top 20 iconic buildings in the world use Dow products. And they do so because architects trust Dow products to work for many decades. So, as this industry transforms and transitions towards more sustainable green building and infrastructure, this will require more silicone through higher performing and carbon neutral sealants to enable lower greenhouse gas emissions.

So, as you think about all three of these market opportunities, markets are growing, and Dow's depth, breadth and innovation position us well to capture this demand. And as we look ahead, our playbook is to invest in downstream capacity to supply the demand as well. The left hand side of this page shows that between 2021 and 2026, we will have added 200,000 tons of high value downstream capacity, half of which started up in the past three years and half of which will start up in the next few years. And this will deliver two critical outcomes for this business. One is it will update and upgrade our market participation into these faster growing markets. But also it will upgrade the returns on our upstream siloxane footprint into higher value downstream products by factor of three times. This will result in top line and bottom line growth as demand returns.

So, coming back to the PMC segment overall, I'd like to end where we started, and that's that this segment has tremendous growth potential. We delivered \$1 billion of EBITDA in 2023, and this was reflective of the challenging macro that we all felt. But as we look ahead, we see a combination of more cycle upside than downside, but more importantly, our strategic actions and plans to innovate and grow in these targeted markets that will lift our earnings of the segment by about \$325 million by the mid part of this decade, resulting in a higher growth and more profitable segment in the future. Next, I'd like to invite Jon Penrice -- to join us today to talk about MobilityScience<sup>TM</sup>, which is a key growth platform for Dow.

**JON PENRICE:** Thank you, Brendy. Hello, I'm Jon Penrice and I lead the Dow growth platform in Mobility, and we're combining the materials science capabilities across the Dow enterprise to focus on growth opportunities for an industry that's going through a once in a lifetime change. At the heart of this, we're seeing customer demand for more sustainable solutions such as electrification, reduced carbon footprint and increased circularity, particularly the end of vehicle life. This requires not just new materials, but new ecosystem partnerships, including with OEMS, where we are securing a seat at the design table. Take the growth of EVs and hybrids as an example. New materials are needed to reduce the heat in electronics for batteries, for light weighting and for better acoustic solutions. When we bring solutions to these challenges, we can increase the amount of high value, high margin, Dow materials per car by up to three times. In addition, most OEMS have established aggressive net zero carbon emissions targets and regulators are introducing circularity targets for polymers and plastics. Here, Dow is getting paid to help the industry decarbonize. So our portfolio is broad. We have deep innovation capabilities across Dow businesses and vehicle types, and we have a local know how to meet the highly demanding quality and just in time needs. Check out this video to see examples of Dow MobilityScience™ in action.

**VOICEOVER:** How can our customers keep pace with the transformation towards electric, autonomous, more connected and sustainable vehicles? With Dow, our goal is not just to keep pace, but accelerate the future of mobility. MobilityScience<sup>TM</sup> is our fast track to success. MobilityScience<sup>TM</sup> allows us to speak the language of the industry by focusing on applications first, like battery, seating and tires. Helping us identify opportunities for deeper collaboration with customers than ever before. Here's how we're pushing the accelerator on growth. Our scientists are focused on unlocking solutions that prioritize safety and performance. Technologies like silicones, polyurethane foams and adhesives are helping solve crucial industry challenges like battery fire protection. In line with our Decarbonize & Grow strategy, we're also working with partners to push the bounds of what's possible in circularity and carbon reduction.

**MICHAEL FRIK:** But we also have this sustainability strategy. This has to be -- has to fit together. We have ambitious targets and when saying in our houses, every action counts. And with this pilot project for the e-class, with the SPECFLEX<sup>TM</sup> CIR is the first step of, I hope, a lot of steps with you together to meet these targets.

**VOICEOVER:** Like OEMs, consumers want cars that straddle luxury and sustainability. For automotive interiors, for example, leather alternatives like LuxSense<sup>TM</sup> synthetic silicone leather and polyolefin elastomer-based Evoair<sup>TM</sup> are providing performance with reduced environmental impact.

**BOB LUX:** Bridgestone is committed to carbon neutrality and the manufacturing of tires from 100% renewable materials by 2050. And in order to deliver on these sustainability commitments, we really need to collaborate at all levels of our business and throughout our entire value chain, and we seek out experts in the field to work with them to drive innovation.

**VOICEOVER:** Next, to better serve the evolving demands of the market, we've expanded capabilities in sites around the world. The creation of MobilityScience<sup>TM</sup> Studios is also paving

the way for new levels of direct R&D with customers. Lastly, we are shifting into a higher gear on ecosystem engagement. New OEM, tier and joint venture relationships are reconfiguring the traditional value chain, that's why we've been writing a brand new chapter in our relationship with some of the world's largest OEMS, like JLR.

**FRANCOIS DOSSA:** Dow is a very important partner for us. We started a few years ago working on Formula E. We're going from the racing road cars. We cannot deliver modern luxury, the best cars in the world, without collaborating. We need partners, people that are the same vision of the world that we have.

**VOICEOVER:** We're also increasing industry connectivity by bringing mobility leaders together under one roof through innovation and sustainability summits in key markets like Europe, Japan and China. Today, the speed of innovation is so fast, none of us can be successful on our own. Collaboration is the key. At Dow MobilityScience<sup>TM</sup>, we are energized by the possibilities.

JIM FITTERLING: You've heard from the business leaders today on several ways in which our Decarbonize & Grow and Transform the Waste strategies really position Dow uniquely to capitalize on this demand for more sustainable and circular solution across all of these market verticals. Altogether, by 2030, the strategies enable us to deliver more than \$3 billion to our underlying earnings, reduce our Scope one and two emissions by 5 million metric tons, and commercialize 3 million metric tons of new circular and renewable solutions annually. In November, we reached a key milestone on our Path2Zero project in Fort Saskatchewan, where our board gave final investment decision for us to move ahead. So to unpack the details a little bit more, I brought Dan Futter, who's our Chief Commercial Officer, and John Sampson, who's our Senior Vice President for Operations, Manufacturing and Engineering. And we're going to talk a little bit about the Path2Zero project. So, John, let's start with that. We've talked a little bit about enabling sustainable growth opportunities while also reducing emissions targets, and I think with respect to fighting climate change, emissions, the general public has already voted, there's a problem and they want to see it addressed. So the question becomes, how do we do it in the most economical way possible?

**JOHN SAMPSON:** Sure. Yeah. Thanks, Jim. We've got a strong track record of building highly efficient assets. We certainly learned a lot from our newest cracker, Texas-9. Third party studies have confirmed that Texas-9 is a first quartile cracker when compared to assets across the industry relative to efficiency and overall performance. Some of the numbers that kind of back that up. We've enjoyed a 15% return on invested capital since starting up in 2017. And then relative to installed efficiency, our installed capital cost was 20% lower in terms of cost per ton of ethylene installed. Once you build it, the big question is, will it run? And in the case of Texas-9, we're enjoying more than 65% lower conversion cost to convert ethane into ethylene than the average across the Dow fleet. And we're also being very efficient. And that 60% less CO<sub>2</sub> per metric ton of ethylene is produced by the Texas-9 cracker compared the average across the Dow fleet, and that's without any decarbonization assets. And so we plan to leverage all of that knowhow into our Fort Saskatchewan project and build upon that strong foundation of knowhow. We certainly expect to deliver an asset that will deliver the \$1 billion that you spoke about earlier

of EBITDA per year, all while eliminating for the first time ever across the entire site, Scope 1 and 2 emissions.

**JIM FITTERLING:** So John mentioned the consumer demand, Dan, and you've got a view towards what's happening there. Tell us what you're seeing in terms of the demand pull and how we're going to address that with the consumers.

**DAN FUTTER:** Yeah, I think, Jim, we're starting to see the first signs of a market emerging. If you recall, Karen Carter earlier presented the brands and the emission reduction targets that they're declaring and we've been doing the same study for our direct customers. And what we've seen is that the majority of our largest customers have made declarations on their Scope 1 and Scope 2 emission reduction goals. And of those, half have already established a Scope-free target as well. And that includes the products that we supply to them and their footprints. So that's fascinating, because if you start to add up all those declarations of all of our direct customers. recognizing this is just the top ones today, so this number will increase and change. What we're seeing is a market for something like 200 million tons of carbon dioxide equivalent by 2030. If you compare that with what we would estimate the supply side to be, it is much smaller. Now, will this market supply demand dynamic stand? Are there bound to be some puts and takes on both of those sides? But that is the largest dislocation in supply and demand that I've seen in my 36-year career. So this is going to be a fascinating period for us as this rolls forward. One of the key outcomes, I think, has to be the emergence of new markets with their own supply demand dynamics for our products that are analogues of the existing ones that we sell. That's analogues with a low emission footprint. And so that's the bit that's going to be interesting, is what type of value positioning will we see for those low emission products, Jim.

**JIM FITTERLING:** And so, on the demand side, it's there, obviously. I mean, we've got the biggest project in the world going and it's a fraction, like a small fraction.

**DAN FUTTER:** Less than 2%.

**JIM FITTERLING:** But people also wonder how we're going to capture value for it. And we've said before we're not putting in the \$1 billion of returns. We don't have anything in there for CO<sub>2</sub> emissions. But we do think there is a value, and we do think there is a premium to be had for that. How do you see it developing in the marketplace?

**DAN FUTTER:** Yeah, if you take a market view rather than the sort of customer view that I just talked about, what we're seeing? We've done a lot of work with McKinsey in this space to estimate what we think each of these markets is likely to pay, as it stands now, for emission reductions. This will obviously evolve over time, but we're seeing a range of values, in fact, probably from the top end in the consumer goods markets down to the industrial markets. And the reason they vary is that each market has its own ways to abate emissions. They vary, and so therefore, the values vary as well. What we're interested in seeing, obviously, is how does this evolve into us being able to bring products to market? One of our single biggest challenges is this, and Fort Saskatchewan is a great example. As Jim said, it's the single largest net zero announcement been made in the industry to date. But as you then take that reduction in

emissions and you cascade it down through the many products that we derive from that asset, what you see is a dilution, right? A diluted effect. And if you talk to our customers, that contrasts to what they're looking for. So what they want to see is please concentrate the emission reduction that you deliver into specific products, the ones that we value the most. And by association, that's because we, as consumers, value those products the most as well. So we're working with the standard setters, with third-party verification agencies, and with our customers to discuss how do those standards have to evolve so that enables us to concentrate those emission reduction benefits in those products that those customers most want. And those conversations are going pretty well, Jim.

**JIM FITTERLING:** So, John, Dan made, I think, a very clear case on the markets. One of the next most common questions I get a lot when I go out and talk to investors is why did we decide to go to Canada first? Maybe you can give some color to that.

**JOHN SAMPSON:** Sure, a lot of reasons to go to Canada. I think location would be one location advantage, feedstock advantage, and then really just the way Canada is approaching decarbonization journey, we have a very large operating hydrocarbon cracker and derivatives complex already working there in Canada, and its low cost and very efficient. And so we'll be able to leverage utilities, infrastructure, and most importantly, workforce that's already there, understands how to work and run these assets. And so we're very excited about that. From a feedstock perspective, Canada of course has very low ethane available and so we've been able to contract and make sure we have ample supply of low cost ethane to feed the cracker once we get it built. And then lastly, Canada has got a price on carbon and they've got an emissions trading system in place and you and other industry leaders have said we really need that to advance the journey towards decarbonization. They've then paired that up with tax incentives and subsidies and so that makes it very attractive for us. And we expect to garner about \$1.5 billion of benefit from those tax incentives and subsidies as we build the project out.

**JIM FITTERLING:** And on the project, the other question that people ask a lot is how do you de-risk a project like this? The start of this project is not just last year. The start of this goes back several years to working on the feedstock supply, the government support. But give everybody an update on where we are with the project and all the steps that have been taken to de-risk it and our confidence in delivering it on time and on budget.

**JOHN SAMPSON:** Sure, we're absolutely laser-focused on delivering the project safely, on time and on budget. And risk management is a big part of that. I'd say overall risk is understood and under control when it comes to this project. And in fact on currency risk we've already hedged 100% of the currency risk associated with the project. Another big risk that you have to manage is procurement risk and there long lead equipment, we've already locked that in. So we've got favorable metal pricing, we've got shop time secured, we've got delivery dates secured, all that we need so that our vessels, our reactors, our turbo machinery, all critical components of our furnaces are going to be here when we need them, so we can get the project up, on time and get it running. Back to feedstock again, as you know, everything hinges on getting advantaged feedstock. We've got several long-term contracts, multiple decade contracts to get that cost advantage ethane into our cracker with staggered end dates, so we're not

leveraged on the back end when it's time to recontract and we're very proud of that. And then, lastly, I'd say third-party ownership. We don't have to invest and own everything here and we partner with folks like Linde to provide our circular hydrogen and our autothermal reformer. They'll build, own and operate that for us. We've also partnered with Ravago on the back end. They'll build, own and operate logistic supply for us. And then we've got, as you talked about earlier, the team is very important and we've got Fluor, who's with us, and they were with us on Texas-9 when we built that project, some of the same people that were on Texas-9 with Fluor who are with us from an EPC perspective to make sure we get the project built right the first time.

**JIM FITTERLING:** Our whole approach to labor contracting has been done. The government's been supportive on expanding the Port of Prince Rupert. Sea and railways is onboard to transport the materials. This is execution mode and this is what we do extremely, extremely well. Both of you, thank you for your leadership and thank you for joining us today. At the end of last year, I was proud to bring back Jeff Tate as Dow CFO and Jeff's going to come up and walk us through how this all ties together in financial performance, but prior to leaving Dow to go be CFO at Leggett & Platt, which is a customer in the automotive industry, Jeff had 27 years of career experience with Dow. So he knows the place inside out and backwards and glad to have him back with us today.

**JEFF TATE:** Thanks, Jim. We really appreciate each of you here joining us today. As CFO, I'm here to bring together everything you've heard from Team Dow throughout the morning. I really want to build on the key themes you've heard from each and every one of the team members here that really helps to solidify why we're going to create additional value for you, our shareholders. As Jim mentioned, I recently returned to Dow after serving as CFO in another industry and with nearly three decades of experience at Dow in a number of different finance roles, I'm truly confident in saying, Dow has never ever been in a stronger position.

It really comes down to three key points. First, team Dow will continue to demonstrate the operational and the financial discipline that you know us for. We're going to maintain those efficiencies that we've delivered in recent years. Second, we've created the financial flexibility to invest counter-cyclically and grow underlying earnings. And third, we're well-positioned to create both top- and bottom-line growth and create shareholder returns into the next cycle.

Let's start with the ways in which we're consistently delivering on our commitments while maintaining our operational as well as our financial discipline. Now, if this framework looks familiar to you, that's great, because the pillars of our disciplined and balanced capital allocation framework remain consistent with what you may have seen during our 2021 Investor Day. As always, our number one priority is safety and reliability, and we're making the necessary investments to uphold this. In addition, we target a strong investment grade credit profile with a two to two-and-a-half times net debt to adjusted EBITDA basis across the cycle, because doing so affords us the opportunity to invest in projects that we know will extend our market leadership and increase our earnings. And last but certainly not least, we'll deliver shareholder returns of at least 65% of operating that income over the cycle.

Now, let me briefly remind you of the four priorities that we outlined during 2021's Investor Day. First, discipline capital allocation followed by profitable growth, then higher returns and finally, industry-leading cash flow generation. The work we've done in each of these areas is pretty evident. We generated more than \$14 billion in cumulative free cash flow and returned approximately 83% of operating net income to shareholders. In addition, we delivered approximately \$800 million of incremental mid-cycle EBITDA and a three-year average return on invested capital of 14%, which is more than 300 basis points above our peer average. And finally, we improved our cash flow conversion cycle by eight days from pre-COVID levels. As we enter new chapter where we're seeing improving market conditions, the work we've already done will really help us to focus on even more value creation and shareholder returns.

Now, earlier you heard Jim talk about the importance of the last five years and our intentional actions over that period have resulted in a very strong credit profile. For example, today we have ample liquidity of approximately \$13 billion. In addition to that, our debt, 99% of that is at a fixed rate, minimizing the impact that rate fluctuations may have on us. And we reduced our net debt and pension liabilities by \$9 billion since Spin. And last year, we took actions on the annuitization and the risk transfer of approximately \$1.7 billion in pension liabilities. And this February, we issued \$1.25 billion of green bonds at a very low spread, further demonstrating the market's interest in our sustainability-focused growth investments. This isn't just about Dow and our ability to deliver at the bottom of the cycle. With the impactful work that we've done on the balance sheet, we're truly ready for Dow's next chapter and this starts with our flexibility from a financial standpoint and how it positions us well for future growth.

Now, the team has worked to run a fundamentally better, more efficient company even at the bottom of the cycle. And as you can see, Dow is a leader among peers in terms of SG&A and R&D cost as a percentage of sales. In fact, in 2023, our combined SG&A and R&D spend as a percent of revenue were 700 basis points lower than our peer average. And the \$1 billion in cost savings that we delivered in 2023 shows our commitment to a continued focus on cash generation. And with the goal of further improving our operations, we're scaling several of our digital solutions. In fact, at the end of 2023, almost 40% of our sales occurred through digital channels, which is nearly double where we were during the last time of our Investor Day in 2021. With this, we've reduced our order touches by over 20%. Importantly, everything you see here are examples of structural improvements. They're intended to be sustainable, long-term benefits that give us the flexibility to invest for the future.

Now, this slide shows that as expected we're entering an elevated period of investment over the next three years, including the startup of construction at Fort Saskatchewan. But it's important to be really, really clear about this next point. We expect to return to more normalized levels of investment at or below depreciation and amortization after we complete the first phase of the project in 2027. Critical to our foundation of working safely and reliably, you can expect to see our maintenance CapEx consistent with Dow's historical averages. So, with all the puts and takes, please remember that our strong financial position allows us to invest counter-cyclically, especially in projects that were confident will grow both earnings and shareholder returns. And our confidence comes from our ability and our track record of delivering on our commitments.

Let me just share a few examples in that regard. On cash flow conversion, we achieved more than 80% since 2019. As you can see through the cycle, this represents top quartile performance when compared to our peers. We also reduced our cash commitments by approximately \$1 billion since Spin while delivering underlying earnings growth. And consistent with recent years, we currently have over \$1.5 billion in unique-to-Dow levers that will further enhance our cash flow. Notably, with our best owner mindset approach, we're currently evaluating strategic actions for our non-product producing infrastructure assets and we hope to have more to share with you about that soon.

So up next, I'll review our growth levers and how we'll deliver increased shareholder returns. Now, the near-term investments shown here represent lower risk, higher return projects in each of our three operating segments. To date, we've added approximately \$800 million per year of incremental mid-cycle EBITDA and more than 450 kilotons of capacity. And we're well on our way to achieving the remaining \$1.2 billion by mid-decade. So taken together, we expect these projects to deliver approximately \$2 billion per year in incremental underlying EBITDA by the middle of the decade. Now, I mentioned lower risk, and what you see here are technologies that give us an opportunity to meet customer demand in fast-growing markets that we've been serving for decades. To further de-risk the investments and ensure higher returns, they're all brownfield projects built on our integrated manufacturing sites. And the benefit to building on our existing sites is that these projects have lower infrastructure needs at less than 15% of the total capital cost. In comparison, new standalone sites often have approximately 30% of invested capital into infrastructure costs. So, with lower technology risk and lower execution risk, these are great projects and we're confident they'll deliver higher returns.

And speaking of lower risk projects at our existing sites, you've heard a lot today about our Path2Zero project in Fort Saskatchewan, Alberta. Team Dow is firmly, firmly focused on completing this project safely, efficiently, on time and on budget, and we're partnering with industry leading companies that are well known for their operational excellence. And as John Sampson outlined, this is not a greenfield project. We're building this asset on an existing Dow site in a significantly cost advantaged region. And from a financial perspective, this project is expected to deliver \$1 billion per year of EBITDA growth at full run rates with similar returns to our Texas-9 cracker. And with that, the projects capital intensity that we've shared is expected to be lower than Texas-9. And with our expected government funding of more than \$1.5 billion, we brought Dow's net capital outlay for the project to \$5 billion. And importantly, not included in the project financials is the potential upside we see from commercializing low to zero emissions products. So, the bottom line is this, given the lower capital intensity of this investment and further upside from low to zero emissions products, this project is a clear opportunity for Dow to grow long term underlying earnings and deliver strong returns.

Now, next up, our partnership approach to Transform the Waste is an effective and capital efficient model that allows Dow to drive both profitable growth and circular solutions. And with sustainability commitments from brand owners as well as consumers, we expect demand for these innovations to significantly outpace industry supply and production through the end of the decade.

So, when you take Dow's strong operating discipline and our financial position and you add in the growth levers, you can see the path to capturing profitable growth through the cycle. So, to summarize, we're on track to deliver the remaining \$1.2 billion per year in underlying EBITDA from our organic growth investments. Our Path2Zero project is expected to deliver \$1 billion of EBITDA growth at full run rates with expected returns in line with our Texas-9 project. And as you saw in the previous slide, our approach to transforming the waste through direct investments and strategic partnerships is expected to generate more than \$500 million of incremental underlying EBITDA by 2030. And importantly, we'll do all this while reducing Scope 1 and Scope 2 emissions by 15% compared to 2020.

So, the proof points are here. They bring together so much of what you've heard today from team Dow. When you look at our uses of cash from 2019 to 2023, so over the past five years, you see we took deliberate actions to strengthen our credit profile as well as our financial position. We also returned more than our target to shareholders, nearly 90% of our net operating income, which enabled us to reduce over 45 million shares during that period. So, looking ahead, we see solid earnings growth as we realize the near-term growth investments, the completion of our Path2Zero project in Fort Saskatchewan and our circularity investments. And coming from a relatively low point in the cycle, we expect a double-digit percentage growth in earnings over the next few years in a scenario where we return to mid-cycle earnings and even more as we approach peak earnings. So, with everything you see here, Dow's next phase of growth will deliver even more cash to remunerate our shareholders.

So, if you think about where we've been and where we are today, and even more importantly, where we're going, we ended 2023 in what we believe to be the trough of the cycle. And now, we're seeing early signs of the next up cycle. We believe Dow is a compelling near term investment opportunity. And why do we believe this? First, we're committed to operational and financial discipline. We've delivered returns and cash generation better than our peer benchmark and we'll maintain our low cost to serve mindset. Second, we've created the financial flexibility to invest right now. Our capital allocation framework remains consistent and unchanged, and we have a strong balance sheet. And lastly, we're positioned to create both top and bottom-line growth and increase total shareholder returns. So, remember this about Dow. Our standards are high, our team is strong, and we are absolutely ready for growth. So, with that, thank you again for your interest in Dow. Now, I'd like to invite Jim back to the stage for our Q&A session.

**ANDREW RIKER:** Tiago Tenuto will be running the mic on that side. I'll be on this side. We'll get going. So, maybe, Kevin, if you don't mind, give your name and firm as you start.

**KEVIN MCCARTHY:** All right, thank you. Kevin McCarthy with Vertical Research Partners. Jim, a few questions on your Transform the Waste initiative. That's \$500 million in targeted EBITDA by 2030, I believe. Can you speak to the price premium assumptions embedded therein or your outlook for premium pricing for both advanced recycled and bio-based product versus mechanical? That would be the first question. And then secondly, 2030 is creeping up on us, and I kind of feel like we're at the thin end of the wedge for this whole industry, really. What kind of line of sight do you have to those three million tons that you target? How much does Dow plan to do internally versus external M&A or partnerships to march toward that goal?

**JIM FITTERLING:** I'm going to have Karen Carter answer this question because she's the expert in this space, but I believe she mentioned in the presentation that we've got line of sight to 1.7 million of the 3 million tons. But you can speak better, Karen, to the premiums and relative market prices and what you see and how you see things developing in that space.

KAREN S. CARTER: Yes, sir. I don't know. Am I on? Yes, certainly. So, to your point -thank you -- in the presentation, we have line of sight to about half of the three million metric
tons. We either have already contracted it or we are in active negotiations to achieve that. But
beyond that, we have a pipeline that gets us pretty close to the three million metric tons, and it's
a combination of mechanical recycling and advanced recycling, as well as bio and renewable
feedstocks. Just like on the carbon side, there's a range of profitability and it not only depends on
the technology, but it depends on the application and that is why we are focused primarily in the
linear low space. So, food packaging, of course, is a bit of a holy grail, which is where
technologies like -- in particularly in advanced recycling, pyrolysis oil. But also, that's where the
P&G partnership that we have really comes into play, a dissolution, because we absolutely
believe that we can get to near virgin resin quality. Then, ultimately that's going to be FDA
approved. So, I would say, that there is a range of profitability anywhere from 200 metric tons.
We've seen also \$500 per metric ton as well.

**JIM FITTERLING:** So, ballpark and depends on customer and application. Very similar to what we saw with the carbon emissions kind of range of different drivers of demand.

**VINCENT ANDREWS:** Thank you. Vincent Andrews from Morgan Stanley. Jim, I'd be curious to hear, as plastic production becomes more sustainable both in terms of recycling and carbon, what is the opportunity to actually grow the pie, to take demand from other substrates or from other parts of the plastic chains or from non-plastic materials? I know there was a great example of INNATE<sup>TM</sup> in the presentation. But wondering, are we going to shift away from just sort of solving a problem to actually creating a new opportunity or is this always going to be about solving the problem?

JIM FITTERLING: Yeah, I think it's a good question. I mean, we showed in the presentations today a change in mix, but there could be an inflection in growth as well that comes in the future. I think the growth will come from these new solutions that are out there. I don't think that the world is going to walk away from plastics. I mean, if they've been moving to anything, it's been to paper. But then, the people that move into paper packaging immediately get attacked for deforestation. And so, when they look at the full life cycle impact, they say, wait a second. I was better off from a life cycle impact with plastics and if they're recyclable and have zero CO2 emissions from production, that's going to be the best answer long term. It doesn't matter what material it is. You're moving from a linear economy to a circular economy. That has to happen. That's going to happen for all forms: Glass, plastic, paper, aluminum, and we see that. And then, I think as that happens, the real virtues of plastics will win out, lighter weight, stronger. It has more functionality. You can do more with the package. If we can work on these technologies like with P&G to be able to have the marketing aesthetics that you have with plastic packaging but then be able to recycle it and get it back to virgin quality. That's a huge win-win, and we have to

crack the code on all of recycling on getting waste back into a central structure. And in the plastics treaty negotiations, the big thing we're trying to drive there is programs like enhanced producer responsibility, recycled content mandates and targets. These are the things that are going to drive the demand for this faster and what that demand signal, more investments are going to come like the ones that we just talked about today. So, I think it is a possibility. Like Kevin said. we're at the thin end of the wedge right now. So, I don't think anybody's out predicting it. But I think if we solve these problems, there's no reason the growth can't come that way.

**JOHN ROBERTS:** John Roberts of Mizuho. Could you talk about the need for the European industry to restructure and if there are any opportunities for Dow that might come out of that. And then secondly, in the Fort, you're actually converting the existing complex to zero carbon as well as adding. Is that the case in the future that you'll have to add capacity to convert other facilities to zero carbon or can you convert other facilities to zero carbon without adding new capacity to those complexes?

JIM FITTERLING: Yeah. I think on Europe, our footprint in Europe is really geared toward the domestic market. So, we're not there to export and Europe doesn't have the cost position anymore to export. And so, our focus is clearly on what's happening with our customers as long as our customers demand is there. I feel comfortable we have low-cost positions. However, policies in Europe are not moving like policies say in Canada or in North America, where they're focused on energy competitiveness as well as incentives. Europe is focused more on the stick-on carbon emission reductions, and they're not focused at all on energy policy to drive down energy costs. Energy costs are going to continue to rise. So, we've hit a low since the Russia-Ukraine situation, but I don't see any signs that's going to go down from here. So, we've just got to keep a close eye on it. And I would say we've trimmed back high costs smaller assets. We focused on operating rates. You heard Karen talked about more LPG cracking at Terneuzen to even lower the cost position there. We'll do those kinds of things to be competitive and improve earnings in Europe. But primarily, our growth investments are going to be in low-cost position regions and high-value products like you saw today through all the projects.

On Path2Zero ... We went to Canada first. John mentioned all the reasons but ability to capture CO2 and sequester it was also a big part of it. And so, we built a world-scale cracker of 2 million tons, and we're going to retrofit the existing cracker which is about a million and a half tons of capacity. The way we'll do that when we build the new cracker, Linde is going to come in and build two auto thermal reformers that will take the backend gas, the hydrogen and the methane off the cracker and make pure hydrogen and that's what will fire the furnaces. So, the retrofit on the existing Fort Saskatchewan cracker is to change the furnace section, the convection section because hydrogen is less dense than natural gas. We changed that section and we get to zero Scope 1 and 2 emissions. Almost all of our furnace technologies is Technip around the world. And so, we've worked out the engineering long ago with Technip on what it takes to burn hydrogen. So, I think that's very straightforward.

As we develop, the US is working right now on developing carbon capture hubs. Exxon is working on it. Other companies are out there. Carbon capture technology hub technology and

pipeline capability is going to be in the United States Gulf Coast. And at the point in the future when you can see the kind of everything coming together, a price on carbon, a carbon market, the policies are in place, an investment down in the Gulf Coast might look more like we would build a world-class asset and retire an asset that's 60 years old, say. And in that case, you would add a pretty significant increment of growth, but you're retiring maybe a 60-year-old, 600,000-ton asset in favor of a 2-million-ton first quartile low-cost asset. And in our kind of business, cyclicality is going to be with us. And so, you want to make sure every peak is better and every trough is better than the last. And as you exit those older higher costs, higher maintenance cost assets and replace them, you want to replace them with low cost first quartile assets and keep moving your average as a company down and that's what we've been doing. So, I feel like we've got a little bit ahead of the game with Path2Zero, but we'll set ourselves up nicely for the next chapter which will probably be United States Gulf Coast and then maybe at some point down the road, Argentina, based on the age of the assets there.

**DAVID BEGLEITER:** Thank you. David Begleiter of Deutsche Bank. Going back to Kevin's question on the price premium for low emissions as your carbon products. How do you think it will develop and what needs to happen from either consumers or brands or governments to maintain that premium going forward?

**JIM FITTERLING:** Well, I think there needs to be a market-related price on carbon. We don't think and I've said this before, I don't think a carbon tax does it? You can collect a carbon tax on emitters and they'll pay it into the government, but it isn't necessarily going to go to reduce carbon emissions. It might go into general spending somewhere else. It might go to write checks to people. I don't know. If you have a price on carbon and you're investing in technology like we are up the Fort and you have verifiable carbon reductions, not offsets, but actual verifiable carbon reductions that can be measured, audited by third-party auditors, like our financial accounts are, then you have a credible emissions trading system. You're able to put a cap on emissions and drive them down to 2050. You've got a price on the carbon. You can recover that investment. So, if you're an investor and we need the capital market to come in to spend the trillions, the decarbonized economy, and you're an investor and you're looking at two situations and you say, if there's a price on carbon, I get a return on that low carbon emissions investment. If there's a tax on carbon, it's a cost to me and I'm not sure I get a return on that at all. I guess, you could assume you're going to be able to pass it all through to the consumer. Maybe, maybe not. I think you're better off with the price on carbon and I think that incentivizes the capital market to put all of this liquidity to work and drive us much, much faster towards a zero-carbon emissions economy.

So, today, Dan, no surprises. I mean, the range of values on low CO2 emissions looks pretty similar to the range of the price on carbon in the markets today. \$85 to \$100 a ton is kind of where we've been. I think it's going to go up. I mean, governments are going to do two things. They're going to put limits on emissions and try to drive them down and that's going to drive the price on carbon up. And so, those premiums could actually go up from what Dan mentioned based on what happens in the market and how fast people want the transition to occur. And it's going to come, it's going to get even more dynamic tension in the system because, now, you've got AI and data centers and huge power generation that's coming at us. I mean, I mentioned

today on TV, we're a 10-gigawatt power producer and there are tech companies that are talking about 30-gigawatt power needs for data centers, and we're just starting the decarbonization journey, right? And they want to build all of this new capacity with zero carbon emissions. Hydrogen carbon capture combined cycle gas with amine scrubbing industrial solutions business wins on that and small modular nuclear reactors are the only thing that are going to supply all that base load power. I feel like we're in a good position. We are in a leading position to do that. We've got to get the cost right, but you've got to have the policies like a price on carbon and the carbon market to help that and that's what helps get think the capital market interested.

**ARUN VISWANATHAN:** Hey, Jim. It's Arun Viswanathan RBC way back here. Sorry about that. Way back here.

**JIM FITTERLING:** Hey, how are you?

**ARUN VISWANATHAN:** Good. How are you? So, I guess, I just wanted to ask about some of your assumptions maybe in the mid cycle EBITDA walk that you've given. So, in the past, you guys have talked about maybe like a 1.3 or 1.5 times GDP multiplier in plastics, similar multipliers in other areas. What I've observed actually on the packaging side is some of those multipliers have come down in the last couple years, destocking by retailers or inflation impacts on the consumer. So, have you guys discussed any of that with some of your partners in the retail area and the consumer area? Have you seen noticeable differences or changes in those GDP multipliers and with that impact, maybe the 9 to 5 billion 2030 walk that you think on mid-cycle EBITDA? Thanks.

**JIM FITTERLING:** Yeah. I think if you look -- I think for sure destocking had a big impact last year. I mean, we saw that the whole year. Actually, probably from the middle of '22 right through the end of last year, you saw a lot of destocking. I'd say in fourth quarter, it felt like we were getting through destocking. In first quarter for sure, it felt like destocking was behind us. But, set that aside, I think in Karen's projections, she showed a bit of a take down in total plastics demand. Now, Vince raised a good point, but our assumption is in a normal world like we see right now, that probably ticks down. These are the biggest markets in the world for petrochemicals, right? And they've been growing at rapid rates for a long time. So, to see them tick down a little bit is not surprising. Not all of our plastics are going into just packaging. So, I want to make that point as well. A pretty sizable portion of the plastics portfolio today is in polyolefin elastomers. And so, you'll see in the photovoltaic films like ENGAGE<sup>TM</sup>, INNATE<sup>TM</sup>, other products that are coming in the value chain. We are starting to get a more sizable portion of what we call functional polymers. These are into more durable goods, longer lasting goods. Karen mentioned we're investing in dual reactor systems up in the Fort for the expansion. So, high-pressure pipe is going to be an area that becomes a growing area for us both for water and natural gas transmission. So, you're going to see more functional polymers growing in that part of the space and they'll have higher growth rates than maybe traditional packaging will. I feel good about the numbers that we have in there. I think we have to look through some of the yearover-year aberrations that are going to happen from destocking and other things, but the longterm trends on plastics are they're desirable and if we can capture the 3 million metric tons of post-consumer recycle, I think you'll start to see things pick up on the circular part of the market

and I think that demand pull is there. Right now, we just can't get material fast enough for all of our consumer brand owners. They want more, more all the time.

CHRIS PARKINSON: Hey, Jim. Sorry. I'm here.

**JIM FITTERLING:** There you go.

**CHRIS PARKINSON:** Chris Parkinson-Wolff Research. We just want to circle back on the European theme with Exxon, SABIC and some others announcing capacity closures. Could you just give us some further insight into your own thinking about the region in terms of your own asset base, the feedstock flexibility there within and just, you know, is there an internal goal in terms of how you want your overall Dow's capacity by 2030 to continuously gravitate towards the loan to the cost curve, especially with your initiatives and candidates in the US? Is that like an official goal or how should we be thinking about that? Thank you.

**JIM FITTERLING:** Yeah, Terneuzen and Tarragona are in great cost positions and both of those countries, the Netherlands and Spain, have good energy policies going forward. I feel good about how they're going to wind up and we've got good plans there. So, we have a good line of sight to keeping cost competitiveness. Now, Central Germany, I think our view there is that's going to become more of a circularity hub. So, we'll look at alternatives and how to feed alternatives into that cracker and probably see that entire pocket turned into a recycled content and circularity. So, that's a big chunk of the footprint for us in Europe. And then, Polyurethanes is the next biggest and Stade is the big site there. And electricity cost is number one. I'd sav one of the biggest impacts we had with Stade was helping the German government to get that LNG capacity in. So, we put land out there to create the chance for a floating platform to come in for LNG imports. It's there and it starts up in June. Is Isam in the room? Is it June? June is when we start moving LNG through that into Stade. That doesn't feed us directly, but it does feed energy partners in the region. So, I think it helps them secure access to LNG, which is going to be lowcost energy for Germany going forward. And then, they're going to build the consortium that we gave the land to. It's going to build an on-land site and they've got the commercial contracts all done for that. At Stade, we're going to provide the utilities to that. So, I think the biggest challenge with Jane and her team is we have to look at what happens with the Stade site, and I'm not suggesting that Dow is going to make these investments, but a long-term plan for the Stade site might be someone else comes into the site with us and takes advantage of the LNG capabilities that are there and use some of the infrastructure that's at the site to expand on that would help reduce our costs in that way. That might be one of the best things that we could do to help improve our positions in Germany. Those are the two businesses really where it impacts and plastics has already returned back to profitability in first quarter. I'd say the other moving parts to the people that are retiring assets in Europe right now, I think have said publicly that they have been losing money for some time and they're older assets are probably going to face some sort of major expense as you look forward and that's typically what we see in the cycles when you're in the high-cost region. You have an older asset. It's not competitive and you're facing some major maintenance money or major rehabilitation on it. At that point, sometimes people say it's enough and time to move on.

**HASSAN AHMED:** Morning, Jim.

JIM FITTERLING: Morning.

**HASSAN AHMED:** Right here. Hassan Ahmed, Alembic Global. You guys didn't talk much about your joint ventures. So, Sadara in particular, as I sort of take a look at the Middle East, things have changed fairly dramatically over the last couple of years. Feedstock has cost escalation. China is not looking as growth as it was. So, the question is, twofold. One, has Sadara lived up to your expectations? And two, as sort of you look at all these moving parts, how core is Sadara to the portfolio today?

**JIM FITTERLING:** Yeah. Well, Sadara has been a great operator since the beginning. So, from startup, it has a really good run and we've done a lot to really improve it. It's been able to generate its own cash flow and manage its own situation. They are obviously when prices get to the bottom of the cycle, they do like the rest of us. They look at cost efficiencies, how they can get cost out and be more efficient. I do think that the Middle East is going to win vis-à-vis the European market. So, it'll have a cost advantage. We may not be seeing at all right now because the Suez Canal is closed. So, I think you're seeing European producers have a little bit of a benefit right now. But longer term, the Middle East will win out with the European market and Sadara's volume doesn't just go to Europe. It goes to India. It goes to Middle East and Africa and it goes out to Asia. So, it's got more diversity in there than you think. So, I feel good about where they are. We're not looking to make more investments there, but it's been operating well and they've got good line of sight to what they need to do to continue to improve the performance and it hasn't been a drag on our results. Kuwait has been constantly a great performer, great cost position, continues to be well funded and generate great returns back to us. Of course, that venture was started up in the 1990s. And so, it's got a long track record of performance and we feel good about how they're doing.

JEFF ZEKAUSKAS: Jeff Zekauskas from JP Morgan. If I could try a philosophical question --

JIM FITTERLING: Okay.

**JEFF ZEKAUSKAS:** So, your goal is to increase your normalized EBITDA by \$3 billion. So say you completely succeed and so Dow sells it, I don't know, six and a half times CBTA on a normalized basis. So you'd increase your value by \$19.5 billion. It's a little bit under \$30 a share, it's like \$28 a share. And so then your price in 2030 would be 90 or a little less than that. And so the appreciation on an average annual basis would be about 6.5%. Is that enough? Do you need to really deliver more in order to have a real equity interest by the investment community generally? Do you need to acquire? Do you need to separate off or do you think you can really deliver enough value through a simple growth by building?

**JIM FITTERLING:** I think it's a good question Jeff. I mean obviously, look, we're not trying to be something that we're not, okay. So right now, investors have a lot of choices in the marketplace and money is going into the tech sector in a big, big way, right? I don't think it's realistic for us right now to try to compete with that. That doesn't make sense. An awful lot of

our shareholder base historically has really valued the dividend and the return off the dividend and they want to secure long-term, well-managed lower risk investments to put in. I wouldn't compare it to a bond but I would say they want better return than bond yield but they want to know that it's a well-managed company and they can generate that higher return and they can look to that. Maybe it's a pension plan. Maybe it's an investment portfolio or an index fund which is really more concerned about cash generation back to that shareholder. I hope in the scenario that you described. I hope we get to that space. I hope that with the growth that we talked about on EBITDA, we're able to not just keep the dividend and support it, but we can increase it over time. That was Dow's heritage and Dow's history as well as continue to do share buybacks and reduce the share count. So you get benefits for different benefits for each of those actions at different points in the cycle. They satisfy different groups of our shareholders. We don't have a homogeneous group of shareholders there. Quite a few that are very dividend focused and there's some that would prefer to see us do all share buybacks so we got to make both of these camps happy. I think we're focused on the highest growth sectors that we have and they're focused on the things that are driving other investments as well. So we hope to get some tailwind effect from that. But our job I think is to be the best in the space that we can be. The world's going to need a lot more of these materials. We need to do it through organic growth at low cost facilities. That's the best way for us to deploy the capital. Consolidation has not been the driving force because I'm not sure that through consolidation -- I lower my cost or get a better competitive footprint or get a better innovation portfolio than what I have but continuing to ratchet myself down and be the lowest cost producer, would be the highest value producer is how we maximize the spreads.

**JEFF TATE:** I think Jim while we're waiting for the next question. I think the other thing I would add is the fact that we recognize we're a cyclical company, right and with that cyclicality, we've got to maintain some of that cost discipline as well at various peaks in the cycle and that's one of the other things that we're strongly focused on Jeff in regards to helping us to stabilize those earnings even in that volatile cyclicality.

**STEVE BYRNE**: Hi Jim. Steve Byrne, Bank of America. I wanted to hear your view on a couple of other potential levers to drive earnings growth that we haven't heard much about. One being just cost cutting productivity initiatives, anything that you're looking at that could be another driver for earnings growth other than top-line. The other one being your segments and your businesses are very driven by chemistry. You highlighted Mobility today and it begs the question, are you doing enough cross-selling within your businesses? You know, you got some nice products over here. Do you do you use them to drive revenue growth in other businesses because it's the same end market?

**JIM FITTERLING:** I'll start first with mobility. The mobility focus was primarily driven by the fact that there's something in every part of the portfolio that's going into that market space today and you really need to be at the OEM interface. Of course, you want to be at the Tier producers. They are driving a lot of the purchasing and the use of the materials but you got to get designed in as well and so to have one face to the customer at both of those levels is key and you want that in MobilityScience<sup>TM</sup> so I think Jon and the team have built up that capability and all the businesses serve them so that when we bring all the power of plastics or silicones or

polyurethane to mobility, they're working through Jon's organization, which is the one phase Dow at that customer to drive that demand. And then they direct traffic back in the organization to get the resources that they need to support that growth. So I feel good about that model. I would say probably another sector that has similar kind of needs so that would be electronics with the exception that electronics really the biggest growth area for us in electronics is in silicones. So that kind of exists today within our consumer solutions business.

The first part of your question. Jeff talked a little bit about digital. Digital is huge from a productivity standpoint for us, so we have done cost cutting over time but what we're trying to do is speed to market, speed to innovation, growth without having to add resources, more digital capabilities so customers are able to order online, track orders online, less human touches. We're a big part of the Microsoft Copilot program so Microsoft's a big part of our AI activities. Dan's got a display back here in the corner about our whole customer fulfillment strategy, but that was all designed to make our ability to deal with customers much, much more efficient. If you look at R&D and the examples we gave about speed to market, that's all enabled by digital and AI as well. In some cases, you know, Karen gave some examples. We have 20 years of deep AI technology and making catalysts for plastics and so many times before we ever go into a lab, we can computer model what we need to make before we ever try to make anything and we can make it a micro pilot scale and make it a mini plant scale for our customer. Those are the kinds of productivity we're focused on. I think to get less than that, I think we have to look at -- really focusing on our big low cost sites, less standalone sites and making sure that we have the footprint as tight as we need to be. But if we can get more growth out of the machine without having to add resources every time we need to step up top-line growth, that's our best productivity.

**PATRICK CUNNINGHAM:** Hi Jim, Patrick Cunningham with Citi. You've been pretty vocal about nuclear being one of the missing links in decarbonization. So could you provide an update on the SMR nuclear project at Seadrift? What have been some of the lessons learned there, challenges and then more broadly, what does it take to get from 40% of purchase electricity from renewables? What does it take to get to 100% both from things in your control and out of your control?

JIM FITTERLING: Yeah, the project is going well, still in obviously engineering phase and design phase but we're working with X-Energy on the total installed capital to bring that down and I think that was the main reason they wanted to work with us and we wanted to work with them. We obviously see it from an industrial decarbonization standpoint as the key to be able to produce low-cost power and steam. A lot of people in the room probably don't know but an awful lot of the energy that goes into industry is to produce steam. And so to have a way to produce low-cost steam is critical. Solar and wind is probably not that way for us to do that and it's got to be reliable 24/7. So the high temperature gas reactor with X-Energy was the focus. By the end of this year or very early in '25, we'll be into the NRC with a construction permit on that. And then we'll see where we go in terms of final investment decision once we see how long it takes to get the construction permit. So it's probably typically, it's a 12 to 18 months to see that kind of permit come through.

Our view is we need to get the total installed cost and the operating cost to compete with combined cycle natural gas with amine scrubbing or hydrogen and carbon capture. We think we've got line of sight to do that. I think if we can do that, then small modular reactors where you can co-locate that, could co-locate it next to a data center. You could co-locate it next to an industrial plant that needs new power capacity. I think that's going to be the winning hand because then you're generating low-cost power and steam and you're not having to worry about a CO2 trunk line and sequestration and some of the other things. Right now, the only parts of the market that have access to a price on carbon are those that can sequester CO2. So that means US Gulf Coast, that's where the CO2 capacity is going to be. It means Canada. But what happens if somebody needs a data center in the middle of the United States or in California or in the Northeast or utilities need incremental capacity for their grid, but they're afraid of building a gigawatt light water reactor and they want to build this alternative. They need some lower capital cost options that are executable. I think it lends itself to SMRs. So I think it's going to be one of the winning technologies, and that's why we got into it. It'll help us decarbonize, but I think it's going to help the whole industry. Plus, what's a new emerging energy intensive industry in AI and data centers. We didn't talk a lot about it today because it's really early on, but as it develops, we'll come back and we'll get more updates on how the project's going.

**FRANK MITCH:** Hi, Jim. Frank Mitch, Fermium Research. I first want to say I'm a big fan of your ability to trademark MobilityScience<sup>TM</sup>. I mean, you would have thought like GM and Ford or Tesla. MobilityScience<sup>TM</sup>, we see a lot of silly names in the chemical industry. That's a winner. So I hope that person received some sort of a bonus. One of the features of your conference calls over the last year and change has been the difficulties in the silicones market. We heard about your leading positions, et cetera. So I was wondering if you could take this opportunity, or maybe Brendy, to talk about the recovery that you see there in the path and what are the expectations in '25, et cetera. And then secondly, you mentioned that you've been doing AI for two decades.

JIM FITTERLING: Yep.

**FRANK MITCH:** I frankly wasn't aware of that. I mean, I'm a Johnny [PH 02:13:04] Kun lately to that topic.

**JIM FITTERLING:** Not generative AI, obviously, not generative, but deep AI.

**FRANK MITCH:** Okay, so there is a difference there. Are you using generative AI at this point?

JIM FITTERLING: We are.

FRANK MITCH: Okay.

JIM FITTERLING: Yeah.

**FRANK MITCH:** The silicones question.

**JIM FITTERLING:** I'm going to have Brendy do silicones. He needs the practice.

**BRENDY LANGE:** Is this on? Can you hear me? We talked a little bit in the presentation about the cycle, and I think the -- some of the things that have been weighing on the silicone space has been a combination of some of those interest rate sensitive applications in combination with some of the length that's come on in the siloxane space. As we look at the siloxane market in particular, I think a lot of the capacity expansions that have come on, the pace of that is starting to slow. And in fact, as we see it now, industry operating rates at about the 70 percentile that the new capacity that's coming online, some of those projects are getting delayed and possibly even canceled. I think it's too early to call the siloxane cycle. But I think that we're in the process of the bottoming. I think the big message from the presentation was the silicone market is growing, and so you get above GDP growth in combination with the pace of upstream supply expansion slowing. I think you'll start to see that cycle start to turn. I think from our perspective, we do see this as an asset versus a liability. The fact that we've got those positions in each region gives us a unique opportunity to leverage that capacity and grow downstream without any additional capacity. It's too early to call it, but I think it's a good position as we move forward and that's what we focused on in the presentation.

**JIM FITTERLING:** The whole AI comment, traditional AI comment, is really research. It goes back to the beginning with Simics and moving towards high throughput R&D capacity, which is now in every one of our businesses. And so you've got massive data sets there that have been built up in plastics, catalyst manufacturing, and ligand synthesis, that have been built up since the mid-1990s when we started that till today. And so a lot of AI can be done on those databases before we ever have to go into a lab and do anything and trial anything. We can do it on materials, we can do it on -- if we make film out of it or make other products out of it, we can start to do it there. And so that's the basis of the traditional AI.

We're doing it in manufacturing as well. Karen mentioned C3 AI is our partner that's working with us on predictive analytics around crackers. And so a 20% reduction in cracker downtime by looking at furnace operations and how that works is a big outcome that we're expecting. So we've got it on one cracker right now down in Texas, and then we'll look to scale that across the fleet. So that to Steve Byrne's question earlier, that's another form of productivity, obviously, that we get.

In generative AI, we're a Microsoft house from an operational standpoint. So we're teamed together with Microsoft on the Copilot program, and Melanie and her team have got that. Dan's got the order fulfillment example back here in the corner. But a customer service rep in Dow that's dealing with customers has an AI app on their desktop and they can bring data together and they can look for information from within our customer service portals, all the different ones that they use to try to help them. It helps them gain the ability to get more revenue in. Like, let's take a look at customers that where we might have missed a shipment or the frequency seems to be off or something's dropped, or are they going to not have product this weekend and have to shut down? And can we get proactive about dealing with that? Those are all things that are happening right now. I'd say in all the functions we're doing training, and they have a development sandbox internally within Dow that they're working on and people are using it in

their jobs today. It's a little bit early for me to comment on what they're saying in terms of real tangible results other than it is helping them to be more productive.

So first, focus on generative AI is obviously on data that we have control over. You think large research libraries, legal libraries, intellectual property data, manufacturing data. We know that's high quality data. We're not going out to the Internet and searching public domain stuff, and we're not taking the risk of losing our IP by doing that. We're focused on internal and using that high quality data to improve the way we serve customers or the way we operate plants or the way we develop new products. And that's going to be real hard productivity. Our capabilities today to have line of sight to demand sensing, supply demand balancing where real time shipments are. So we have Amazon-like capabilities on shipments. I mean, trucks, trains, barges. You can see where it is. Our ability to do that is part of being able to have eight days lower net working capital because we're able to turn that cash faster. We're turning in plastics. Our working capital days are like 41 days. That's a lot of turns through the year. That's a cash generating machine. So that's real productivity for the company. We've been able to reach those levels and sustain them through this whole big swing up in COVID and swing down post COVID. Now coming back through the cycle, we've been able to maintain those ratios. That's because we got good quality data. So I feel good about where we are. I don't feel like we're way ahead of the pack. I don't feel like we're behind. But everybody's learning how to use it and use it in a good way. We're not doing anything with AI that people don't check and touch like a human's involved with everything that we would do, externally involved with generative AI. I think it's going to be very powerful, though and research, I think, is going to be one of the key beneficiaries.

**ANDREW RIKER:** So Jim, we have two more. It'll be Josh and the Matt Blair in the back.

**JOSH SPECTOR:** Yeah, thanks, Josh Spector with UBS. So I want to come back to the mid cycle EBITDA, and obviously the biggest gap in numbers for this year, next year from consensus is, call it two billion difference in P&SP. So a couple things there. One, can you walk through maybe your bridge of how you get there, what needs to happen for things to improve? Would you be more optimistic about being able to get to that mid-cycle level, call it within the next one to two years? And then third, has anything changed? So that number I don't think has changed since your last investor day. But what's going on in Europe, Russia, crude, maybe going into China? Anything change in terms of how you think about the makeup of that? Thanks.

JIM FITTERLING: Sure. Yeah, I think we're starting to turn. So I think coming into second quarter, you're starting to see some price come back. You're seeing supply demand tighten. You're seeing the export markets continue to be resilient. I think we're starting to move there. I'm hoping that we start to get closer to those mid cycle numbers in P&SP by the end of the year, certainly into 2025. I think peak in plastics is probably looking more like the 2027-2030 timeframe. I'm hopeful that we've got our timing right on Alberta that we can get it up first phase of it up and capture the peak and get that under our belt. That's always big for a megaproject to be early on in that cycle. We saw that with Texas 9. The first mover advantage was big. It really helped those returns for us. Regardless, that will be one of the lowest cost assets that comes on and it will run. I feel good about how we're going there.

And then the second big delta is just where things are with the housing sector. That really has a big influence on polyurethanes because housing also drives durable goods demand and those two are locked. The existing home sales or new home builds. When people buy an existing home, like Joanne likes to say in coatings, they paint on the way out and they paint on the way in. Right? You paint to sell the house, and then whoever buys it paints to make it the way they want it. When you build a new home, you paint the new house. So that drives demand for coatings. Insulation is one of the biggest markets for polyurethanes. It is the most energy efficient insulation. So when housing construction picks up, polyurethanes takes off. When housing construction picks up and existing home sales start to turn almost immediately, durable goods like refrigerators and washers and dryers and appliances start to pick up. That drives a lot of demand, and pretty quickly things move up for polyurethanes. I think Jane, I don't remember if she mentioned on the video or not, but internally we talk about the fact that historically when you see a couple of interest rate cuts and you start to see that move, you see a pretty immediate impact on construction and durable goods. I think given the high rents in the United States, as soon as you see people get to an affordability point for mortgages, I think you're going to see a move to want to build more homes or buy an existing home, and things are going to start to move up.

**MATTHEW BLAIR:** Hey, Jim, Matthew Blair from TPH. You laid out some pretty major initiatives in circularity with the whole Transform the Waste initiative. I think there's a whole slide on all the partnerships that you have in recycling. But Dow is a big company, and I think one thing that investors struggle with is just how significant are these changes going to be going forward. So I was wondering, is there an opportunity to trim your portfolio, which could provide two benefits. One, it makes your circularity investments that much more meaningful, but then two, it gives you an opportunity to return more capital to investors over the short term when you are outspending D&A. So what are your thoughts on exiting your higher cost positions in PO, caustic some areas like that to help make this a more nimble portfolio?

JIM FITTERLING: Well, it's a good question. We always have to keep a best owner mindset in front of us. Jeff mentioned today that we're really focused on looking at infrastructure assets where there's a strong appetite for investment there and monetizing some of those. Obviously not losing our advantage, but monetizing some of those and deploying that cash into high growth areas like Transform the Waste or Path2Zero. And so we continue to do that. We did that with terminals and rail operations down in the Gulf Coast. It's been very successful. Infrastructure partner companies are coming to us and wanting to do more in that space, and that helps us. But I think it's a good question that we have to keep an open mind about as we move forward. You could clearly see that we know where we want to invest for growth, and it's in P&SP and Consumer Solutions and Industrial Solutions. They are our best return for the investor. Everything that we're doing in Coatings and in Polyurethanes is very targeted. It's targeted to improve the returns on those businesses. But we'll keep an open mind to what's possible there and we'll always be looking to try to do the best as we can to remunerate shareholders.

**JEFF TATE:** And even the laminated adhesives deal that we just announced this quarter is a good example of that, right? Where Karen and her team were able to look at a portion of the

business that long term we didn't see a good fit for to be able to get some cash back into the company that we'll then be able to utilize and helping us invest in circular investments.

**JIM FITTERLING:** Thank you all for being here with us. You're going to give them instructions about lunch but thank you for the questions and the time today. I know it's a big time commitment. I hope you had a chance to see the innovation gallery walk. I know we'll have people there. As you're moving out and you're moving over to lunch, I look forward to talking to you in the hallway or at lunch. Thanks again for your ownership and support of Dow.

**JEFF TATE:** Thank you.

[BACKGROUND NOISE]

[02:27:03]