Operator

Welcome to Solvay's Full Year 2021 Results Conference Call for analysts and investors. Solvay team, the floor is yours.

Jodi Allen - Head of IR

Good afternoon, and welcome to our full year and fourth quarter 2021 earnings call. My name is Jodi Allen, and I'm joined virtually by our CEO, Ilham Kadri; our CFO, Karim Hajjar; and today, we are also joined by Philippe Kehren, President of Solvay's Soda Ash & Derivatives business.

Today's call is being recorded and will be made available for replay on the Investor Relations section of our website shortly after the webcast has concluded. I would like to remind all participants that the presentation includes forward-looking statements, which are subject to risks and uncertainties. You may refer to the slides related to today's broadcast, which are available on our website.

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

Ilham Kadri - CEO

Thank you, Jodi. I'll begin my remarks, as usual, with the health and safety overview shown on Slide 3. As of last week, we have 158 colleagues who are infected with COVID-19. The number of confirmed cases is down significantly from a peak of 430 from January 20th.

The impact of the Omicron variant was particularly apparent in the Solvay workforce in the United States of America, Italy, and France over quarter-4 and into the new year. Although the number of cases continues to drop across the company, we must remain vigilant as we gradually and carefully look to reopen our administrative sites with measures in place to protect our employees and their communities. We will continue to work in a hybrid mode as pandemic control measures ease.

On top of that, we will continue to use the Solvay solidarity fund and have used over €6.4 million out of the €15 million collected from investors, management teams, and Directors' donations to support our people and communities in 13 countries around the world.

And this leads me to our sustainability program, Solvay One Planet, which is an integral part of our strategy. I would like to celebrate some of our achievements in 2021, which are shown on Slide 4.

As you know, Solvay is fully committed to reducing carbon emissions. Here, you see that we continue to make excellent progress against our targets. The impact of the pandemic on 2020 activity level is well known, so the increase in emissions in 2021 comes as no surprise. But what is most significant is the fact that we have achieved an 11% reduction across the 3-year period, which means we are surpassing our targets to be aligned with the Paris Agreement very substantially.

Last quarter, we announced our ambition to reach carbon neutrality before 2040 in all businesses and before 2050 in soda ash. We are accelerating our efforts in this area by announcing today another major project to transition to cleaner energy in our largest soda ash plant in Devnya, Bulgaria and Philippe will give you more details shortly.

Our climate efforts are getting recognized, and we were recently recognized by the rating agency, Carbon Disclosure Project, or CDP, which upgraded Solvay from B to A-, and we are proud to be in this leadership band and higher than the chemical sector average of B. Slide 5 shows the summary of our ratings from various independent rating agencies.

We have made many more achievements in our other two pillars, Resources and Better Life, which we have highlighted in our quarter-4 earnings press release. As an example, in quarter-4, we announced the launch of our very first employee stock ownership plan, offering employees the opportunity to buy shares at a 10% discount.

We are very proud of the strong progress as we deliver on our ambitious roadmap. There is much more to do, and this remains a key priority for Solvay and is directly aligned with our company purpose and our strategy.

Moving now to our full-year results shown on Slide 6. 2021 marks another great year of progress in our transformation journey. We're emerging stronger on all fronts from pricing power to profitability from cash generation to returns. I'm proud of the strong performance we delivered in the fourth quarter as we navigated new challenges facing the chemical industry and overcame these headwinds with necessary price actions to maintain and actually increase our margins.

Our businesses continue to do an outstanding job managing an environment of inflationary pressures, supply chain constraints and lingering uncertainty due to what we hope are the last stages of the pandemic. Let me, here, extend the sincere thank you to our team globally for their continued hard work and unrelenting focus on serving our customers. Without you, we would not be in the strong position we are in coming out of the pandemic in 2020 and a year beset with challenges in 2021.

Comparing the fourth quarter of 2021 to the previous quarter, sales were up 22% on an organic basis, and up 17% versus the full-year 2020. Of this 17%, 12% growth was from volumes, and 5% from pricing. We accelerated our pricing efforts in the third quarter, and began to realize the benefit in Q4, achieving 12% growth from price increases. This is the highest single-quarter level of price achievements in the past 5 years. Sales for the full year were up over 4%, versus 2019 pre-crisis level and this is without full recovery of the civil aero market.

Demand in all our key end markets was strong in quarter-4 with double-digit growth driven by automotive, agro & feed, electronics, and consumer markets. Likewise, our full year 2021 sales performance exceeded market growth in the same core areas.

Geographically, all regions delivered double-digit organic sales growth versus the fourth quarter of 2020. Europe was up by 14%. China was up by 19%, and the rest of Asia by more than 30%. North America was up 22%, and Latin America was up by 33%.

The double-digit top line growth and €40 million of structural cost reduction resulted in strong EBITDA performance in the fourth quarter, up 24% organically.

For full year 2021, Solvay reported record EBITDA of €2.35 billion, up 27% organically versus 2020 despite the higher inflationary environment and unfavorable energy headwinds. We also surpassed 2019 EBITDA levels by 8%, twice the topline growth, demonstrating strong operating leverage – this is the result of volume growth, our accelerated pricing initiatives and ongoing restructuring and cost-takeout measures.

We're also marking the achievement of a new milestone, namely delivering returns of 11.4% in 2021. Remember that in 2019, when we first launched our growth strategy, the return of capital employed was 8.1% and we committed to exceed 11% by 2024. The strength of our operational performance, combined with the optimization and rationalization of our assets, and of some product lines, enables us to deliver on this target 3 years ahead of plan.

Last but not least, we continue to deliver strong cash performance. As you are likely aware, we laid the foundation back in 2019 when we put in place a new incentive structure and more focused and disciplined governance. You saw us accelerate our delivery during the pandemic, and we have continued to do this. In fact, this is the eleventh consecutive quarter of positive free cash flow generation.

Why this is important? Because our strong cash generation enables us to invest for the future, and we have a number of exciting growth opportunities, thanks to our customers who value our sustainability-driven innovation and come to us with even more opportunities.

Speaking now about investments, as you have witnessed following our batteries webinar a few weeks ago, we are switching gears from "Getting fit to changing the game" through the acceleration of our investments. In batteries, we are investing €300 million over the next 2 years in Tavaux France. We encourage you to listen to the webcast replay available on our website to learn more about our ambitions and targets in the auto and batteries markets.

In addition, just this week, we announced new investments that affirm our #1 leading position in the U.S. sulfone polymers market. We are increasing the capacity of polymers, such as PSU, PESU and PPSU which serve growth in various markets, including health care, water filtration, and food industries.

Finally, similar to the auto webinar, I plan to host other dedicated webinars throughout this year either as stand-alone events or a spotlight topics during our earnings calls. The objective of these webinars is to introduce some of our global business unit Presidents and other experts and leaders in order to share more about their business strategies and performance highlights, and to help address the many good questions you have.

So today, I'm very pleased to be joined here physically actually, in Brussels, by the president of our Soda Ash & Derivative business, Philippe Karen.

Philippe has been with the company for 26 years and has accumulated a wide range of experiences from finance, managing energy and clean energy production to leading transformation projects and customer relations in the Europe, Middle East and Africa.

In the fall of 2020, he became president of the global Soda Ash & Derivatives business where he and his team have been driving the business transformation flawlessly, on both the operations and sustainability fronts. Philippe will now give you an overview of the soda ash business and current market environment.

Happy to have you here, Philippe. Now I'll turn the floor to you.

Philippe Kehren - President of Soda Ash & Derivatives

Thank you very much, Ilham, and hello, everyone. Very happy to be here as well.

Since taking this role, the objectives of this business have been clear – to focus on cost competitiveness and sustainability – and continue to drive cash generation. We have also leveraged the transformation done at Group level to build a lean and fit for purpose organization for our business.

Today, I will share an overview of our markets. I'll discuss the pricing environment and contract status for 2022. We will take a look at our world class assets and leading cost position, and I'll update you on the stepchanges we are making with our energy transition projects.

So what is Soda Ash & Derivatives at Solvay? Our business has annual sales of €1.5 billion. We operate in 11 production sites globally and are producing soda ash and bicarbonates and we have 3,200 employees. And we serve customers everywhere in the world.

Now let's start with our markets. Soda ash and sodium bicarbonate are considered as essential chemicals that serve resilient and growing end markets. There is a large number of diversified markets for these chemicals.

By far, the largest market is still for glass manufacturing; about 50% of our soda ash sales today are used in glass for building, automotive, food and beverage containers, and also for new growing applications such as photovoltaic panels.

About 25% of our soda ash is used as a water softener for detergents. It's also used in various industrial applications and new applications are also developing such as lithium carbonate for batteries

We also use soda ash to produce sodium bicarbonate -- which we have branded as BiCar®. Bicar® represents 25% of sales, mainly serving four markets: flue gas treatment with our Solvair® solution, and also serves feed, food and pharma.

These markets are backed by sustainable megatrends, including resource efficiency -- for example, the need for double-glazed windows to improve energy efficiency; another driver is recyclable packaging -- for example, its use in glass containers supports the reduction in use of single-use packaging; another trend is emission control, where, for example our Solvair® branded sodium bicarbonate is used in flue gas treatments to clean air.

Most of our markets have been resilient through the COVID-19 pandemic, and in fact today's demand has us back at pre-COVID sales levels.

These markets are expected to grow by 2% per year for soda ash, and 4% per year for sodium bicarbonate.

Now let's turn to our business environment, pricing and contracts. Slide 10, on the left chart, you can see a good overview of the evolution of market volumes and pricing dynamics of this business over the past 5 years. The chart on the right shows the evolution of profits through this same time period, using normalized data. What you can clearly see is the demand reduction in 2020. Then, as volumes recovered in 2021, the margin

squeeze that occurred in 2021 as a result of the significant cost inflation impacting the business, first on sea freight, and then starting in the summer of 2021, on the energy markets, in particular in Western Europe.

Despite the margin squeeze that had a significant impact on our EBITDA, we have been able to deliver a strong cash performance thanks to a strict discipline on fixed costs, very tight asset management, and working capital management.

As most of you are well aware, the majority of contracts are negotiated annually. We have just completed our 2022 negotiations.

I'm pleased to report that our negotiations have been successful, better than the market average. For your reference, the latest public data published by analysts such as IHS indicates the average pricing increased 27% in Europe, and more than 50% on the export markets, and that some surcharge clauses have been introduced to face this unprecedented cost situation on logistics and energy.

Given the surge in energy costs in late 2021, it was critical for Solvay – and for the industry – to increase pricing in order to manage this strong cost inflation and beyond that, to recover pre-COVID profitability levels to support the investments that are needed to execute our energy transition, and to invest in capacities that are needed by our customers.

Solvay is a global leader in Soda Ash, operating world class assets.

Our synthetic and natural soda ash sites are highly competitive, with 75% of our capacity in the 1st quartile of the industry cost curve which you can see here on the chart. These sites are able to serve any customer anywhere in the world. The remainder of our assets are the most competitive in their regional markets; they are not designed to export, so the FOB cost to the nearest port is not relevant for them, but they offer local and secure supply to our customers there.

This competitive position takes a continuous and focused effort by our entire business. We have been relentless in finding ways to reduce process costs, and in fact have reduced costs by €50 million in the last two years since I took the role, and reduced costs by about €200 million in the past 10 years! This is how we maintain our leadership position.

We have 6 synthetic plants in Europe that are sustainable and competitive in the long term. Along with our natural soda ash unit in the US, this gives us a unique portfolio of assets in the market.

Even though new developments will likely take place in the natural production of soda ash, synthetic production remains a critical source across the long-term, given there are not sufficient natural trona resources on the planet.

On Bicar*, we continue to consolidate our leadership position. We are producing Bicar* at all of our soda ash plants, and we have 2 additional units only dedicated to Bicar* in the US and in Thailand. As a reminder, back in 2019 we announced an investment in our site in Bulgaria to build a new bicarbonate plant to meet the growing industry demand. I'm happy to share that we have completed this expansion and the new capacity is now available. In line with our objectives, this investment will deliver strong cash and returns.

Finally, in order to make all our plants sustainable, it is absolutely key to do their energy transition, and we made significant progress in 2021, and very recently, and that will be the last part of my talk today.

As part of Solvay's ONE Planet sustainability roadmap, the soda ash business has committed to become carbon neutral BEFORE 2050, and to phase out coal by 2030.

We have already taken a number of steps in our European factories to enable such a transition away from coal usage:

In 2021, our site in Rheinberg in Germany began the process of switching from coal to using biomass derived from waste wood chips. The first boiler has been operating since May 2021, and we approved the construction of the second one. Rheinberg is set to become the world's first soda ash plant powered primarily by renewable energy by 2025.

Last week, we have officially announced that our site in Dombasle in France will exit coal completely and transition to 100% primarily refuse-derived fuel as early as 2024 to cut emissions by half, the first project of its kind in France.

Those 2 projects will use local resources and develop a circular economy.

Plans are also underway to transition our Greenriver, Wyoming, plant from coal to gas power in two stages to be completed by 2023.

And today, in 2022, we also announced the first step in our largest European site in Devnya, Bulgaria by converting a boiler to biomass. The biomass will come from a variety of sources, including locally-sourced sunflower husk pellets. The boiler is projected to come on stream in November 2022.

Therefore by 2025 we will have achieved 20% emission reduction in our global business, and by 2030 a 30% reduction.

As a reminder, each of these projects generates returns above 15% and further de-risk our operations.

Beyond this timeframe, we plan to initiate new process innovations and other energy technologies to support the exit of coal in our hard-to-abate sites.

The transformation is not only part of our sustainability ambition, but it is valuable to all stakeholders – our customers, our employees, and our investors – to keep our sites at the forefront of the industry in terms of reduced emissions AND cost competitiveness.

Thank you very much. Now back to you, Ilham.

Ilham Kadri - CEO

Thank you very much, Philippe. Really happy to have you with us today. And I just want to say great job to you and to your global team, who I know are listening to you today for not only the successful completion of your contracts, and I know you've done something historical by reopening them in quarter-4, but the exemplary way you are driving our cultural and operational transformation.

Now I would like to pass the floor to Karim who will review in more detail the Group's segment and financial performance in the fourth quarter of 2021, Karim?

Karim Hajjar - CFO

Thank you, Ilham. Good morning, everybody. I'll start with an overview of the three business segments and as usual, we'll refer to figures on an organic basis which I mean, at constant scope and currency.

I'll start with an overview of the 3 business segments and will refer to figures on an organic basis, meaning at constant scope and currency.

Beginning with Materials on slide 13, sales in the segment increased 20.2% in the fourth quarter as Specialty Polymers delivered yet another record quarter. Growth was once again driven by automotive, EV batteries, and electronics markets – each with double-digit sales growth. Growth in auto (including batteries) grew by 31% over the full year 2021. And we expect strong growth over the next decade and beyond as we shared with you during the Auto Batteries webcast earlier this month. But this is not the only driver – our polymers are adding real value in a number of key markets. Polymers sold in the electronics sector grew 19%, boosted by semiconductors, electrical components, and smart devices. Sales grew about 11% in healthcare which includes polymers used in medical devices and pharmaceutical packaging. Our technologies are adding significant value and as a result we continue to win business. Specialty Polymers is exiting the three year cycle (2019-2021) as a winner against the most formidable peers in high-performance polymers (such as PEEK, PTFE, PPA, to name a few)

In Composites, we saw sales recover strongly from the low point of the pandemic in Q4 2020, with organic sales up 24% in the fourth quarter. Growth was driven by the increase in single-aisle aircraft production rates (for example the B737 Max, A320 Neo, and A220 aircrafts) which grew about 57% from the 2020 low points. Sales to the space and defense markets grew by 2% in Q4 as launch and other defense programs partially offset the reduced F-35 program rates. For the full year, our civil aero business was down by 11% versus 2020 and our space and defense sector grew by 8%. Solvay's diversified presence across multiple aero & defense platforms allows us to have less exposure to the softness in twin-aisle (wide body) aircraft production rates. It is important to note that supply and delivery constraints continue in this market creating challenges in raw material, labor and logistics availability.

Turning to profitability, the EBITDA of the Materials segment in Q4 increased 31.4% year on year, and EBITDA margins improved almost 300 basis points to 27.5%, primarily due to record sales in Specialty Polymers, and the benefits of price increases to offset inflationary costs in both businesses.

Next, I'll move to slide 14 to review the Solutions segment, which delivered sales growth of 28.3% in the fourth quarter. Beginning with Novecare, sales were up by 32.8% thanks to both volumes and pricing, driven by its core markets including agriculture, coatings, and home and personal care, each delivering double-digit growth. Oil and Gas, which is now reported separately as of Q3 2021, was up significantly by 88% in the fourth quarter driven mainly by strong pricing.

The Aroma Performance business achieved record results in the fourth quarter, with sales growth of 36.7% thanks to good demand across all product lines. In Special Chem, fourth quarter sales grew modestly by 1.6% driven by electronics, which partially offset lower sales to auto. Technology Solutions had another good quarter, with sales growth of 15.4% driven by mining and phosphorus derivatives.

Wrapping up Solutions, the segment delivered 29% EBITDA organic growth versus Q4 2020, reflecting the strong and continued recovery across most markets, while EBITDA margin rose slightly to 17%.

Turning to chemicals on Slide 15. You've heard Philippe, but looking at the whole segment, fourth quarter sales in the segment were up 18% with all businesses, all of them experiencing organic growth year-on-year.

Philippe has already covered soda ash business, so I won't go into that any further.

Peroxides sales were up organically 16.5% in Q4, driven by volumes and by price as market conditions remained strong in hydrogen peroxide for the merchant market as well as for the HPPO mega plants.

The Silica business also performed well with 13% sales growth in the quarter, thanks to pricing initiatives. Although tire demand is still slightly down vs 2019 levels, demand remains strong for specialty grades of Silica in that market. An example is a recent innovation called Techsyn which you may recall is a result of a collaboration with some key partners, including Bridgestone.

The Coatis business in Latin America continued its exceptional growth momentum, with fourth quarter sales up 59% thanks to sustained demand in key markets and increased pricing power.

The Chemicals segment had very strong performance in the fourth quarter, with 36.9% growth in EBITDA thanks to sales volume growth and strong pricing management in each business, supported again by exceptional performance in Coatis and Rusvinyl.

I'll now move to the group's financials on Slide #16. First, the significant inflationary cost headwinds that we flagged in Q2, you recall we mentioned \in 200 million to \in 250 million that we updated to around \in 400 million at the beginning of November last year. Well, the truth is we underestimated it; they came in at \in 465 million for the full year 2021.

To give you a bit more color, about 70% of the increase related directly to raw materials and energy and about the remainder related to logistics and packaging. That's the context against which we mobilized. We mobilized the whole of our organization starting in the third quarter because we were really determined to accelerate our price increase actions in order to respond, in order to really face those challenges head on because those cost pressures are very clear, and we're really proud of what the teams have accomplished, truly.

We've overcome a significant amount of those costs. We've kept our assets running safely to keep utilization rates very high, to ensure supply to our customers and as a result, we protected our margins. Indeed, the significant progression in our pricing is evident to you on Slide 16. And there, a picture is worth a thousand words.

What you can see here is that in Q3, we went from essentially a standing -- we were standing still. In the first half, we went up to 7% in Q3 and to an unparalleled, never done before, 12% in Q4. That's why we've improved our pricing power as the year progressed, and we're really pleased with that.

On top of this, we continue to make good progress on our structural cost programs, which you can see on Slide 17. In the fourth quarter, we delivered \leqslant 40 million of additional savings that brings the year total to \leqslant 213 million for the year. And we're giving you a breakdown of that into three key areas. 1) Restructuring: These represent reductions in labor costs that contributed around \leqslant 75 million. 2) Indirect cost: That delivered \leqslant 85 million last year. And then we've continued to focus on 3) Productivity efficiencies on our industrial sites, which came in at \leqslant 53 million. And that really is associated with improving our manufacturing yields, which, of course, helps to support the volume growth.

Now that brings the total of our structural savings so far to €390 million across the 2-year period, well ahead of the targeted reduction €500 million reduction that we'd indicated by the end of 2024.

Slide 18 shows that the positive demand development across many markets, combined with our successful price initiatives and our cost reductions to help us deliver another quarter of strong EBITDA performance, up 24% on the quarter -- on the fourth quarter of 2020, and up 27% for the full year.

One time impact of net $\[\le \]$ 27 million in the fourth quarter were also reported in underlying EBITDA, and that includes $\[\le \]$ 61 million of onetime gains resulting from the Brazilian Supreme Court's retroactive decision on duty recoveries for many companies, including Solvay. And we've recorded that gain in the chemicals segment. This gain was partially offset by a $\[\le \]$ 34 million loss, half of which related to bad debt in the energy business, clearly related to the unprecedented spike in energy costs, which were recorded in our corporate and business services segment.

I'm going to turn to cash generation on Slide 19. The results of our efforts over the last 2 years to improve our cash generation are evident. For the 11th quarter in a row, we are generating positive free cash flow with €151 million in Q4 last year and €843 million for the full-year 2021.

So how did we achieve this strong performance? I'm going to give you the main elements. I'll turn first to working capital. As you'd expect, strong top-line growth drove increases in inventories and receivables. The good news is that we doubled down and even drove that discipline even further.

And so we, within that figure, you have structural improvements of around €100 million of benefit and also the benefit of temporarily higher than usual payables because of high energy costs.

So we continue to manage our working capital very carefully and with discipline.

Total average working capital to sales in 2021 was 12.7% versus 14.7% in 2020, and mid- to high teens is typically the industry standard. So we're really proud of this performance.

Turning to CapEx. We accelerated the investment in the fourth quarter to €324 million, bringing the total for the year to €736 million, in line with our guidance at the very beginning of last year of between €700 million and €750 million.

Our ambitions to grow the business are high, and our investment plans are concrete. We are now entering a growth cycle to prepare for the opportunities in the coming years, and Ilham already mentioned a few of these exciting projects.

We also spent €118 million on our restructuring program, €26 million more than in 2020. And payback is generally l2 years.

Finally, the deleveraging of our balance sheet has continued unabated and the continued work on pensions and on the debt is paying off; indeed pension and financial charges were €89 million lower than in 2020, and €190 million below 2019.

As a consequence, our FCF conversion ratio is over 37% for the last twelve months, again higher than our ambition of a structural FCF conversion ratio exceeding 30%.

I invite you to think of the 30% FCF conversion as a minimum average level that we expect to maintain going forward, even though investments in our growth projects may cause that level to dip in a given year.

We also recommended a dividend increase of 0.10, which if approved, will bring the dividend to 3.85 per share.

Finally, a word on our net debt. Underlying net financial debt decreased again in 2021 by around €250 million to €3.95 billion, mainly due to the higher free cash flow generation, and that's despite an additional voluntary contribution towards pension obligations of €236 million.

Since the start of 2019, we decreased our net debt by nearly €1.6 billion. We decreased our pensions by an additional €1.1 billion. Today, the leverage ratio stands at 1.7x, making it the lowest level we've had since 2015 and our credit strength and our strong ratings are really reinforced.

And with that, I'll hand you back to Ilham, who'll discuss the full year outlook for 2022.

Ilham Kadri - CEO

Thank you Karim. I'll now share some comments on our outlook for 2022.

First let me share our assumptions:

First, there will be a negative scope effect in 2022 of €21 million, due to the small divestments we made last year.

Next, I want to acknowledge that the cost inflationary environment we continue to face is unprecedented in terms of volatility and financial impact. We also are aware of the geo-political risks and continued uncertainty. In light of these circumstances, we assume that things will neither improve nor get worse and we remain focused on what is in our control. Our Q4 results demonstrate that we have the capability to take pricing actions to overcome the inflationary pressures, and going into 2022, this remains a TOP priority for our organization.

We also continue to drive growth across our businesses.

Let me highlight some of these assumptions:

In the Materials segment, we expect growth to be driven by a few key areas:

Growth in auto thanks to the shift toward electric vehicles and continued penetration of our high-performance polymers across all vehicle platforms; we shared this story with you just a few weeks ago during our webinar. LMC forecasts a recovery in the auto market with an approximately 12% increase in global light vehicle production in 2022 versus 2021. The expectation is that this growth will be weighted towards the second half of 2022. This would provide a strong tailwind for our auto-facing polymer businesses where we expect to continue to outperform the general market.

Another growth driver is the continued recovery in civil aero that supports growth in composites; with single-aisle production rates increasing this year. We estimate steady improvement in this business. We intend to share more details on this market in the coming months in a similar dedicated webinar to be held in May.

In Chemicals, Philippe just highlighted the expectations in the Soda Ash business; this is important because the growth in soda ash this year will help to offset the non-repeating effects of the supercycle that benefited us in 2021 related to Coatis and Rusvinyl, which delivered together around €100 million more than their cycle average.

In Solutions, the segment is expected to grow modestly thanks to the demand for more sustainable solutions in a number of its markets, including agro, home & personal care, and others. We are seeing the success of the optimization strategy in the segment, and we see even more opportunities ahead.

Given this market view, and taking into account our intention to invest more in capability in Materials and in digitalization, and the fact that we expect pricing actions to accelerate this year, we estimate full year EBITDA to grow organically in the mid-single digit percentage range.

On Cash generation, we have clearly benefited from the improvements and discipline in our processes over the past three years, and now we will be using some of this cash to fund our growth. I already mentioned a few of these investments earlier related to various high-performance polymers capacity expansions. Altogether, this should bring our capex level in 2022 to around €850 to 900 million, representing a 15 to 20% increase versus 2021, of which half is inflation. Please be aware, this does NOT indicate a sustained higher level of spend; think of it as an investment cycle, where some years are higher than others as we prepare for future growth.

The expected growth in the topline will likely result in higher working capital needs. This, together with our investment needs in 2022, brings us to a Free Cash Flow estimate of at least €650 million. Of course this can fluctuate based on the activity levels, as we will ensure we meet our customers' needs. As always, we will keep you informed of any changes during the course of the year.

I'm sure this year will also have its share of challenges as we continue to emerge from the crisis and some of the secondary challenges it has created. Our team has demonstrated our ability to manage through these near-term headwinds. Our solid and improving portfolio coupled with our strong balance sheet and structural improvements have enabled us to emerge leaner, stronger and well-positioned to progress on our transformation journey and unlock value for our customers, shareholders, and our employees.

And with that, Karim, Philippe and I are happy to take your questions.

Jodi Allen - Head of IR

Thank you, Ilham. We will now move to the Q&A, and I ask that you kindly limit yourself to one question per analyst so that we can address as many questions as possible today. Moderator, I'll hand the floor back to you.

Operator

The first question is from Daniel Chung from Redburn.

Daniel Chung - Redburn

Congratulations on the solid quarter. Could you elaborate more on the execution of the pricing actions that have been taken beyond soda ash? And maybe to sort of link that onto a follow-up: So to get to your guidance now, €2.45 billion of EBITDA, is that assuming pricing for the offset costs for the year?

Ilham Kadri - CEO

Well, definitely, the pricing has been a new muscle that we've just started to train in the company. I'm not a newcomer anymore, but we have had our share of crises since I joined. And when inflation hit us last year and the second half looked very different from the first half, we had two types of businesses.

One type of pool of businesses like soda ash, and Philippe can elaborate later on, where we had contract pricing either based on a number over the year with no formula or others with formula pricing linked to raw material like in silica with 4 months lag, right? And obviously, you want to honor your yearly contract with your customers. That's why we put a contract in place, but it was really unprecedented.

So price became a real focus of our teams from mid-2021 when raw materials and energy began to escalate, and we knew this is not something which is going to be lasting for only a quarter. We have seen a broad-based progress on pricing. We shared best practices with our teams.

We said it would take time. You remember, I told you that in quarter 3. But I'm really proud of our teams as in quarter 4, we saw this acceleration with 12% increases in the core. Really proud of many. Philippe can talk about what they have done in soda ash because it's the highlight when a team -- a management team and the sales teams are courageous and bold to go and reopen a contract during any given year and fight for protecting the margins and defend their value proposition.

In a way, almost -- even if it's painful, we could actually renegotiate 2022. But before I do that, obviously, in Specialty Polymers, for example, it was another story because pricing was lagging in the 3 first quarters, right? In Specialty Polymers, we have a unique value proposition. We went back to the market. We defended our value proposition. And the team succeeded in increasing prices and the acceleration allowed us to compensate the variable cost increase in quarter 4. Well, we had a margin squeeze in a quarter 3.

So then it depends on each business. Novecare made good progress, but we expect more. And as we entered into January, I can tell you that the pricing in quarter 4 is sticky. We are still looking at pool of pricing leakage where we're not covering our variable costs. We are seeing some escalation on inflation more than what was even budgeted or seen in December.

So listen, this is a muscle we are training. We're entering the year with renegotiated contracts, including surcharges.

Philippe, would you like to share your experience on reopening your contracts in quarter 4?

Philippe Kehren - President, Soda Ash & Derivatives

Yes, absolutely. Thank you, Ilham. Well, in soda ash, most of our contracts, let's say, 90% of our contracts are fixed price negotiated on a yearly basis.

The market last year was tight. So obviously, we're able to pass price increases on the open volumes. But again, I mean, 90% of our volumes were locked. And we soon realized that it was not sustainable to continue like that because of the unprecedented price increase on the energy markets.

I mean we're, talking about on gas and coal 4, 5, or even more x normal prices.

So it was absolutely key to desqueeze a little bit the business already in 2021. And of course, the market being tight, the customers are wanting security of supply and visibility in the long term and also investments that are required for energy transition and for new capacities in the future.

We were able, in a lot of cases, not to say in most of the cases, to get the support of our customers. And that's really, really something that was a nice surprise and a must, I must say, to mitigate the risk.

For 2022, obviously, we renegotiated the prices in a situation where, again, the market is tight and costs are increasing. Here, our target is not only to compensate the costs, but really to go beyond that and to get back to the profitability levels that we had pre-COVID in order to be able to continue to invest because we have big investments to be done, both in energy transition and in capacities.

Ilham Kadri - CEO

So thank you. And this is it. I think the pricing muscle was underdeveloped historically. And frankly, this inflation environment, although again, painful, it's really, for me, a nice opportunity to really engage with the business Presidents, the sales organization, the technical staff to really defend our value proposition.

You know that Solvay had top-tier margins. So people know that we have great assets. We have great value proposition to offer to the world. And business by business, we are engaging with our customers and really proud of the 12% price increase.

By the way, I think maybe some of you think that Coatis has done really a great job over the year. But even if you remove Coatis from the price increase, we are at double-digit price increase. So it tells you that this is not coming only from the commodity side of the portfolio but also from the specialties. Back to you.

Operator

So we have a question from Lisa De Neve from Morgan Stanley.

Lisa De Neve - Morgan Stanley

Can you just share the free cash flow moving parts that underpin your €650 million guidance or minimum guidance for the year? And specifically, I'm looking at what are the sort of provisionals or the net working capital expectations that are baked into that number?

And secondly, a small question. So congratulations on your pricing in the quarter. On materials, you delivered €40 million pricing in 4Q in the backdrop of much higher PVDF pricing and sort of market tightness and higher raw materials. Can you share how much of that €40 million was driven by PVDF pricing?

Ilham Kadri - CEO

Can you start, Karim, with the 650?

Karim Hajjar - CFO

I will start with the €650 million. So maybe a couple of key comments: Remember, first of all, that we did indicate and promised to a minimum 30% free cash flow conversion by 2024. We announced that in 2019. We've averaged 44% in the last 2 years.

What I want to highlight, though, is I'd like to -- as I said to you, as I was giving my earlier remarks, take that as a minimum average over time and it really doesn't preclude that when we have a peak growth investment that doesn't dip modestly. So don't be surprised if, for example, in '22, it's a little below that 30%.

It's important to note that particularly, for example, it's very strategically coherent. We said to you a few weeks ago that we're investing in batteries at a cost of €300 million. Half of that is coming in this year.

The other thing I want to highlight, the €736 million we invested this year, if we just take inflation into account that will move it up towards €800 million. So again, that tells you that in indicating €850 million to €900 million

of CapEx, we're making space. We're allocating more to make space and drive that additional growth investment. That's the main one.

I think as far as working capital is concerned, 12% is very, very low. Typically, I expect us to want to invest to serve our customers. So working capital investment to support our growth is something you can expect. It really is those two key factors that are the main drivers.

The other one, which is a little more modest, which is the incidence of our profit pools will impact our effective tax rate by a couple of percent here and there. And I can easily add \$20 million, \$30 million of extra cash costs. But that's totally dependent on exactly where the -- which geographies those profits are made. Hope that helps, Lisa.

Ilham Kadri - CEO

And as you know, by now, we'll not let go the free cash flow discipline in this company. So we'll take it as a floor. And obviously, we want to reinvest. And as Karim said, we have great investments, and we -- the markets welcomed our investments in Tavaux, France. We have a few more in PSU and PCU, but also in electronics, in highly purified H_2O_2 and obviously, in working capital as our customers need to.

On your question on materials and price increase, and I gave the example here, on materials before Philippe kicked it in, Lisa, it's the highlight of quarter 4, right? And really, the price increase acceleration allowed for the first quarter, frankly, since the past year or 18 months to compensate variable cost increase.

And this is across the board. Don't think it's only PVDF. Obviously, we have record sales in batteries almost under allocation. But the rebound in automotive is across the board, including for other high-performing polymers, which go to under the hood application and go to lightweighting despite the chip shortage, as you know. Electronics is boosted by the 5G and smart devices, the mobile phones.

So all of this is actually booming within Specialty Polymers. And we did a price over cost campaigns throughout the year and in quarter 4 with value capture initiatives. We looked at price initiatives. So where we have price leakages, we are giving much transparency on the pricing and the cost to all our product managers and salespeople to really ensure that there is no -- that they understand the outliers, and we are actually educating our salespeople starting in Specialty Polymers, but also expanding to other businesses on large deal negotiations.

So there is a readiness process, which I've been through when I was a young salesperson, and I think it's good to go back to the basics and multiple deals spanning the GBU portfolio across all large deal renegotiation. And when you are in those inflationary environments, it's good to reopen your contract. We are looking at all our contracts. The payment terms, the pricing leakage, the outliers. We have 40 or 60 deals ongoing now in negotiation. And obviously, we are applying this new format. So yes, you can expect our prices increase to really go across the board, and we shared this in the auto webinar that we were able to pass the cost increase to customers also in auto as the demand is very strong and supply is still limited. Back to you.

Operator

So we have another question from Wim Hoste from KBC Securities.

Wim Hoste - KBC Securities

I would like to ask your opinion on the management of the balance sheet. With leverage coming down, how are you looking at things like further reducing the pension deficits, lowering debt service costs? Are there any opportunities just in making your balance sheet more efficient?

Karim Hajjar - CFO

That's a great question. I think this is a journey we've been on. We've really -- as I mentioned, very, very big numbers have contributed to the de-leveraging. But what I want to highlight is everything we've done has created value.

Just remember that the major reduction in our pension cash service cost, in our financing costs is directly associated with that. We're talking of returns, what, in excess of 10% after tax.

It's fair to say we're coming to the end of that particularly attractive deleveraging. The next chapter that's opening up is investing with real discipline. I think that's really, really key.

So at this stage, what I can say is that our credit strength is improving. I would speculate we're probably at the top-end of our credit ratings and we like that. It gives us the ability to maneuver to really invest and do the right thing.

But there is no more new major de-levering opportunities. We have a bond that comes due of, I think, just around €380 million in September. We've got the cash to pay. We don't have to raise new debt. It's a great position to be in.

Maybe the only other thing I'll highlight is that with that cash is, of course, we can look at CapEx. We always look at the right opportunities for M&A. But again, it's not the lack of cash or -- target that gets in the way. It's the fact that we're very, very demanding on the -- on our expectations and on the value creation. So we can look at things, and we're not going to move unless we really find value, which is what we did early last year with the agro business that we bought. Ilham?

Ilham Kadri - CEO

I fully agree. And frankly, it's good to pause and enjoy the view. The pension, as you know Wim, was the nail in the shoe of Solvay when I started in this company. And I thank the teams, and specifically, the finance team here for the pension funding; there is a lot of negotiation and engagements with the trustees and different institutions across different countries, which happened behind the curtain and the hard work and deleveraging and paying epsilon 1.1 billion on pension and on net debt, epsilon 1.6 billion. Unheard of, frankly, in 2.5 years.

So really enjoying to see a strong balance sheet. That's my belief, any company should have a strong balance sheet. And indeed, we just have a luxury now to contemplate where to invest. We have -- the good news is that since 3 years in the job, we built a really great organic growth platforms, right, which you see. They are real. We can win. We can -- the opportunity is real. We are a winner, and it's worth it economically. So we go for it.

And obviously, we continue looking at strategic portfolio, but with a high level of discipline. The allocation of resources and the change in governance, which we did since March 2019 has paid dividends, and this is not changing.

Operator

We have another question from Chetan Udeshi from JPMorgan.

Chetan Udeshi - JPMorgan Chase

I just had a few questions. First one was I think within the provision line and also within the exceptionals, I think there is a mention of €123 million exceptional costs associated with results from legacy remediation and major litigations, which seems primarily related to remediation costs.

I'm just curious to understand where is this \in 100 million remediation cost, like which part of the business is this related to? Is this essentially going back to the PFAS remediation provisions that you guys are now starting to build up? Any color there will be useful.

A bit technical here again -- if I look at the cash flow, there is a big bump in the dividend payments from associates and JVs to almost €130 million last year from €25 million in 2020. Do you think this is sustainable going forward? Clearly, and most of this might be coming from the PVC JV in Russia, but any color there would be useful.

And last question, there's a big jump in revenue from noncore activities in fourth quarter. I mean, it's more than double versus third quarter 2021. I think this is mainly related to your energy trading and sales business. But can you help us understand if this had any profit impact or EBITDA impact as well given the significant increase in sales?

Karim Hajjar - CFO

Sure. First and foremost, I think I mistold a provision. There's nothing exceptional in the remediation line. Yes, it's a little higher than we've had historically, but there's nothing particular that jumps up in terms of those major outcome and major costs that we flagged.

What I want to highlight though is I'm going to confirm what you said because your assumptions are absolutely spot on. The spike in dividends from non-controlled entities is really around Rusvinyl; it is dividend, exceptional dividends. Again, we're benefiting from super-cycle earnings. And the great news is we're monetizing it, we're crystallizing and getting the cash, record dividends. That's the major part of it.

And on the noncore earnings, again, you're spot on. It really is around the equity accounting. It's mainly the energy business and the onetime impact that we highlighted. Thanks, Chetan.

Operator

We have another question from Geoff Haire from UBS.

Geoffrey Haire - UBS Investment Bank

I was just wondering if we could talk a little bit about specialty plastics. And could you talk about the different trends that you may be seeing in volume terms for ICEs and EVs? And also talk a little bit about, do you see a big margin difference in the products that you're selling into ICE and EVs, please?

Ilham Kadri - CEO

Yes, of course, and I can take it up. And maybe for those who didn't actually listen to or attended the webinar, we had a webinar dedicated to auto, and I think it's now available on our website. Our belief on ICE and the move to hybrid and electric is, that by 2030, half of the market will stay with ICE, and the other half will move to hybrid and BEVs. Obviously, there is an ICE power train in the hybrid, so that's good for us. And along with the electric powertrain.

We also shared with you that the opportunity is real for us. We've seen it. It was stress-tested during the COVID-19 pandemic because our, frankly, electric PVDF and other polymers to lighten the car has been just increasing, including in the midst of the crisis. And our numbers we shared with you that we grew this business with an -- with a CAGR of 8% between 2016 and 2021 from €500 million to €800 million altogether. And that this number will likely become €1.5 billion by 2025, and can go above and beyond €2.5 billion by 2030.

And that's a great opportunity. I mean, you see that investing in PVDF and upstream monomers, and feedstock is a high barrier to entry. In fact, I was in Tavaux just a few days ago to start and inaugurate this new construction. And actually, we're building five different plants, all vertically integrated.

We also -- what we told you in terms of the opportunities that we double our addressable markets and value by market, which is great for the company and the revenues.

And we are in suspension just to finish with the technology, and suspension as compared to emulsion, it's the supply of choice for high-end batteries. Basically, it gives a better electric addition in NMC, for example, as compared to the emission technology.

So all in all, we feel really good about that. The margins are as good as we have today. So we will keep our margins, we will double the accessible market. And we have the technology, the know-how, the customer access, the conversations, right? Our customers were really involved with us in making these investments happen in Europe -- in localizing the value chain for batteries.

And at the end of the day, we're also agnostic to the cathode type. We are agnostic to the industry in a way because PVDF goes to other businesses. So there is a de-risking here of the investments. Obviously, you know that in Changshu, China, we also doubled our capacity and we are now looking and discussing how to invest further either in Asia or in the United States of America. Back to you.

Geoffrey Haire - UBS Investment Bank

Could you possibly comment on just what you're seeing currently in Q4 and what you expect to see in the first half of 2022 in terms of EVs and ICE demand?

Ilham Kadri - CEO

Yes, great question. And we've seen a very strong demand last year. When we came out of 2020, there was a lot of destocking during the crisis, et cetera, and you had to rebuild inventories in 2021. And in quarter 4, frankly, there was a lack of seasonality in quarter 4 with strong demand, especially in batteries. So we've seen this very strong, the order book entering quarter 1, remains strong. Our order book covers anywhere between 8 weeks to 10 weeks for Specialty Polymers. So demand indicators continue to align strongly with the order book and pricing remains the leading indicator.

So we shall see on the raw material and the inflation, how we're going to engage in the second quarter of 2022. You've seen LMC's forecast, I shared it with you. It looks like they are very still comfortable, although it can change later, but confident that 2022 will deliver double-digit growth, probably heavily weighted towards the second half than the first half. But for us, the order books are still strong, and that's what we see today in our books. Back to you.

Geoffrey Haire - UBS Investment Bank

And are order books in both ICE and EVs still strong?

Ilham Kadri - CEO

Yes. I mean, higher -- I mean, there is a strong demand in electric batteries, right, and demand for products for EV and hybrids but definitely, the ICE is still okay, yes.

And don't forget as well, I'm just -- beyond what you see from the ICE bit rate against electric hybrid is that we are also in light-weighting. So we enter the existing models and the existing technology, whenever we can replace metal and we can lighten the vehicle, which goes, as you know, into cutting the emissions and allowing the car manufacturers to become more sustainable.

You heard it from -- again, celebrate that Philippe is with us that EVS is emerging and is small, it's new, but it will also benefit the mining and the soda ash businesses. Back to you.

Operator

We have another question from Mubasher Chaudhry from Citi.

Mubasher Chaudhry - Citigroup Inc.

You've had relatively good performance and cash generation as well, as you talked about deleveraging and having a good balance sheet and starting to focus on organic investment. Is it fair to say from a capital allocation perspective, that the focus is very much on organic delivery and focusing on the business as it currently stands, therefore, M&A is off the table? And if not, is there any preference for size or – and market exposure that you'd be most excited by from an M&A perspective?

Ilham Kadri - CEO

I think you're right. Since I joined the company, frankly, my first objective was to deleverage the balance sheet, to make the cash generation not a fourth quarter story, but a quarterly story with high discipline. And you remember, we've changed our incentives and frankly, this organization had just responded better than good. So we really trained the muscle. So very happy with the generation of the cash across all the businesses.

I think, again, Philippe is here. And soda ash, as you know, has been and is a resilient cash generator, but other businesses, Specialty Polymers and Hydrogen Peroxide, et cetera, they are equally generating quality free cash flow and the conversion has been really good.

Now in terms of investments, since I joined the company, I was really looking at what are those key big bets we have in terms of organic growth. And we do have quite substantial great projects, and you've seen them.

I mean, batteries is one, we're investing in thermoplastic composites. We just finished our investments in Greenville in the United States of America. Green hydrogen is still small, but we are putting a semi-commercial plant for Aquivion membranes for green hydrogen. We announced earlier this week the PSU, the UDEL story for health care, high-margin businesses. And then ultra-purified hydrogen peroxide, which goes to semiconductors and the world is short and thirsty for getting more semiconductors, and our customers are asking us to invest very close to them. So after our joint venture, an alliance in Taiwan, we are looking at investments here in Europe. We don't have yet the final choice of the manufacturing plant but we will inform you.

On the inorganic side, first of all, there is no sacred cow. We look at it from the strategic planning point of view. We are disciplined. And if there is a strategic fit, and we believe we can be the best owner, the next question for me will be how much it will cost? Is it creating value? And I know our history has been debated a bit on past acquisitions. So we want to -- we will look at it and we do it right, including the synergies. What are they? What are the expected returns? So no emotion. It's very clinical, based on facts, and we will be extremely disciplined on any inorganic M&A.

Mubasher Chaudhry - Citigroup Inc.

Great. Just to come back to you on that. Is there any limitation on size? And kind of would you be keen to go for bolt-on side? Or that doesn't matter regardless of if much of the investment criteria and is attractive you're open to bigger ticket M&A as well?

Ilham Kadri - CEO

So I don't want here to change the risk profile of the company, right? So I'm very careful with the big acquisition we have. Remember, I mean, we exited 50 – cycle of 50 M&As after the acquisition of Rhodia and Cytec, we had actually to merge those, integrate them, build the synergies, which happened very recently. We contemplated, and we still contemplate, small M&As building agro. Remember, we did a small one last year, so that's good.

But big is not necessarily beautiful or profitable. So I'm very -- I've seen many "bigs" in my career. So I'm very prudent and I will continue to look, obviously, at all the options on the table, but with discipline in returns.

Operator

So we are going to take the last question, Andreas Heine from Stifel.

Andreas Heine - Stifel Europe

It's on soda ash actually. I would like to come back to the comments you made on what soda ash can deliver this year in the context of the over-earning of Coatis and Rusvinyl. And you signed that the last two were over earning by €100 million last year. I might not do this this year. Is that right that you are so optimistic that soda ash might increase earnings by €200 million this year on the tight market and the price increases you have achieved at the beginning of the year? The first question.

The second related to this: is soda ash as variable costs are highly dependent on the energy cost. And my understanding is, in looking at your annual report, you have quite high hedges in energy. How is it for 2022 in the current market, you have now the annual price and you know where energy prices are currently on the spot market, how you handle hedging your energy position? Or will it be a more open position this year?

Ilham Kadri - CEO

Yes. I will leave the energy question, I will leave the other to Philippe as he is with us. But definitely, on the €100 million, we're not saying -- I mean there is a super-cycle. You understood it from Coatis and Rusvinyl, which we evaluated around €100 million. This is baked in our guidance of mid-single digits for the EBITDA for 2022. We don't give guidance by GBU and by business, right? But obviously, we'll give you more color as I expose some of my GBU Presidents over the year to give you the quality of the business.

And I think what Philippe is saying is that after 2020, where we elected to let go some low profitable volumes in the market, we did it really intentionally, right? And frankly, it worked very well for us in 2021. We actually -- really, we were more resilient and more profitable than our competitors, right, because we have discipline, we protect our margins and we renegotiated our prices.

And I thank, again, Philippe and his team to be bold and courageous to reopen historically, some of the contracts. And not only to see the impact in quarter 4, but definitely in 2022, including having energy surcharge. Philippe, can you build on that?

Philippe Kehren - President of Soda Ash & Derivatives

Yes, absolutely. Thanks a lot, Andreas, for the question. Indeed, we are extremely exposed to energy markets. As you know, it's the biggest part of our variable costs.

Well, the answer is very simple, it's a combination of hedge that we've taken. And also, under the current circumstances, some new contractual clauses that allow us in some cases, either to pass on those extra energy costs, in particular, if they continue to go up, and we fear this might happen given the context. And also some reopeners that would allow us to pass some price increases. So this is exactly what we are doing. What I would like to mention on top of that is that it's highlighting the fact that doing the energy transition is key because moving from coal or gas to refuse the right fuel, biomass and so on with local sourcing, local sourcing that we can secure in the long term, help us to get out of this huge volatility that we see increasing month after month on the fossil fuel energy markets. Thank you.

Ilham Kadri - CEO

So thank you. And to clarify, it's €100 million, it's not €200 million. So I don't want you to walk away with that number. So yes, just to be clear.

Well, listen, I think it's the last question, and I would like really to thank Philippe. He's the first one now joining us in an earnings call and you will see us having guests from different businesses as we continue building the equity stories of our strong and robust portfolio. Thank you. Thank you very much.

Jodi Allen - Head of IR

This concludes our call today. And as always, the IR team is available for any follow-up questions that you may have. Thank you so much, and have a good day.