Speaker O-Operator
Good morning and thank you for standing by. Welcome to the Linde’s Full Year and Fourth Quarter 2022 Earnings Teleconference and Webcast. At this time, all participants are in a listen-only mode. Please be advised, today's conference is being recorded, and after the speakers' presentation, there will be a question-and-answer session.

I would now like to hand the conference over to Mr. Juan Pelaez, Head of Investor Relations. Please go ahead, sir.

Speaker C-Juan Pelaez
Thanks, Devin. Good morning, everyone, and thank you for attending our 2022 Fourth Quarter Earnings Call and Webcast. I’m Juan Pelaez, Head of Investor Relations, and I’m joined this morning by Sanjiv Lamba, Chief Executive Officer; and Matt White, Chief Financial Officer. Today's presentation materials are available on our website at linde.com in the Investors section. Please read the forward-looking statement disclosure on Page 2 of the slides and note that it applies to all statements made during the teleconference. The reconciliations of the adjusted numbers are in the appendix to this presentation. Sanjiv will provide some opening remarks and then Matt will give an update on Linde’s fourth quarter financial performance and outlook. After which, we will wrap up with Q&A.

Let me now turn the call over to Sanjiv.

Speaker C-Sanjiv Lamba
Thanks, Juan, and good morning, everyone. By all measures 2022 was another successful year for Linde despite the significant and unprecedented headwinds. I am incredibly proud how every employee rose to the challenge by not only delivering record financial performance but also living our core values and supporting key initiatives for all stakeholders. And while there are hundreds of daily examples, where Linde employees have created real value through their commitment and determination, I’d like to highlight just a few on Slide 3.

Starting with shareholders. We delivered record financial performance against the backdrop of an energy and inflation crisis, not seen in half a century. Three important metrics for our owners, operating margin, EPS, and ROC, all reached record highs, both for the fourth quarter and the full year.

In fact, we achieved our ninth quarter in a row of growing EPS ex-FX by 20% or more. On top of that $7 billion, almost 5% of our average market cap was returned to owners in the form of dividends and share repurchases. We also expanded shareholder focus beyond fundamental results by identifying persistent technical constraints on Linde’s stock valuation. The Board recommended a solution to simplify our exchange listing, which is approved by an overwhelming majority of shareholders. However, achieving sustainable long-term value creation requires more than just a commitment to our owners. We need to successfully integrate all stakeholders, including employees, customers and the very communities we operate in.

So, on the environmental front, we continue to make great progress and 2022 was no exception. Looking at the numbers, we added 50 additional zero-waste sites in 2022, reaching 760 sites around the globe.
We reduced absolute Scope 1 and Scope 2 greenhouse gas emissions by over 1 million tones of CO2 versus 2021 despite growing volumes. This was a good start towards our stated goal of reducing 35% greenhouse gas emissions by 2035, which was recently validated by the Science Based Targets initiative. In addition, through the use of our technology, products, and services, we helped customers avoid more than 2 times the CO2 emissions from our operational footprint. These achievements have been recognized by the Dow Jones Sustainability Index, CDP and several other independent organizations. And we are not only committed to reducing our own carbon footprint, but we are also playing a major role in the global energy transition, which I’ll cover later. Of course, none of this is possible without the commitment of our employees.

When I measure performance and human capital, I first look to our longstanding company values of safety, integrity, inclusion, community and accountability. Our safety performance continues to be best-in-class as defined by a double-digit improvement over 2021 in lost Workday cases and commercial vehicle incidents. Creating a diverse and inclusive environment, where employees can achieve their full potential remains a priority for us.

In support of this commitment, Linde has recently implemented a number of development programs across the enterprise. We’re currently at 28% for gender diversity and I fully expect us to exceed 30% by 2030 across the entire organization. The local nature of our business has also enabled over 500 different community engagement projects, an increase of 25% from 2021.

Linde donated more than $10 million to support various charitable and STEM programs, including over $2 million in support of our Ukrainian employees and relief efforts. These highlights represent only a handful of accomplishments during the challenging 2022. However, here at Linde, we have a relentless focus on how to improve including better positioning ourselves for the future. And while we had four great years since the merger, I’m even more optimistic looking ahead.

The $9.2 billion project backlog, which we define as contractual growth projects with secured returns increased $2.4 billion versus the third quarter due to our OCI win, which I’ll talk about shortly. Additionally, 2022 was another record year for small on-site wins, as the 52 new contracts will provide secured revenue for the next decade or more. With this in mind for 2023, we expect to invest almost $5 billion in CapEx and acquisitions across all three supply modes, enabling high-quality growth while increasing asset density and reliability.

Furthermore, we expect to start up over $2 billion in sale of gas projects this year, including our $1.4 billion project with ExxonMobil in Singapore. You’ll recall that this project is expected to start up in phases beginning this summer. Therefore, we’ll remove it from the backlog sometime during the middle of this year. Of course, it’s difficult to talk about growth today without mentioning key secular drivers. I’d like to remind everyone that a few years ago, we stated how we would leverage the secular driver of electronics capacity expansions and win more than our fair share of high-quality projects. Our current project backlog of Tier 1 electronics customers validates that strategy as we continue to lead the industry. I view clean energy opportunities as been no different. I expect to win more than our fair share of high-quality projects across the energy transition spectrum. We are already partnering with global leaders and actively developing large-scale projects with contractual terms and conditions and scope that you become accustomed to with Linde. This approach is consistent with what I mentioned last quarter, of course, it never hurts to reiterate.
First, we intend to partner with subsurface experts for all underground operations. We are not geologists. Secondly, all projects will follow our investment criteria, in other words, earn a commensurate return for the risk undertaken. And finally, we will stick to our core, which is management of industrial gases. We have no interest to own or speculate on globally traded chemicals. Rather, we have offtakers for our products. Our recent win with OCI perfectly aligns with these principles, which you can find on Slide 4. We will invest $1.8 billion as a long-term supplier of nitrogen and blue hydrogen into OCI’s ammonia facility with terms and conditions and a return profile consistent with our traditional on-site contracts. OCI is an expert in ammonia production, logistics, and marketing, something Linde doesn’t want to engage in. In addition, we are partnering with a world-class oil and gas company for the CO2 sequestration. This blue hydrogen project is a great start, and we have several more large-scale energy projects under development. These opportunities follow our traditional gas model and involve partners that are global leaders in that space.

In addition, we will continue to execute in our base business, managing pricing, productivity, and increasing density across all three supply modes. Because we recognize that our owners appreciate the resiliency of the industrial gas model. Overall, 2022 was another stellar year despite the many headwinds. We achieved new heights across several key financial metrics, while relentlessly focusing on our core values. This is the fourth year in a row of double-digit EPS growth, and I see no reason why this won’t continue. Stated simply, I have confidence that we will deliver strong results irrespective of the economic and geopolitical climate. From my vantage point, I have never been more confident about Linde’s future.

I’ll now turn the call over to Matt to walk you through the financial numbers.

Speaker C-Matt White
Thanks, Sanjiv. Please turn to Slide 5 for an overview of the fourth quarter results. Sales of $7.9 billion were down 5% from prior year and 10% sequentially. Note that underlying sales increased 7% year-on-year, but decreased 2% sequentially, so there are several moving parts distorting the trends. First, you can see FX down 6% year-on-year due to the strong US dollar. This trend has already started to reverse as evidenced by the flat sequential impact. I’ll speak to guidance at the end, but based on current FX levels we might have some upside going forward. Divestitures from GIST and the deconsolidation of Russia, resulted in a 4% and 2% headwind when compared to prior year and the third quarter, we’ll lap part of this in June and the rest in September. Although I do expect a sequential tailwind in the first quarter from our US acquisition of nexAir. The engineering business decreased 4% from last year and 3% sequentially. The prior year variance is driven by Russian projects and the sequential decline is from timing of the US project. I expect a few more quarters of engineering volatility as they resolve and subsequently lap suspended Russian projects. While we ceased all Russian activity in July of 2022, we continue to reconcile balance sheet liabilities upon reaching settlements with our vendors and former customers.

Cost pass-through trends are starting to stabilize with a 2% increase over last year, but 3% drop sequentially. As you know, this represents the contractual pass-through of energy costs and has no effect on operating profit dollars. However, this will impact operating margins as we gross up or down sales and variable costs. The volume is down 1% from last year and 4% sequentially. This prior year, economic weakens in EMEA and severe weather conditions in the US, more than offset growth in APAC and project startups. Most of the slower volume came from pipeline customers, so there is a larger
impact to sales than profit, given the contractual fixed payments. Versus the third quarter, volume decline is coming from weather impact to US pipeline customers, EMEA’s softer economy, and normal seasonal impacts from Southern Hemisphere LPG. We saw a larger-than-normal amount of US pipeline customer outages towards the end of the quarter from weather. This mostly occurred in December, but the vast majority of customers are back to their seasonal run rates. Therefore, this is not expected to be an issue going forward.

Pricing actions remained robust with an 8% increase from 2021 and 2% from the third quarter. These increases are broad-based and aligned with the weighted inflation rate. Operating profit of $2 billion resulted in a record 25.3% operating margin. Excluding pass-through, operating margins expanded both sequentially and year-over-year in all gas segments, as pricing effects, net of cost inflation continue to improve underlying business quality. The Engineering segment had an abnormally high operating margin this quarter due to favorable project timing. Recall that engineering follows a percent-of-completion accounting method. Customer cash deposits are held on the balance sheet as liabilities until we have the contractual right to bill the customer, at which point the liability is recognized on the income statement as revenue. This quarter, we settled a large contract, enabling us to retain all related cash deposits, thus recognizing the remaining liability as current period revenue. I do not expect this margin to be sustainable beyond this quarter. A lot of you are likely wondering how to model engineering going forward given the recent performance. I believe the best approach is to use the sale of plant backlog as the next three to four years of revenue with average profit margin in the low to mid-teens percent. During times of rising backlog, cash inflows in margins tend to be higher, whereas in a declining backlog, it’s usually the opposite. However, the current situation is deviating from this pattern due to the significant project wind down from sanctions, so we still may have a few more volatile quarters ahead.

EPS of $3.16 increased 14% from last year or 20% excluding FX. As Sanjiv mentioned, this is the ninth quarter in a row of 20% or more EPS growth ex-FX. Operating cash flow is down versus prior year and sequentially. This is almost entirely driven by engineering project timing. Please turn to Slide 6 for a review of 2022 capital management. Operating cash flow was $9 billion for 2022 or 82% of EBITDA, consistent with our multi-year average. The business continues to deliver steady levels of cash in any economic environment. You can see to the right how we invested that cash. Aligned with our stated capital allocation policy of growing the dividend, reinvesting in the business, and using the leftover cash for share repurchases. During the year, we invested $3.3 billion, while returning $7.5 billion back to shareholders. We anticipate a meaningful step-up in 2023 for new business investments, while raising the dividend and maintaining a healthy share repurchase program.

I’ll wrap up with guidance on Slide 7. For the first quarter, we’re providing an EPS range of $3.05 to $3.15, an increase of 4% to 8% versus prior year or 9% to 13% when excluding FX. Sequentially, this range assumes that recovering US pipeline volumes and acquisition are mostly offset by China seasonality and lower engineering profit. Full-year guidance is expected in the range of $13.15 to $13.55. We’re representing an increase of 7% to 10% or 9% to 12% when excluding an estimated 2% FX headwind. Both ranges assume no material change in economic conditions at the midpoint. Furthermore, we’re estimating a 4% FX headwind for the first half year and flat for the second half, although recent trends have been better. At this time, we believe it’s appropriate to remain cautious against the backdrop of an uncertain environment. If the economy grows, we’ll have upside, and if not,
we’ll take actions to mitigate like we did in 2020 and 2022. Our job as management is not to predict what will happen, but instead execute in a volatile world and deliver on our commitments.

I’ll now turn the call to Q&A.

Q&A

Speaker O-Operator
(Operator Instructions) Our first question comes from Duffy Fischer with Goldman Sachs.

Speaker A-Duffy Fischer
Yes, good morning. A couple of part questions just around the new project announcements. So, historically, a lot of the fertilizer companies used captive production, so, one, I’m just wondering with this outsourced, does that indicate that maybe they’re moving to an ATR or something in the IRA or just connected to your pipeline, does that give you guys an advantage, particularly in the industry in general with outsourcing hydrogen going forward? And then I just on the project itself, so the way to think about it, you’re $0.10 of profit for every dollar of capital we should put in about $180 million run rate, kind of whenever we think that starts up in 2025, is that a fair way to think about this?

Speaker C-Sanjiv Lamba
Thanks, Duffy. So, let me just take a step back and tell you why projects like this become attractive to have Linde as a partner with, and the OCI project as an example, there are few things that work in our favor, and that kind of translates into your question as to why -- why outsourced versus captive. Let me bring in a number of things to the table. One, EPC capability with a successful track record executing very large and complex projects, integrating different technology packages, you referenced ATRs, ATRs are new for many people to operate, I mean we already operated one clearly at our own facility, so that advantage is something that then becomes available to people who are thinking about that outsourcing model. Add on to that, the reliability that we are able to bring which a single captive standalone unit does not have, we, of course, hope the hydrogen pipeline up to a US Gulf Coast system and to the cavern that has the ability obviously to store excess hydrogen at times when we are able to produce more, and strong operational expertise in managing the ATR ASU complex, I mentioned to you, we already operated one at Clear Lake and obviously adds to that whole piece.

Ammonia players in my mind are increasingly seeing Linde as a very complementary partner, supporting their efforts to start their expansion programs on blue and subsequently green as well. You put all that together, I think it’s a compelling argument, Duffy. As far as the return profile is concerned and I heard the numbers there, I’d say to you, the way we think about returns and again this goes back to our disciplined capital and investment criteria -- for us double digits, un-levered, post-tax returns is how we would assess a project like this. This is a traditional industrial gas project, no different to any other that we do and that’s how we would then factor the return coming back into the returns you would see hitting the EPS.

Speaker A-Duffy Fischer
Great, thank you, guys.
Our next question comes from John McNulty with BMO Capital Markets.

Yeah, thanks for taking my question. Maybe just another one on the blue hydrogen opportunities. You’re in a position now where you’ve got a partner on the carbon sequestration side, I guess when we think about the Q45 credits or the value of them, so maybe there’s some negotiation there, I guess how should we think about how much you capture as part of this carbon capturing that you setup versus how the sequestration gets allocated, is there a way that we should be thinking about that or a rule of thumb, I’m sure every contract maybe a little bit different, but your partner sounds like it’s going to be a steady and long-term one?

Exactly, so, Duffy, let me -- let me just -- sorry, John, let me just start off by quickly kind of identifying as you saw on Slide 4, there are three components to this deal coming together. There is a customer who is the offtaker, we define that as a core part of our strategy, without an offtaker we don’t develop these projects. There is a Linde scope which is the ASUs, the ATRs, and the carbon capture equipment that we are investing in, and the 45Q is linked back to the entity that captures the CO2. In this instance, obviously, when you think about how the project moves forward in examples like this, we are working with numerous partners developing multiple project streams like this. At the moment, we had advanced conversations with a number of partners for this very project. And essentially what we’re agreeing with them is potentially what you could call a tipping fee, where we would have structures, which allow them to take the cost of transmitting and injecting the CO2 for storage underground and obviously managing that on a permanent basis. So that’s how you would structurally see it. Obviously, the 45Q benefits are part of that discussion and negotiation that we’re currently pursuing with a couple of three different carbon sequestration experts.

Got it, thanks very much for the color.

Our next question comes from Mike Leithead with Barclays.

Great, thanks, good morning, guys. I’ll stay on that theme and ask another one on the OCI project. You mentioned it will connect your existing pipeline or your existing customers on that pipeline, I assume you’re currently supplying them traditional gray hydrogen, I assume there is also now an opportunity to sell them blue hydrogen at some price or value premium, am I thinking about that correctly? And then when you think about your base returns or hurdle rates for this project with those incremental comp up shift opportunities to blue hydrogen on the pipeline be considered in your base returns or is that all potential upside from here?
Speaker C-Sanjiv Lamba
So, Mike, you’re right that there is some excess blue hydrogen that we will have out of this facility. We’ve obviously scoped for that. The linkage into the US Gulf Coast hydrogen pipeline works both ways, right. It works as a reliability factor, very attractive for OCI, at the same time gives me the opportunity to take that surplus blue hydrogen and put it back into my system. We have demand for that blue hydrogen, and yes, there is a premium -- in the past, I’ve explained between gray and blue the premiums that exist and we will be putting that into the pipeline for customers who are moving on to blue hydrogen and have the willingness to pay for it. So, to that extent, whatever surplus we have, we have factored that into our economics. As you’d expect, we tend to be fairly conservative around how we model some of that stuff and you will see that also here, either a potential upside longer term, there is always going to be as that transition to blue hydrogen happens.

Speaker A-Michael Leithead
Great, thank you.

Speaker O-Operator
Our next question comes from Nicola Tang with P -- sorry, BNP Paribas.

Speaker A-Nicola Tang
Thanks, everyone. Hi, little off theme, I’d like to ask a little bit about the buyback actually. I see that it stepped down a little bit from the usual $1 billion per quarter in Q4, which I assume is due to the restrictions around ahead of your EGM. If I understand correctly through the delisting process, there may be a few restrictions around your ability to pay dividend or do a buyback until you get the approval from the Irish court, so can you just sort of clarify whether that you see any constraints in terms of your buyback or timing of the dividend around the delisting period? Thanks.

Speaker C-Sanjiv Lamba
Nicola, I’m good to the headline that by saying, I don’t see any constraints, but I’ll ask Matt to just give you a little more color on that.

Speaker C-Matt White
Sure. Hi, Nicola. So, to your two questions, I think first just on the buyback pace, yeah, we were since this is classified as a merger of the actual structure, we were essentially out of the market entirely for most of the month of December. We are back in as our traditional 10b5-1 and then it will open up again to active buybacks in a couple of days, so that would drive some of the quarterly reductions given that we needed to be officially out. As far as the Irish distributable reserves, which you’re referring to on dividends and buybacks, as you know, this is the same process we went through on the original merger between Praxair and Linde AG, it is somewhat perfunctory exercise, especially now that we have a track-record and history, so we don’t see this as any issue. We are well ahead of it and this will not affect the dividend, it will not affect the buybacks, and we’ve got that well accounted for, so there is no concerns on that on my part.
Thanks so much.

Our next question comes from Jeff Zekauskas with JPMorgan.

Thanks very much. With all of the winter storms, did Linde itself have operational issues in hydrogen in the fourth quarter?

Jeff, the impact of the winter storm was primarily on our on-site customers resulting in customer outages. We were there to support them with whatever nitrogen requirements, et cetera, was there, but the outages were at the customers' end.

Great, thank you so much.

Our next question comes from David Begleiter with Deutsche Bank.

Thank you, Sanjiv. Back to the OCI project, should we think about the 45Q tax credit as additive to your low double-digit return or is it embedded in that assumption?

David, it’s embedded. So, obviously, the relevant portions are appropriately embedded into the economic model, and obviously, double-digit, as you know, is a wide range. So, it’s an attractive project for us the way it comes together.

Very good. And you mentioned last quarter about 30 projects you’re working on I think in the US on the back of the IRA implementation, would we stand additional projects like OCI been announced perhaps in next few months or few quarters? Thank you.

David, I mentioned that we have a large number of projects that we're working on. We’ve said that we have visibility over a decade now about $30 billion in overall terms of decisions that we expect to be
making. I also mentioned that I see $7 to $9 billion of decisions on projects, foreign investment over the next two to three years, and that, despite the $1.8 billion that we’ve now announced, I still see that $7 to $9 billion number is being robust in terms of decisions over the next two to three years.

Speaker A-David Begleiter
Thank you.

Speaker O-Operator
Our next question comes from Peter Clark with Societe General.

Speaker A-Peter Clark
Yes, thank you. Again, going back to the OCI, a little bit. I mean, obviously, that place these trends, you can see that with the infrastructure, the pipelines, and everything, obviously, there’s a lot of talk now coming out of Europe, though with the response to the IRA, and I see your footprint there, it’s not quite the same as the Gulf Coast, you don’t have the hydrogen pipelines to the same extent, I’m just wondering, how you see your vantages there, if there is a real risk?

Speaker C-Sanjiv Lamba
So, Peter, I’m going to give you the example of Germany and Leuna, where you know we have exactly the same structure that we have here in the US Gulf Coast.

Speaker C-Juan Pelaez
Peter, can you hear us?

Speaker A-Peter Clark
Well, I think, yeah, I’m saying in Europe, you don’t have the same pipeline and infrastructure that you have on the Gulf Coast, so..

Speaker C-Sanjiv Lamba
Peter, I was going to give you an example of Germany and Leuna, where we have exactly the same structure, multiple customers, pipeline network, serving refineries, and chemical companies in that -- in that industrial network. So that’s an example of where we have incumbent strength, in fact, we are building our electrolyzers there to provide some green into that very pipeline network. So that’s one example where we do have the ability to expand and use that incumbent position that we have as a leverage to win more into that industrial -- industrial activity and the park that we operate in Leuna in Germany. So that’s an example in Europe. What I’d say also to you is, I think the nature of the projects in Europe, it’s going to tend to be quite different where there will be a complex producing product and then putting it into a pipeline network. Our ability therefore to participate in these islanded developments remains very strong, and I can also tell you that of the number of projects that I referenced previously in response to David’s question, I see a number of those currently being developed in Europe as well.
Can I sneak one in on trading? Just on Europe, obviously, the margin shot up, you have the volumes down, a lot of that was the on-site business, so I presume that helped you with the margin, but effectively, how you see the price cost argument in terms of pushing the selling price through against the energy cost situation now, because I presume most of it through and you called that out, so just how you see that progressing in ’23? Thank you.

So, Peter, the way I think about about energy costs and their implications for our business is two-fold, right? In terms of power cost and natural gas costs, anything that happens in terms of it going up or down, gets accounted for in our contractual cost pass-through mechanism. So if that moves up and down, yes, you will see some shift happen as a result of that. For the rest, the way we recover inflationary impact and the way we manage our business is pricing. And as you know, we’ve got a 30 year track record now of positive pricing and I see no different -- nothing different to suggest that there would be any different as we move forward. If fuel costs go up and we manage that through a pricing mechanism, that’s the cost inflation piece. If other costs go up, we manage that through a pricing mechanism as well. One of the things that we do is we manage that through product pricing and not only surcharging and therefore the stability of that pricing longer-term is quite sound and we feel pretty good about where it stands and how will be able to cope with that as we move forward.

Peter, this is Matt. I would just add to Sanjiv’s point. I mean, I think a good indication to see these changes you’re looking for are the sequential trends. So, when you look at EMEA’s sequential trends in this most recent quarter, you can see that to Sanjiv’s point pass-through is negative 6%, that is the energy pricing that is the natural gas pricing coming down, yeah, pricing was up 4%, so we’re still seeing stability in the pricing levels, but of course, we are seeing large reductions in the pass-through as that energy comes in.

Thank you.

Our next question comes from Kevin McCarthy with Vertical Research Partners.

Yes, good morning, Sanjiv, would you comment on your expectations for China as emerged from the Lunar New Year holiday, what are you baking in there in terms of baseline demands trajectory for ’23? And then I’d welcome any thoughts on non-China, Asia as well, taking into account your ExxonMobil project startup in Singapore?
Sure. So, Kevin, just talking about the APAC business overall, and I'll just walk you through APAC more broadly that will give you the color that you're looking for. Again, we had solid pricing as you saw, we had record operating margins, they are up at 26.5%. I've said to you folks before that there is a target on the back of the America's business and APAC and EMEA are moving in that direction to try and bridge that gap. Sales were pretty strong in electronics in particular across APAC followed by chemicals, energy, and then a bit of manufacturing. So, it is a story of two halves, if you will. Ex-China, again, electronics, very strong, chemicals, engineering, energy, and manufacturing are also extremely strong. Some seasonal impact of LPG business in South Pacific that you would normally expect. We've seen that level stable and I'm seeing that in January, the same momentum carrying through. In China itself, in the last quarter, we saw steel, automotive being reasonably weak. The Chinese New Year, obviously, in January kind of impedes our ability to really see how that recovery is going to come through, given the reopening that's been touted now. I think the next couple of weeks, I am watching carefully to see how that trend shapes up, and that's really going to determine what that long-term view on China is going to be. I said last year that I expect moderated growth out of China and that's kind of what we considered in our guidance.

John, I'll answer that in two parts. Let's talk about technology and then I'll talk a little bit about the commercial side of things. As far as technology is concerned, Linde has some really good technology around back cracking which is cracking that ammonia back to get disassociate and get hydrogen back. And we are, in fact, running pilots as we speak on some new catalysts and some new developments over there to make that a lot more efficient as a process, we are running with one of the largest oil and gas companies in the world kind of doing that those trials. So I feel very good about the technology we have. I feel very good about that particular project that we're running through and you'll hear more on that in the weeks ahead.

As far as the commercials are concerned, I really struggled with this. The reality is, for us to make ammonia blue or green, we put a lot of energy into that process, we get the ammonia molecule, we'll then move that molecule from point A to point B in a large ship. We will then take it to a storage at the
other end, and we will back crack it. The amount of energy loss that you see in that entire process makes
the economics not viable, in my mind. I don't see, so for me, direct ammonia usage, either on the
fertilizer front or direct as an fuel injection or fuel blending, makes a lot more sense in the near term, as
technology changes and improves and as the energy balancing work that we are doing fact in our pilot
continues to improve, then it becomes a little more viable in longer-term.

Speaker A-John Roberts
Thank you.

Speaker O-Operator
Our next question comes from Steve Byrne with Bank of America.

Speaker A-Stephen Byrne
Yes, thank you. Can you provide a little more granularity on how you got the 21% sales growth in
electronics year-over-year given that end market, it's clearly slowed?

Speaker C-Sanjiv Lamba
Steve, when a fab is been constructed, and -- we're talking about solid contracts with long -- Tier-1
players across the world, when a fab is constructed, they have to manage that operational elements to a
point, right, so that capacity utilization works in our favor and we are actually growing that market both
in terms of ramp-ups that are happening on new fab that came up two or three years ago and we
continue to ramp our gases into increasing production that is happening over there. And in addition to
that, we also continue to improve some of the molecules that we bring into these fabs given the new
technologies that are there, we call them electronic special gases, that we had continued to see growth
over there as well. And of course, I'll always add that there is a good strong pricing element to that.

Speaker A-Stephen Byrne
And if I could on the OCI blue ammonia project, the 2025 startup, does seem quite ambitious, is
construction already underway, and maybe, particularly for your partner, is your contract with them
will take effect in 2025 if their plant is not on-stream? And at the other end, is your partner for
sequestration well on their way to getting a class 6 injection well, can you comment on those, perhaps,
key bottlenecks?

Speaker C-Sanjiv Lamba
Sure, so these projects typically take many months to develop, in some cases, years, and so we have been
working on this project for a while, Steve. So that's the reason why we are reasonably confident about
getting this up and running in 2025 and then commercial production. So, I feel pretty good about where
things stand with that. Having a local engineering organization with the ability to do EPC on very
complex projects obviously helps and is a competitive advantage from a Linde perspective. Our
customers have obviously been working on their project for a period of time as well and are well-
advanced in terms of their own construction activity. So I again feel good watching that and I am not
concerned about delays on their end. Having said that, contractually, we always protect ourselves and we have date certain contracts to ensure that we are -- we have done the investments and done the construction that we needed to do that we are able to then ensure that our facility fees or facility charges are then paid to us on a date-certain basis.

Coming onto the downhaul activity, we are talking to at least three, if not more, very competent world-class companies that are experts in carbon sequestration, and those discussions are progressing well, and obviously, you would expect us to do some diligence around their ability to get permits, say, where they stand in that process, some have already applied, others are fairly advanced in terms of their preparation. Again, we feel good about how they are kind of in terms of readiness to manage the sequestration when it comes to the pipeline.

Speaker A-Stephen Byrne
Thank you.

Speaker O-Operator
Our next question comes from Vincent Andrews with Morgan Stanley.

Speaker A-Vincent Andrews
Thank you and good morning, everyone. I'm just sticking with that global end-market trend slide, two aspects of it. One, is this going to be the last quarter of difficult healthcare comparisons and should that yellow box start to turn green? And then secondly, the other piece within Industrial actually had the worst sequential sales growth, so what in particular within that other bucket was driving that minus 6% sequentially?

Speaker C-Sanjiv Lamba
Right, so we are about lapping the COVID volumes. Vince, you're right that we will see that largely lapped now. I think the point that you can also notice the sequential movement on that suggests that we are actually headed in the right direction. You'll see that green -- the greening up of it if you like in the quarters ahead. So that looks pretty much in along the expectations we have for that. As far as the rest is concerned, clearly, we -- there are sequential elements over here that have a range of different things matters referenced most of this, I'm going to just highlight a couple of them, so I make sure that I cover that. One, we told you that US on-site business saw customer outages during the winter storm in the U.S. that obviously affected between metals and chemicals and energy. We have -- and again, you've heard this before, but I'll just repeat it, our January trends look very good. Most onsite customers are back to seasonal run rates in line with expectations or even slightly above. We mentioned that in our Q1 guidance already as you might have seen. So, feeling pretty good about where that trend is in terms of the developments out of the Americas that you saw.

As far as EMEA, I'll just briefly cover and let you know that from our perspective, there has been lower economic activity across EMEA for the course of this year, has been especially true on the on-site business given the volatility on the energy costs, customers in metals, chemicals, and energy, obviously impacted by that. So, volumes were down versus previous year as far as our on-site business portfolio
was concerned. But again, having strong contracts and high-quality customers helps and you can see that in the EMEA margin, which hit that 25% mark, which was a target that I’ve set for them as it moved down that journey to try and bridge the gap to the America’s margin. As far as Europe is concerned, sentiment is of course improving and given the stability in energy pricing, we’re starting to see some volume creeping up slowly as far as that on-site business that I mentioned to you earlier on. But of course, they still remain below previous year levels and we’re just waiting and watching and how that all shapes up.

Speaker A-Vincent Andrews
And just to that other end-market, which is the bottom one on that Slide under industrial, anything specific within that other piece?

Speaker C-Sanjiv Lamba
Yeah (multiple speakers) Matt, do you want to just.

Speaker C-Matt White
Yeah, sure. Vince, so a couple of things on other. Generally, what it represents, clearly, items that wouldn’t fit the categories above, it represents competitor or it would represent distributors that we don’t have an actual end-market identified. It is the smallest percent, so large moves could shift it. In this particular case, it’s the seasonal component of LPG, that’s the big driver since that is a sort of a retail component of our Southern Hemisphere business, and that just shows on the year-over-year, right. You can see the year-over-year is still up slightly. This is mainly driven by the seasonality component of some of that our residential LPG component.

Speaker A-Vincent Andrews
Thanks. Thanks so much.

Speaker C-Matt White
Sure.

Speaker O-Operator
Our next question comes from Tony Jones with Redburn.

Speaker A-Tony Jones
Hey, good morning, everybody. Thanks for taking my question. I just wanted to ask about volumes, with the good visibility you have over the next couple of quarters, do you think some of the new projects ramping up will offset slower end-market trends, particularly EMEA, may read in the US if things deteriorate from here? Thanks.

Speaker C-Sanjiv Lamba
Tony, as I've said, the volume trends that we were looking at, in January, looked really good, and I
mentioned the on-site customers in particular and we are seeing them back at seasonal run rates that I
would expect them to be at or slightly above that. More broadly around manufacturing, we are also
seeing a snapback after the holiday period. So the seasonal impact and kind of watch out for what
happens beyond that, again, January showed us a good clear path to that in the US as well. In Q4, our
packaged goods, if I look at the gases and hardgoods, both grew sales double-digit and we are seeing
momentum continue into January on that as well.

Speaker A-Tony Jones
Thank you.

Speaker O-Operator
Our next question comes from PJ Juvekar with Citi.

Speaker A-PJ Juvekar
Yes, good morning, Sanjiv. In the past, you talked about three buckets of capital, I think, decarbonize,
Linde was $3 billion, decarbonized customers was $10 billion and greenfield projects was $20 billion,
are the returns on -- in this three buckets kind of similar to each other, and then how do you go about
forecasting long-term hydrogen price given that this could be 20, 30-year projects and hydrogen costs
have been coming down substantially? Thank you.

Speaker C-Sanjiv Lamba
PJ, let me -- let me talk about hydrogen price quickly and then we can talk about the three buckets and
how we look at them. So as far as hydrogen price is concerned, we've been in the hydrogen business for
about 50 years now, so we've got some long-term experience around hydrogen pricing. In terms of how
we think about hydrogen pricing, we look at our projects, the capital that we put on the ground and look
at, as I said before, double-digit, unlevered post-tax IRRs, to make sure that those projects stand on their
feet. You walk that back into the hydrogen pricing and obviously given that we leave the hydrogen
market, both in the US and elsewhere in the world, we feel pretty good about being very competitive in
terms of what we bring to offer. Now, the hydrogen price development that you're referencing over here,
it's largely going to be that variability is largely going to come on the green side of things, a lot of scale-
up needed. Green is neither scalable today nor is it cost-effective today, even with the PTC, $3 per kg that
might come out of the IRA. I would say to you that the inflection point for green isn't quite there yet. I
see a journey of at least five to seven years there. But you're right, you will see some pricing curves on
that, that will kind of develop in the next five to seven years to make it get to a point of inflection on
volumes.

The three buckets that we spoke about.

You're right, they are three different buckets, there are two specific elements in there that you can think
about. The first, when we have assets on the ground in the US Gulf Coast is an example today, when we
add capture capability to that and then work with the sequestration partner to put a downhaul, there is
an existing asset base onto which I'm adding a little more incremental capital and getting the leverage of
that installed base that I have, so clearly the return will look more attractive. For the rest, whether it's decarbonizing our customers on new markets, we are largely setting up new assets, which will be just as we have in the OCI case, in an ASU plus an ATR plus carbon capture, you put that together, we will then again look for our traditional industrial gas contract structures and return profile where we would expect to have returns commensurate with the risk that we undertake. So that’s how I would kind of say to you that those two buckets would really play out.

Speaker O-Operator
Our final question comes from Christopher Parkinson with Mizuho.

Speaker A-Christopher Parkinson
Great, thank you so much for taking the question. On the last earnings call, you had a very helpful Slide 4, I’m sure you remember it was the IRA and accelerated in the US, clean-energy transition, can we just hit on actually one of the smaller buckets the decarbonize Linde, it seems like you have a lot of projects three-plus billion dollar opportunity, fairly low hanging fruit, how should we be assessing those opportunities in terms of your prioritizations versus obviously, in the interim, well, I’d say short, intermediate, and longer opportunities with customers as well as new markets? Thank you.

Speaker C-Sanjiv Lamba
Thanks, Chris. So that bucket and I referenced it briefly to PJ’s question earlier on as well, that bucket is installed assets that we have to-date, there are about 11 to 13 assets that we have on our list for that $3 billion spend that we talked about and really I expect that in the mid-term, we will be looking at decarbonizing that. There are two drivers for that. One, we’re seeing conversions and demand buildup for blue hydrogen across our existing networks, so clearly, we want to make sure our assets are ready and able to supply that. The second, remember that from a sustainability point of view, we’ve made a commitment, that we will bring absolute reductions to our Scope 1 emissions, which are coming from that installed base of steam methane reformer that we operate in the Gulf Coast. So, we will be tackling that both from a point of creating economic value, but also living up to our sustainability commitments that we made in reducing absolute Scope 1 emissions. In the mid-term, you will see actions on all of that.

Speaker A-Christopher Parkinson
Thank you so much.

Speaker O-Operator
That concludes today's Q&A session, I’ll now turn the call back over to Juan Pelaez for any closing remarks.

Speaker C-Juan Pelaez
Kevin, thank you, and thanks, everyone, for participating in today's call. If you have any further questions, feel free to reach out. Have a safe day.
That concludes today's conference call. Thank you for your participation. Ladies and gentlemen, you may now disconnect.