LyondellBasell Industries
Third Quarter 2022 Financial Results
Teleconference Transcript
October 28, 2022

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Q&A Participants
Steve Byrne - Bank of America
P.J. Juvekar - Citi
Arun Viswanathan - RBC Capital Markets
Josh Spector - UBS
Jeff Zekauskas - JPMorgan
Aleksey Yefremov - KeyBanc Capital Markets
Vincent Andrews - Morgan Stanley
David Begleiter - Deutsche Bank
Mike Sison - Wells Fargo
Kevin McCarthy - Vertical Research Partners
Mike Leithead - Barclays
Matt Skowronski - Credit Suisse
Frank Mitsch - Fermium Research

Operator
Hello, and welcome to the LyondellBasell Teleconference. At the request of LyondellBasell, this conference is being recorded for instant replay purposes. Following today's presentation, we will conduct a question-and-answer session.

I would now like to turn the conference over to Mr. David Kinney, Head of Investor Relations. Sir, you may begin.

David Kinney
Thank you, Melissa. Before we begin the discussion, I would like to point out that a slide presentation accompanies today's call and is available on our website at www.lyondellbasell.com/investorrelations.

Today, we will be discussing our business results, while making reference to some forward-looking statements and non-GAAP financial measures. We believe the forward-looking statements are based upon reasonable assumptions, and the alternative measures are useful to investors. Nonetheless, the forward-looking statements are subject to significant risk and uncertainty. We encourage you to learn more about the factors that could lead our actual results to differ, by reviewing the cautionary statements in the presentation slides and our regulatory filings, which are also available on our Investor Relations website.

Comments made on this call will be in regard to our underlying business results using non-GAAP financial measures, such as EBITDA and earnings per share, excluding identified items. Additional documentation on our investor website provides reconciliations of non-GAAP financial measures to GAAP financial measures, together with other disclosures, including the earnings release and our business results discussion.

A recording of this call will be available by telephone beginning at 1:00 p.m. Eastern time today until November 28 by calling (877) 660-6853 in the United States; and (201) 612-7415, outside the United States. The access code for both numbers is 13732141.

Joining today's call will be Peter Vanacker, LyondellBasell's Chief Executive Officer; our CFO, Michael McMurray; Ken Lane, our Executive Vice President of Global Olefins and Polyolefins; Kim Foley, our EVP of Intermediates and Derivatives and Refining; and Torkel Rhenman, our EVP of Advanced Polymer Solutions. During today's call, we will focus on third quarter results, current market dynamics and our near-term outlook.

With that being said, I would now like to turn the call over to Peter.

Peter Vanacker
Thank you, Dave, and welcome to all of you. We appreciate you joining us today as we discuss our third quarter 2022 results. Let's begin with our safety results on Slide number 3.

Our team continues to deliver outstanding safety performance in 2022. LyondellBasell's year-to-date incident rate for employees and contractors is 0.12, roughly half the rate seen in recent years. Safety is a core value at our company and will continue to receive the utmost attention. The focus and commitment our metrics reflect will remain a cornerstone of our company's culture and a key enabler of our future success.

Let's now turn to Slide number 4 to discuss our financial results.

During the third quarter, as you would expect, our team remains very focused on cash generation while navigating the well-known, very challenging environment.

LyondellBasell's business portfolio faced headwinds from rising costs and weaker demand at the same time. Earnings were $1.96 per share. EBITDA was $1.2 billion. Nonetheless, we delivered an impressive $1.4 billion of cash from operating activities. By the end of the quarter, we increased our balance of cash and short-term investments to $1.5 billion and had $5.3 billion of total available liquidity. The strength of our balance sheet and our disciplined approach to capital allocation enables us to confidently move forward with our strategy while continuing to provide attractive and strong returns to shareholders through all stages of the business cycle.

Despite significant headwinds, our company generated a 19% return on invested capital over the past 12 months.

On Slide number 5, we highlight some of LyondellBasell's existing and emerging sources of advantage for generating differential value and high returns over a range of market conditions.

Our company is widely recognized for our deep commitment to safe operations, cost management and operational excellence. These values are part of our DNA.

LyondellBasell's global portfolio of businesses benefit from both geographic and end market diversity. Leading positions in diverse markets balance the portfolio and reduce risks from market concentration.

Last quarter I mentioned the work that is underway to identify a North Star that provides clarity and guiding principles for our strategic decisions. Some of the early decisions from this work adds to our capability and resiliency for generating value and high returns.

Market leadership in Circular and Low Carbon Solutions has quickly emerged as an essential part of our path forward. We believe circular and low carbon solutions will provide advantage, under a wide range of economic scenarios. We will talk about this more in a few moments.

An intense and consistent focus on people and culture is a key enabler for driving differential value. On October 1, we implemented a new organizational structure that will improve agility and accountability across our company. One example is our decision to align strategy and execution by moving the global responsibility for manufacturing under the strategic business unit leaders.

The strategic business unit leaders will have the ability to run their businesses based upon the required value propositions and business models. We also launched customer and commercial excellence initiatives to elevate our levels of service, quality and innovation. With the right organizational structure and improved customer focus, our company will have even more capacity to capture differential value.

After a very comprehensive diagnostic phase, a well-structured value enhancement program targeting $750 million in recurring annual EBITDA improvements have been launched. I will describe this program in more detail, shortly.

When these portfolio advantages are combined with our track record of efficient cash conversion, our investment-grade balance sheet and our secure, steadily growing dividend, I think you will agree that LyondellBasell has the winning formula for generating high returns and differential value for our investors under a wide range of economic scenarios.

On Slide number 6, I would like to share more detail on one of the decisions that quickly emerged from our strategy work - the creation of our new Circular and Low Carbon Solutions business unit.

In my view, circular and renewable solutions businesses require a differentiated business model and a more entrepreneurial mindset to succeed. We're setting up our new Circular and Low Carbon Solutions business unit with this in mind.

This business unit is led by Yvonne van der Laan and is accountable for building scalable technologies and profitable businesses to serve rapidly growing customer demand for our circular and low-carbon solutions.

Since we launched the *Circulen* brands in 2019, we've sold products with more than 150,000 tons of recycled and renewable content. Our current goal is to sell at least 2 million tons per year of these products by 2030 with our new business unit leading the way. For perspective, 2 million tons represents about 20% of our 2021 global sales of polyethylene and polypropylene.

In just the past few weeks, we have announced our participation in several agreements related to new capacity for our Circular and Low Carbon Solutions business in several regions.

We are partnering on plastic waste sorting facilities in Houston and Germany. The sorting plants will convert local plastic waste into usable feedstocks for mechanical and or advanced recycling.

In Germany, we expect the facility will provide a material amount of the feedstock required for our first advanced recycling plants using LyondellBasell's proprietary *MoReTec* Technology.

In India, we are forming a joint venture for a fully automated 50,000 tons per year mechanical recycling facility. And in China, we are developing another joint venture to mechanically recycle post-consumer waste in the Guangdong Province.

I am confident that these and future actions will accelerate our circular and low carbon solutions offering to position LyondellBasell as the preferred supplier for customers and brand owners seeking to lower the greenhouse gas impact of their business and increasing the circular content of their products. Our recently announced collaboration with Air Liquide, Chevron and Uniper on a U.S. Gulf Coast low-carbon hydrogen and ammonia project is but one additional example of our progress.

We're quickly and methodically building a robust supply chain to support attractive growth opportunities for our Circular and Low Carbon Solutions business.

Let's turn to Slide 7 and discuss the launch of our value enhancement program.

LyondellBasell has a well-earned reputation as a cost leader in our industry. But after 12 years with a singular focus on managing costs, a significant number of untapped value opportunities have accumulated. We believe this untapped value can be unlocked with modest incremental investments in resources.

Our value enhancement program utilizes a proven stage-gate methodology to identify, implement and track progress on hundreds of initiatives across the company. Over 2,000 ideas have been generated and we have validated more than 1,500 initiatives, to date. But we're just getting started. We organized value opportunities into three categories: manufacturing and operational excellence, procurement and supply chain and commercial excellence.

We have confidence that our value enhancement program is capable of achieving an estimated $750 million of annual recurring EBITDA improvement by the end of 2025. And with the continuous, evergreen process in place, we look forward to regularly extending our goals. We will keep you apprised of our progress and look forward to sharing more details on this program during our upcoming Capital Markets Day in March.

Before I turn the call over to Michael, I would like to describe the new organizational responsibilities for the business leaders on this call. Joining us on the call today is Kim Foley, who assumed responsibility for the Intermediates and Derivatives and Refining segments from Torkel Rhenman.

Kim began her career with our company more than 30 years ago as a chemical engineer and has served in a broad range of leadership roles spanning manufacturing, strategic planning, finance and supply chain. She is a proven leader with a deep knowledge of our company and a valued voice on our Executive Committee.

Torkel Rhenman is now in charge of our Advanced Polymer Solutions segment. In order to be a market leader, our APS business requires a customer service focus that is differential from most of LyondellBasell's other businesses. Torkel will develop the appropriate culture and service model to maximize the full value potential of our APS business. Torkel’s prior experience as a CEO at other companies will serve us well in this role.

Ken Lane will continue to have responsibility for our two Olefins and Polyolefins segments. Jim Guilfoyle, who formally led APS, is relocating to Rotterdam and reporting to Ken as the leader for the O&P business in Europe, Africa, the Middle East and India.

With that, I will turn the call over to Michael first and then to each of our business leaders, who will describe our financial and segment results in more detail.

Michael McMurray
Thank you, Peter, and good morning, everyone. Please turn to Slide 8 and let me begin by describing how we are extending our track record of robust cash generation.

In the third quarter, LyondellBasell generated $1.4 billion of cash from operating activities that contributed towards a total of $7.6 billion over the last 12 months. Our cash on hand increased to $1.5 billion at the end of the third quarter. During the past four quarters, our team efficiently converted 100% of EBITDA into cash. This efficient and robust cash generation provided for the return of $4 billion to LyondellBasell shareholders over the last 12 months.

Let's continue with Slide 9 and review the details of our cash generation and allocation, during the third quarter. The LyondellBasell team remains focused on disciplined capital allocation to provide strong returns for our shareholders.

During the third quarter, we returned $400 million to our shareholders through our quarterly dividend and an additional $160 million, through share repurchases.

We continued to invest in maintenance and growth projects with $440 million in capital expenditures. A significant portion of this capital funded the final stages of construction for our world-scale PO/TBA plant that remains on track for start-up in the first quarter 2023.

My finance and strategy teams are partnering with our strategic business unit leaders to rigorously track the ongoing progress from our value enhancement program. We look forward to regular reporting on our value capture, beginning in 2023.

Now, I'd like to provide an overview of the results for each of our segments on Slide 10.

LyondellBasell's business portfolio delivered $1.2 billion of EBITDA during the third quarter. Our results reflect margin compression across all segments due to rising costs and weaker global demand. Our Olefins and Polyolefins businesses faced persistently high and volatile energy cost coupled with lower demand, particularly in Europe and China. While our oxyfuel business and Refining segment continue to earn margins above historical averages and demand for fuels remained strong, results were sequentially lower following peak margins in the second quarter of 2022. Higher cost for energy, raw materials, labor and transportation negatively impacted our Advanced Polymer Solutions segment.

Across our European assets, September year-to-date energy costs are $1.8 billion higher than the same period in 2020. During the quarter, we recognized $84 million in cost related to the exit from our refining business. We expect to incur a similar amount for refining exit costs, during each of the next five quarters.

With that, I'll turn the call over to Ken.

Ken Lane
Thank you, Michael. Let's begin the segment discussions on Slide 11 with the performance of our Olefins and Polyolefins Americas segment.

Third quarter O&P Americas EBITDA decreased to $559 million. In North America, the combination of customer destocking and expectations of additional supply from new assets resulted in lower product prices.

During the fourth quarter, we expect lower seasonal demand and further capacity additions will keep markets well supplied. Margin pressures could be offset by moderating feedstocks and energy costs. Also, with lower demand, we expect continued easing of logistical constraints.

LyondellBasell will continue to reduce operating rates to match lower demand and manage our inventories. We expect to operate our O&P Americas assets at a rate of approximately 75% in the fourth quarter.

While market conditions remain challenging, we continue to proactively advance our long-term strategy. We recently announced a new partnership with Cyclyx and ExxonMobil to build a 150,000-ton plastic waste sorting facility in Houston. Beyond recycling, we announced our participation in an industry consortium to evaluate a low-carbon hydrogen production facility along the U.S. Gulf Coast. We are moving quickly and decisively to increase circularity and reduce our carbon footprint.

Now, please turn to Slide 12 to review the performance of our olefins and polyolefins Europe, Asia and International segment.

European markets were severely pressured by tight gas supplies and higher energy costs that reduced demand from both plastic converters and downstream consumers. LyondellBasell's European volumes declined due to extended downtime at our ethylene cracker in France and planned maintenance at our cracker in Germany. All of this combined to result in a third quarter EBITDA loss of $83 million.

During the fourth quarter, we expect high and volatile energy costs will persist. In addition, slower seasonal demand is likely to add further pressure on European markets.

Our O&P Europe businesses have responded to escalating energy prices by reflecting these costs in product pricing with energy surcharges. This year, we introduced variable formulas for these surcharges to account for energy volatility and ensure fairness in our pricing.

Also, in response to lower demand and margins, we plan to operate our European assets at approximately 60% of capacity during the fourth quarter. As previously announced, we have postponed the restart of our integrated O&P site in France until early 2023.

As in the Americas, we continue to focus on long-term strategies in support of our circular and low-carbon business. In October, we announced new partnerships for plastic waste sorting facilities in Germany and China and a fully automated mechanical recycling facility in India.

These partnerships allow us to swiftly develop fit-for-purpose facilities in each region while addressing rapidly rising global demand for circular and renewable solutions.

Finally, I want to express how excited I am about the opportunities with the value enhancement program that Peter mentioned. Across the board, we see ideas being generated to improve value capture in manufacturing, procurement and serving our customers more efficiently.

With that, I'll turn the call over to Kim.

Kim Foley
Thank you, Ken, and thank you, Peter, for your kind remarks at the beginning of the call. Please turn to Slide 13, as we look at the Intermediates and Derivatives segment.

Following a record second quarter, EBITDA for the segment declined to the third quarter of $360 million. Styrene margins deteriorated to a loss as market supply improved following second quarter industry outages. Oxyfuel margins declined relative to the second quarter but remained above historical averages. Propylene oxide margins continued to moderate on softer demand for durable goods.

In the fourth quarter, lower benzene and ethylene raw material costs are expected to improve styrene margins and bring the styrene business closer to breakeven, as we expect lower seasonal demand will lead to further margin compression across most of the remaining I&D product lines.

Despite the improving outlook for styrene, we have decided to idle production at our Dutch propylene oxide and styrene monomer joint venture during the months of November and December due to the high energy costs and weaker European demand. Overall, we expect to run our global I&D assets at approximately 75% capacity, during the fourth quarter. We remain on track to start up our new PO/TBA plant in Houston during the first quarter of 2023.

Lastly, we have completed the validation steps for the I&D portion of the value enhancement program and we look forward to the implementation plans to be done by year-end.

Now let's turn to Slide 14 and discuss the results of the Refining segment.

The third quarter EBITDA decreased to $190 million on moderating margins following extraordinarily strong second quarter demand for refined products.

In the third quarter, the Maya 2-1-1 spread declined to about $47 per barrel but remains well above historical averages. Due to planned maintenance, we operated the refinery at 80% of capacity with an average crude rate of 215,000 barrels per day.

In the near term, we expect continued strength in the Maya 2-1-1 spread driven by a tight market and strong demand. We plan to run the refinery above 90% capacity during the fourth quarter.

The successful completion of the planned maintenance during the third quarter demonstrates our commitment to safely operate these assets with high reliability until we exit the refining business at the end of 2023.

With that, I will turn the call over to Torkel.

Torkel Rhenman
Thank you, Kim. I'm extremely excited to be joining the Advanced Polymer Solutions team. With integration now complete, I look forward to increasing our agility, speed and customer focus to maximize the value of this business. Now, let's review the third quarter results on Slide 15.

Third quarter EBITDA was $66 million. Margins in the Compounding and Solutions business and the Advanced Polymers business were both pressured by higher feedstock and energy costs. Volumes for our Catalloy roofing polymers decreased due to unplanned downtime at one of our major customers.

We expect similar results from this segment during the fourth quarter with a small volume improvement from increased automotive production.

In my initial meetings with our APS customers, I witnessed the considerable and growing demand for circular and low-carbon solutions. The APS business provides a natural extension of the value chain for LyondellBasell's sustainable solutions and our team is actively addressing these opportunities.

As Peter mentioned, we believe that our APS platform has a lot of potential. While our team will have some autonomy to instill a more customer-centric business model, we will also be highly accountable for delivering value from our initiatives.

With that, I will return the call back to Peter.

Peter Vanacker
Thank you, again, to the entire LyondellBasell team for successfully navigating this challenging quarter.

To close out our segments, let's turn to Slide 16 and discuss the results for our technology business on behalf of Jim Seward.

Third quarter EBITDA declined by $20 million to $92 million, due to lower catalyst demand.

In the fourth quarter, we expect our licensing revenue will moderate and catalyst volumes will decrease due to lower demand on a weaker macroeconomic outlook. We estimate that fourth quarter results for the Technology segment will be roughly half of quarterly results seen thus far in 2022.

After the slow beginning to 2022, our licensing business signed six new agreements during the third quarter to provide polyolefin process technologies for five projects in Asia and one in Europe. Over the history of our company, LyondellBasell has sold more than 300 polyolefin licenses around the world and we continue to be a leader in this space.

As indicated by our activity to secure plastic waste feedstock in Germany, we are making good progress on developing our *MoReTec* advanced recycling technology. And during my recent visit to our technology center in Italy, I was impressed by the rich legacy of innovation at LyondellBasell and the creative work underway to launch this exciting technology. We hope to provide you with further updates and reach an initial investment decision for a commercial scale plant in the fourth quarter.

Now let me summarize our third quarter and the outlook for our company with Slide 17.

Despite very challenging markets, our team is delivering results. Our goal is to capture value and move forward on strategic priorities under a variety of economic conditions.

We remain focused on LyondellBasell's core values. The outstanding safety performance from our team is just one indicator of the passion and commitment that I see across our workforce.

Our O&P businesses are under pressure from weaker demand, new supply and higher energy costs. But our diverse business portfolio often provides balance. In the third quarter, our oxyfuels and refining businesses provided offsets with margins that remained well above historical averages.

With over $550 million in dividends and share repurchases during the third quarter, our commitment to shareholder returns remains strong.

LyondellBasell is focused on serving growing customer demand for our *Circulen* products. We recognize the differential needs of these businesses and are rapidly moving to enter multiple partnerships to secure the plastic waste feedstocks required to advance the leading position of our Circular and Low Carbon Solutions business.

Looking ahead to the fourth quarter, we anticipate seasonally weaker demand and volatile energy costs will further pressure fourth quarter margins. In response, we are proactively lowering operating rates to match reduced demand. Our business leaders are optimizing working capital and further strengthening our balance sheet flexibility. We'll remain watchful for market improvements in China as stronger economic activity could help drive recovery in global markets during 2023.

I hope that you can sense our excitement around the initial progress towards developing a North Star to guide LyondellBasell's strategic initiatives. During the quarter, we launched the new organizational structure and established a Circular and Low Carbon Solutions business unit. We are building the structures and leadership that will enable LyondellBasell to quickly advance and our initial strategies with new business models that address our customers' needs.

We're also highly energized around the prospects of unlocking the opportunities identified by our value enhancement program. We have put into place the required infrastructure and management expertise to organize, support and track our progress. We aim to leverage LyondellBasell's core competencies and target value opportunities totaling $750 million in annual recurring EBITDA by the end of 2025.

In closing, we look forward to sharing more details over the coming months and at our Capital Markets Day in New York next March that should clarify your understanding of LyondellBasell's forward strategy.

We're now pleased to take your questions.

Operator
Thank you, sir. Ladies and gentlemen, at this time we will begin the question-and-answers session. As a reminder, if you have a question, please press the “*”, followed by the “1” on your touchtone phone. If you would like to withdraw your question, please press the “*”, followed by the “2”. We do ask that you limit to one question.

Our first question comes from the line of Steve Byrne from Bank of America. Please proceed with your question.

Steve Byrne
Hi, I think I'd like to dig in first with your PO/TBA plant that you're talking about starting up in the first quarter. How would you assess the supply and demand fundamentals of PO/TBA right now, given you got some idle capacity? Are you potentially considering a delay on that start?
And maybe longer term, do you have a view on how that the competitive landscape in PO/TBA is going to be given your competitor probably is pretty high on the cost curve with the cost of chlorine these days, do you see potentially some rationing of capacity down the road?

Peter Vanacker
Thank you, Steve. Good question, Peter here. No delay in the startup on the PO/TBA plant. As we have alluded to with the Q2 results, we are quite favorable in our costs on the PO/TBA side, due to the world-scale plants, very well integrated. So, we believe that independent of what is happening in the marketplace, we are very well positioned to start up that plant and therefore, no changes.

Operator
Thank you. Our next question comes from the line of P.J. Juvekar with Citi. Please proceed with your question.

P.J. Juvekar
Yes, hi, good morning. Just a couple of related questions on your circular economy. When you look at Circulen, what kind of return on capital are you targeting? And can you talk a little bit about your contracting structure that will ensure your return on capital?

And then secondly, on decarbonization, you have this joint venture with Air Liquide, Chevron and Uniper. I guess with the passing of the IRA and the new 45Q credits, how do you think about the hard to abate sectors like ethylene? And any update on your cracker electrification related to that? Thank you.

Peter Vanacker
Thank you, P.J. Very good questions, as usual. On the circular economy, we are at the very early stage in this year but just coming back, I mean, from the K-Fair and Dusseldorf, this is organized every three years. There was an amazing positiveness around renewable and circular solutions, both, from the brand owner side, as well as from the companies that were actually producing the packaging.

So, we noticed that there was quite some demand, to accelerate the amount of volumes that are being brought into the marketplace. And as a consequence, of course, willingness to pay, that is there across the value chain.

So, that gives us the commitments that we are, as you have seen during the last couple of weeks, with the creation of that strategic business unit, that we are accelerating because we see this as a value proposition which is quite attractive.

Then on the second question on the IRA, I will give that question to you, Ken.

Ken Lane
Yeah, sure. Hi, P.J. Thank you for the question. What we've commented before has not changed in terms of our targets looking out to 2030. We're making very good progress on reaching that 30% reduction that we put out there.

When you start talking about some of the other options around CO2 reduction like electrification or carbon sequestration, certainly things like the tax benefits that you see coming out of the IRA for CO2 sequestration is going to help but we're going to look at all of those options in our portfolio. And as you can imagine, every site is a little bit different. It depends on the location of the site and what infrastructure is available around it. And we're going to keep exploring those in the coming months and we'll be able to share more about that later. But right now, it's really more in the exploratory phase and assessing what the potential is for these technologies today.

Operator
Thank you. Our next question comes from the line of Arun Viswanathan with RBC Capital Markets. Please proceed with your question.

Arun Viswanathan
Great, thanks for taking my question. Good morning. I guess I just wanted to get your perspective on how the next couple of years could shake out. I know it's still early, but you have provided some discrete items here, including the $750 million by 2025. So, if you consider that Q3 EBITDA around $1.1 billion, maybe there's some uplift as you go through seasonality into Q2 and Q3 of next year.

And then you layer in the PO/TBA gains, as well as extra EBITDA from Hyperzone and some of your other projects. What would you say is kind of the new profit level of EBITDA? Would we be mistaken if we were to annualize that 1, 2 to 5 and then maybe move up into the $6 billion range, given some of your investments at a trough level. Is that a fair assumption?

Peter Vanacker
Let me take that question. Peter here speaking. As you alluded to mid-cycle earnings, what we talked about in the past was increasing from $6.5 billion to $8 billion. And you mentioned a couple of these elements that bridge that $1.5 billion. One being the Schulman acquisition, then our joint venture that we have in China, the joint venture with Sasol in Louisiana, the Hyperzone investments, our POSM joint venture as well as the PO/TBA. So you may know that on top of that, our commitment to increase value on the bottom line by $750 million on a run rate, by the end of 2025. So, that means that if

you look at the year 2026, we expect to capture that fully that $750 million. And of course, we are still in progress of developing our North Star strategy.

So, more on that to come then with the Capital Markets Day in March next year, and if we find other opportunities to create value.

In case that question comes up, my experience by launching these value enhancement projects in the first year, one may expect that about 20% of that can be captured on a run rate basis, by the end in that first year.

So, this is not something that is completely back ended towards 2025, but due to the fact that we already have the teams in place, we have a transformation office in place, the value capturing, the sequencing of the different topics is starting immediately.

Operator
Thank you. Our next question comes from the line of Josh Spector with UBS. Please proceed with your question.

Josh Spector
Yeah, hi. Thanks for taking my question. Just on your European assets within O&P. So, I mean you're taking actions today and you continue to take more to address some of the lower profitability. I guess if we think about this energy environment persisting for the next year plus, are there other actions that you would take to optimize your asset base further? And I guess where are you kind of in the line of thinking along making further changes to the region? Thanks.

Peter Vanacker
Thank you for your question. And it's needless to say that, of course, our crisis management team has been up and running already since quite some months, even before I joined the company. So, we continue to monitor, very intensively, what is happening in the marketplace. We alluded to on the call to the actions that we have undertaken.

So the Berre cracker in France will not start up prior to the end of this year but needless to say that we are monitoring that situation in the marketplace every week to then define what the right time will be to start up the cracker.

In addition to that, we currently have a scheduled shutdown ongoing in the smallest of the steam crackers in Germany, so-called OM4 steam cracker. We expect that to start up on time and we would not take any action to delay that startup.

And then what Kim alluded to is that the joint venture asset that we have in Rotterdam, that has been idled for the time being. And then, of course, also there, we will evaluate how the market is developing, especially on the styrene monomer site because we hear, of course, also in the markets that on-purpose styrene monomer productions have been idled or moth-balled or even questioned if they be profitable and be started up again.

Operator
Thank you. Our next question comes from the line of Jeff Zekauskas with JPMorgan. Please proceed with your question.

Jeff Zekauskas
Thanks very much. I think I have a question for Ken Lane. China purchases oil at a discount to the Brent price from Russia. Does that purchasing, that discounted purchasing, provide a cushion to Chinese petrochemical margins? Or does it not influence Chinese petrochemical margins? And can you sort of characterize the state of the Chinese polyethylene market these days?

Ken Lane
Sure, Jeff. Thanks for the question. Good to hear from you. So, we've done a lot of investigation into that, as you can imagine, because what we're seeing in the China market, we're at historically low spreads there and a lot of that is driven by the new capacity coming on. But our view is a lot of that oil is actually going into the state-owned refiners and not being passed on to the market, in terms of lower priced feedstocks for the polymers. What's happening in China is really more related just to the higher capacity and the lower demand that we're seeing there.

So, that is going to be the larger driver in the even midterm. What we really want to see is the growth come back in the China market which we've not seen as of yet and you may recall, going back to even the first quarter earnings call, we were talking about expecting to see some recovery in demand in China already after Chinese New Year; and that just has not materialized.

So, once we see that and that demand starts to absorb all of the new capacity, then I think you're going to start to see a return to a more normal level of spreads in China.

Operator
Thank you. Our next question comes from the line of Aleksey Yefremov from KeyBanc Capital Markets. Please proceed with your question.

Aleksey Yefremov
Thanks. Good morning, everyone. We saw energy prices in Europe have come down quite a bit in recent weeks. Could you attempt to sort of provide mark-to-market, how much better your profits would be in O&P, EAI and perhaps in I&D, if these energy prices kind of stay the same and all other factors were locked in place, as well.

Peter Vanacker
Do you want to make comments first, Ken? What's your views on this?

Ken Lane
My view is that we're seeing some moderating in the headwinds around the energy costs and feedstock costs in Europe, and that could be short-lived. If we have a cold winter, then we might see that reverse.

But longer term, obviously, one of the things that we're going to be looking at are ways to improve the competitiveness of our assets. What can we do to make the flexibility of our feed slate and the energy consumption that we have in those assets more competitive?

And frankly, some of that is going to be related to our CO2 reduction targets because, believe it or not, that is a way that we will improve competitiveness is by finding lower CO2 energy by making the assets more efficient and improving our cost position. So, a lot of things are going to happen over time here. And we're currently very focused on what's happening in the short term, but don't let that make you think that we're not thinking longer term about how we position ourselves more competitively in the region.

Peter Vanacker
And all that to be put in perspective, of course, year-to-date, European energy costs for us were $1.8 billion higher, compared to 2020 in the same period.

Michael McMurray
And Peter, you want to maybe make some comments from an enterprise perspective to help the analysts and investors kind of think, sequentially, as well. I mean, things lagged down substantially in August versus July. It was pretty dramatic. And those reasons were highlighted in our release today, and then September deteriorated further. And as we look forward to October, it should be a bit better than September.

And as you pointed out, we are seeing some relief in both feedstocks and energy costs. And I would say, broadly, it feels like we're kind of finding maybe a bottom. But to be clear, Q4 will be sequentially lower than Q3. We're facing into persistent inflation, high-cost energy, weaker seasonal demand, and we're missing fixed cost absorption with all the idled and curtailed assets, which are heavier curtailed in Q4.

We’re also experiencing the full effect of lower prices from the third quarter. So again, dramatic drop-off from July to August. So, we will be sequentially down.

Operator
Thank you. Our next question comes from the line of Vincent Andrews with Morgan Stanley. Please proceed with your question.

Vincent Andrews
Thank you. Could you speak a little bit more in more detail about the program to get it to $750 million and maybe an area I would appreciate some focus on? What are the things that you're doing that are taking until 2025 to see the EBITDA show up in your results?

And if you could also comment on what, if any, cash costs are associated with going after the $750 million? Thank you.

Peter Vanacker
Thanks, Vincent. Very good question. Let me do one step back. We have set up this transformation office and organized a large number of bottom-up workshops across the different functions, so the commercial functions, supply chain functions, procurement functions, but also very important in our U.S. largest manufacturing sites.

And out of that came these around 2,000 ideas early-stage projects. So, we have not yet covered the European region and we have not yet covered the smaller sites.

But we see already that we get lots of ideas on how to create value. And a lot of these ideas do not materially demand higher OpEx or higher CapEx. So, these are the ones that, of course, we will focus upon. And they can be, of course--it's a very broad range.

So, it is about energy management. It is about creep capacities - clear if we don't need a creep capacity because of the market situation, these will not be the projects that we will do first; they will then come later.

But it's a very, very broad range of projects that we have here in terms of covering the entire portfolio. So, we'll provide more details on that when we talk on the Capital Markets Day because we will have progressed more, as well. As I said, we are now in the phase of prioritization.

So, what out of those 2,000 ideas do we actually want to implement, do make sense in the current market environment? So, then we go to the so-called Stage #4 and then make the people available to capture those opportunities. Next year, we will start doing the analysis also in the European sites. So, we will start with the larger sites and then also move to the smaller sites.

So, that should normally also add in the confidence that we can at least, capture $750 million by the end of 2025 on a run rate basis.

Operator
Thank you. Our next question comes from the line of David Begleiter with Deutsche Bank. Please proceed with your question.

David Begleiter
Thank you. Good morning. Peter and Ken, can you discuss the outlook for the U.S. polyethylene market in the context of the new capacity coming on from both Shell and Bayport, over the next few months here? Thank you.

Peter Vanacker
Ken.

Ken Lane
Yeah, David. The outlook--some of that volume is already in the market. They've been doing some premarketing for quite a while, now. So obviously, going back to what I had said earlier, just around China, what's going to be very meaningful is overall for the market supply demand is going to be the return to growth in the market.

And these assets, like any, are going to get absorbed. I'm sure they're very competitive assets based on the feedstock situation in the U.S. So, there will be a period of time now where we're going to have to weather that and absorb that in the market.

But the way that I think about it is, where we exited Q3 is where I expect us to be in Q4. So, things like Michael had referred to earlier, things really dropped off in the middle of Q3, and we've kind of levelled off in that range. So, what we're doing now is taking actions that we can control to improve our cash flow and be able to meet demand without being cash suboptimal here.

Operator
Thank you. Our next question comes from the line of Mike Sison with Wells Fargo. Please proceed with your question.

Mike Sison
Hey, guys. Good morning. Most folks are looking for some degree of a recession, next year. So, I'm just curious, when you think about the third quarter and the fourth quarter, and you annualize that, why wouldn't that be sort of the trough potential for Lyondell heading into '23? And then, what needs to happen for the first half of '23 to be better than the second half of '22?

Peter Vanacker
That's a very good question, of course, and we've alluded to that, and Ken made comments as well in this call. Very important just to look at China. What will happen in China? How will demand be encouraged in China? That's a big question mark.

You know that China normally imported about 40% of their needs in polyethylene. So at this point in time, not a lot of growth in China and, therefore, the material is not flowing into China either.

So, that's an important element to look at. And of course, what about the cost situation? We've alluded to that also in the call already, energy costs on the other hand side, electricity costs, of course, included in that.

And Ken, anything you want to add?

Ken Lane

I think you've hit it. Again, it's going to be getting more growth back in the market and seeing some of the headwinds around feedstocks and energy come off which, right now, is hard to predict.

Peter Vanacker
What we have seen also in the past, if you just look at the history, then markets have relatively quickly recovered, as well. That doesn't mean that I'm now saying that we have seen the trough, going back to Michael's comments before. But how long can it stay like this is the question that we are all looking at.

Operator
Thank you. Our next question comes from the line of Kevin McCarthy with Vertical Research Partners. Please proceed with your question.

Kevin McCarthy
Yes, good morning, everyone. I was wondering if you could speak to your inventory levels internally, as well as your perception of inventory downstream among your customers? The reason I ask is you've put forth some very low operating rates for the fourth quarter. If I look at the inventory on your balance sheet, it's up but it's not up dramatically, maybe 3% or 4%, year-over-year.

And so, just looking for some context. Do you think these low operating rates will serve to right size inventory by year-end or might it take longer than that? How would you frame that issue?

Peter Vanacker
Thanks for your question, Kevin. Maybe I'll start by saying that our teams have done excellent work in focusing on cash management and you see that from the results. So, that of course, includes on one hand side, payables and receivables, but also we have dealt with our own inventory levels, as you recognized, as well.

Now, when we look at the downstream--and it depends, of course, a little bit from market to market--but normally, in the I&D business, we don't have a lot of inventory in the pipeline in the channel. And Ken, allow me to say that what we have seen is that the inventory levels also in the polyolefin side, they have reduced, during the third quarter.

Ken Lane
Yes, that's right. I mean, we certainly--we've adjusted and what you've seen, even with the adjustment to the utilization rates that we've communicated, is we're adjusting the utilization rate to match what we see with our demand, and we'll continue to do that in the fourth quarter.

Operator
Thank you. Our next question comes from the line of Mike Leithead with Barclays. Please proceed with your question.

Mike Leithead
Great, thanks. Good morning, guys. Just two around capital uses and returns. First, I wanted to re-ask part of Vincent's question and just see if you could give us, at least, a rough cash spend figure for the $750 million EBITDA value-enhanced program.

And second, just on circular and low-carbon solutions. I assume this is going to be a focus area in March. But could you just give us a rough sense of the capital you tend to spend annually on this area and just any sort of commensurate type EBITDA or return on capital or return hurdles we should expect there?

Peter Vanacker
Yeah, thank you for your question, Mike. I mean, of course, clearly, as we have pointed out in the past, our capital allocation strategy has not changed. You remember that I said also looking at our CapEx investments, around $2 billion, $1.1 billion, $1.2 billion in sustaining CapEx and the rest in growth CapEx.

Well, if you look now at 2023, we are, of course, reflecting upon what is happening in the marketplace. So, you may not expect to see that number of $2 billion. It will be quite lower. So therefore, you will not really see an uptick because of our value enhancement program in terms of CapEx, if you look at it in the overall CapEx that we have invested in our business because as said, the number for next year will be lower.

And then of course, as you roll out these programs, like the value enhancement program, they don't have a beginning and an end. They become part of the DNA in the company; have continuous improvements.

So, at the beginning, of course, in the first years, there will be more low-hanging fruit, how we operate not heavily in OpEx and CapEx, so you won't see it, so to say, in the overall numbers.

And then when we start talking about ‘26, ‘27, then probably, you talk about debottlenecking activities’ and so on. But then every project on its own will have to have its own merits’ and we will reflect on every project on the IRR.

So it will be, of course, an asset-- it must be a value enhancement project that we have that is not dilutive for the company in terms of our IRR or return on capital.

Michael McMurray
And the return profile of these projects is, generally, very high.

Operator
Thank you. Our next question comes from the line of John Roberts with Credit Suisse. Please proceed with your question.

Matt Skowronski
This is Matt Skowronski on for John. Specifically in O&P EAI, you noted your plan to run the crackers in Europe slightly lower, quarter-over-quarter. But are there any other expenses to consider either that you incurred in 3Q or will incur in 4Q, when we're trying to bridge the quarter-over-quarter profitability in the segment?

Peter Vanacker
Yeah, you know that we have always been extremely focused on costs, so cost discipline. Even when I joined LyondellBasell, I was quite amazed how deep it is embedded in the DNA.

So yeah, we have not announced a certain number in terms of cost preservation, cost reduction but remain sure that this continues to be managed on a daily basis, so where we can actually reduce our costs but not at the expense of our value enhancement program. Michael?

Michael McMurray
Yeah, maybe I'll reinforce a couple of things. I mean, no doubt, the current environment has implications for our spending plans, both this year and next year. And then as you would expect, we are taking appropriate actions, in particular in Europe. And as Peter said, our value enhancement program will also help. So, it's incremental but, interestingly, it's also sustainable.

And then we have a great team and we've demonstrated our ability to navigate difficult environments like in 2020 where we covered our full dividend and capital program with cash from operations. We already operate lean, which gives us an advantage versus others.

And as Peter also said, that said, our view on safety and reliability is steadfast. We don't want to destroy long-term value or put our assets in peril. So again, we're confident in our ability to manage and actually come out stronger on the other side.

Operator
Thank you. Our next question comes from the line of Frank Mitsch for Fermium Research. Please proceed with your question.

Frank Mitsch
Thank you, and I wanted to offer my congratulations to Kim. I believe we met, Kim, a few years ago in a Channelview site tour. And as part of I&D, you indicated that you're going to run in the fourth quarter at 75% operating rate. I was wondering what that was in the third quarter; I don't believe I saw that?

And then also that 75% operating rate in the fourth quarter, there are a few different segments, within I&D. Is there any area that is going to be particularly higher or lower than that 75% average?

Kim Foley
Thank you, Frank. And yes, I remember our visit through the Channelview facility, quite well. I hope to see you again as we start up the new PO/TBA plant later next year, or early next year, I should say. As it relates to your question, the operating rates in the third quarter were about 75%. So, we're basically steady or equivalent, quarter-on-quarter.

Some of the differences as far as what we're operating is around my comments that I made earlier in the presentation. So, we'll be idling the PO11 or the propylene oxide styrene monomer plant in Maasvlakte. And what we will do with that is we'll have the opportunity to help improve the styrene supply demand, as well as run our PO/TBA plants at higher capacity.

Operator
Thank you. Ladies and gentlemen, we have come to the end of our time allowed for questions. I'll turn the floor back to Mr. Vanacker for any final comments.

Peter Vanacker
Okay. Thank you, everybody, and thank you for joining and also as usual, for your very thoughtful questions. We look forward to sharing more of our plans and how LyondellBasell will advance on our strategy and unlock additional value over the coming months. I wish you all a great weekend. Stay safe and looking forward to meeting you again, soon.

Operator
Thank you. This concludes today's conference. You may disconnect your lines at this time. Thank you for your participation.