SOLVAY Q2 2022 Results call for Analyst & Investors

Operator

Welcome to Solvay's Second Quarter 2022 Results Webcast. Solvay team, the floor is yours.

Jodi Allen

Good afternoon, ladies and gentlemen, and welcome to our second quarter 2022 earnings call. This is Jody Allen, I'm the Head of Investor Relations, and I'm joined today by our CEO, Ilham Kadri, and our CFO, Karim Hajjar. Today's call is being recorded and will be made available for replay on the investor relations section of our website later today.

I would like to remind all participants that the presentation includes forward-looking statements which are subject to risk 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

Hello, everyone. I'll begin my remarks as always with the health and safety overview. Compared to the second quarter of 2021 the reportable injury-and-illness rates are down across the Group, and we continue working hard to raise the bar towards a zero-incident goal. Regarding COVID-19 there is an upward trend of infection, mostly in Europe. But it's important to know that this has not impact on our operations, and a future interruption is not foreseen.

Moving on now to our second quarter 2022 results on slide three.

You've heard me say before that the strong performance we delivered in the quarter on sales, EBITDA and cash flow are a testament to the continuing effort of our outstanding team. I do not take this for granted and I'm very proud of their results.

Our business has continued to perform strongly, overcoming volatility in an environment of unprecedented inflationary pressure from energy and raw material cost, along with supply chain and logistics constraints.

Net sales in the quarter were up 33% organically versus the previous year quarter.

The clear driver was capturing 26% growth in prices – we have detailed this on slide four. In quarter two €690 million of price improvement offset €414 million of inflationary cost. Looking back 12 months, we have delivered in total €1.6 billion of price actions, overcoming €1.2 billion in variable cost in the same period. This is remarkable and again, I want to thank our front-line organisation for taking these necessary actions. Capturing a proportional share of our value of the value of our products brings to the market is not automatic. Our value-selling front line training has paid off and our sales team know that we sell the value proposition and involves the products. This has enabled us to mitigate the rising cost and preserved our EBITDA margin of 24.8% in the quarter.

While price was an important of the delivery in quarter two, I wish to acknowledge and thank our customer as we work very hard to meet their needs; and by doing so, I'm particularly proud to report that we also delivered volume growth. In turbulent times, our customers appreciate our ability to supply them locally and keep our assets running safely, sustainably and productively to consistently serve their needs, and align demand trends in our key end markets enabled us to grow volume by 6% in quarter two. It's worth noting that sales grew by 35% and 29%, respectively, related to quarter two last year for the businesses that will form Specialty Co. and Essential Co. in the future.

The strong demand momentum from Q1 continued in quarter two in several key markets. For example, Automotive grew 44%, Electronics grew 47%, Agro & Seed grew 57%, and Healthcare grew 28%, to name a few.

Our best-in-class portfolio enabled us to capture this growth and, in fact, grow our sales above market growth rates in each of the served markets.

From a geographic view, we reported sales growth in all regions. China, in particular, was a positive surprise. If you recall, we had forecasted a negative impact of about €50 million in sales related to the lockdown in Shanghai. However, I am thrilled and pleased to share that the recovery occurred much quicker than expected and our teams in China achieved a new quarterly record with sales up 36% on an organic basis relative to quarter two last year.

EBITDA of €864 million was up 35% on a comparable scope and foreign exchange basis, with all three segments contributing to the earning growth.

Free cash flow was €257 million in the second quarter. This is the 13th consecutive quarter of positive free cash flow. This reflects our strong performance, despite an increase in working capital and higher CAPEX for our growth projects.

Now, I'm extremely proud to report an all-time record high ROCE, return on capital employed, at 13.7% – 230 basis points above year-end 2021, and significantly above the 8% level in 2019. We've done this both by raising the bar operationally, optimising our industrial footprint, upgrading the quality of our portfolio of businesses, pruning those businesses that couldn't be improved further, and prioritising and focusing on higher-end specialty growth as we deliver the value proposition our solutions bring to our customers.

Turning now to our ambitious ESG goals as show on slide five.

Starting with our climate initiatives, which are to reduce greenhouse gas emissions by 30% between 2018 and 2030, and to reach carbon neutrality before 2040 in all businesses, and before 2050 in Soda Ash, this remains on track at this point of time. However, at this moment, we are faced with unprecedented environments related to natural gas risk. And therefore, as part of our business continuity planning, we're exploring the voluntary use of coal or fossil fuel only if absolutely necessary to keep our plants and our customers' plants in operation. I will take you through these contingency plans later in the call.

In the meantime, we have made great progress integrating SCOPE 3 emissions into our target. I remind you that SCOPE 3 considered emissions generated all along the value chain. Recognising this potential, we are committed to set a 2023 target for our reductions in SCOPE 3 emissions by joining the science-based target initiative and have set the ambition to reduce SCOPE 3 emissions by 24% by 2030.

To achieve the SCOPE 3 target, we will set up, and we are setting up our work in close collaboration with our suppliers and customers. For example, we have launched procurement initiatives for strategic suppliers as climate commitment will become a criteria of choice at Solvay for future supplier relationships. We are developing partnerships with our customers to eco-design new products to reduce emissions from cradle to end-of-life. With this commitment, Solvay's taking an important step towards net-zero emissions and continuing our fight against global warming.

We have also made great progress on our journey of bringing more sustainable technologies to the markets we serve. In June, we announced our voluntary commitment to phase out our use of fluorosurfactants. We are very proud of our Technology team, who innovated a new polymerisation process that doesn't require the use of fluorosurfactants while keeping the unique properties required by our customers, who continue to offer more sustainable value propositions. As you know, one year ago, in July 2021, we successfully eliminated fluorosurfactants from our site in New Jersey. And recently, we have also committed to phase out this technology from the remaining site in Spinetta, Italy, with a target completion by 2026.

I will now take the opportunity to share a few customer highlights in the quarter. We are honoured to have received several customer awards in the recent weeks, which we find particularly meaningful given the hard work and commitment of our team to focus on our customers, especially in these challenging times.

First, I'll highlight Boeing, as you know, a top aerospace customer. As you can imagine, they have over 30,000 suppliers, and we were one of the nine who were acknowledged with a Supplier of the Year Award. Also in the aerospace market, Lockheed Martin, a top defence customer, recognised our Composite Material business with an "Elite Supplier Award" for 100% on time deliveries and zero quality defects throughout 2021 – and it means a lot to us. These come at such pivotal times for us, as the industry's beginning its recovery and we are honoured and energised by the recognition. Congratulations to all of our Composite Material team members – you are truly living our vision.

Our Special Chem businesses have also received the Best Partner Award from Samsung in recognition of their great performance through difficult supply environments. And finally, the last but not the least, the Coating business received the Best Supplier of the Year Award from Brazil's Oxiteno. The criteria included service, delivery, quality and sustainable practices.

I would also like to acknowledge some new business wins in the quarter.
Technology Solutions just won a new mine contract in Peru. In addition to this, the mining team is making great with its digital platform, which they call SmartFloat. In fact, Smart Float is an expert system developed by Solvay to accurately dose the selected reagents required in a copper floatation operation. This can be done without any human intervention – therefore, remotely. We are making chemistry dynamic with real-time adjustments to a number of operating parameters, enabling our customers to significantly increase metal extraction yield and improve their operational efficiency.

The automotive team in Specialty Polymers has won a brand-new application using long fibre thermoplastic material and it demonstrates how our new innovative materials are being adopted in new electrified drivetrains by high-profile OEMs like BMW.

Last but certainly not the least, again, our Coatis business has signed a long-term contract to supply adipic acid for a term of 8.5 years, quadrupling the volume of the product compared to previous contracts.

Finally, we continue to invest in growth and in capacity to fuel our growth in our core markets. Recently, we announced our plan to invest in a new greenfield site in Arizona, in the United States of America, close to our key customers to supply electronic grade hydrogen peroxide to the growing US semiconductor manufacturing industry. The facility will treat hydrogen peroxide into an ultra-high purity grade to clean silicon wafers that are needed to manufacture semiconductors essential components, as you know, of electronic devices.

Now, Karim will take us through the Group's segments and financial performance in more detail. Karim?

Karim Hajjar

Thanks Ilham, with pleasure. Good morning, good afternoon, everybody. As usual, I'm going to go straight to our business review and of course we'll refer to figures on an organic basis, by which I mean constant scope, constant currency unless of course I highlighted otherwise.

Sales in the Materials segment increased 38% driven by strong demand for Specialty Polymers and Composite Materials. And together that led to record second quarter sales and earnings.

Sales in Specialty Polymers reached new records increasing 43% compared to Q2 last year and up 21% against the first quarter of this year. Pricing accounted for around 75% of the total net sales increase. Volume growth made up the remaining 25%. We saw continued strong demand in markets such as automotive including EV batteries of course and electronics which includes small devices and in healthcare applications.

The automotive market continues to be fertile ground for innovation with our sales into electrification and lightweighting applications growing really strongly. You'll be pleased to note also that we reached an important milestone in mid-May when our new PVDF capacity came online in China which doubled production capacity and positions us really well to meet the growing demand in electric and hybrid vehicles. This is timely because as we know sales volumes for batteries are up around 50% which is a clear sign that the new technologies are driving substitutions in auto with electric vehicles. The most recent market forecast for 2022 from LMC indicates growth of around 6% in light duty vehicle production on a global basis. And this is happening beyond the auto market. For example, let's turn to electronics. We see strong growth as we see semiconductor investment and expanding 5G infrastructures. Last but not least, momentum in healthcare is also strong in many areas, be it biomaterials, medical devices, pharmaceutical packaging, to name but a few.

Turning to Composite Materials, sales in that business grew 24% year-on-year with strong sales growth to our civil aerospace customers. Clearly the recovery in air passenger traffic is prompting an increase in build rates for single-aisle aircraft. And we also see an increase in the business jet market which is happening faster than we expected frankly. And that's good. On the other hand sales to the defence industry were down in the quarter as supply chain issues slowed production rate at some key customers. Wrapping up Materials, segment EBITDA increases 45% compared with the second quarter of last year and they increased 32% sequentially against the first quarter of this year. But to note, the EBITDA margin's increased to 32.5% in Q2.

Turning to Chemicals on slide eight. Second quarter sales grew or rose 27% driven mainly by price increases which were necessary, really important to offset rising inflationary costs. Demand was strong across the segment but we did experience various forces majeures and production outages and these led to a modest 1% decline in volumes. Had this not happened we would have seen a modest increase in volumes. Now these outages impacted both Soda Ash and Peroxides and actually cost us around €20 million in profits in the quarter, these issues have all been fully resolved.

Our Soda Ash & Derivatives sales increased 35% thanks to the continued demand strength and tight supply and price increasing to offset the significant rise in energy costs. Volume growth was constrained, as I explained, by asset outages due to the force majeure issues affecting Europe and in the US. The Conflict in Ukraine and the consequential embargo on certain imports has prompted us to secure alternative sources of supply especially solid fuels, for example anthracite, which are used for energy generation and coal by the way – which are used for energy generation and in the production process of our European sites. Switching sources of anthracite or even coal implies different specifications, be it size, impurities, energy content; and this in turn requires modifications in our industrial processes and they impact asset utilisation. And our engineers have been working really hard to adapt and to make sure we continue to optimise and underpin business continuity in these situations. And we are getting there which is really good. Bicarbonate sales also increased driven by growth in flue gas treatment for industrial plants and in treating maritime transportation missions as well as healthcare applications. In Q2 we were also pleased to start up one of the largest sodium bicarbonate plant in the world in Devnya, Bulgaria. And we are very well-placed to meet growing demand.

Peroxide sales up 10% driven mainly by pricing but also by volume growth in North and South America due to strong demand. Q2 saw the business face some headwinds from an operational outage at our HPPO site in Antwerp and reduced demand at a major pulp and paper customer in Europe who experienced a strike which has since been resolved by them.

Silica sales grew 42.6% from price and volume increases driven by increased demand for high performance silica in electric vehicle tyres. Sales volume growth was higher than entire industry production rates.

Coatis continued to benefit from strong momentum with sales up 17%, higher volumes and prices on strong demand in solvents and in phenol compensated for higher energy prices and logistics costs. Fair to say as well that global logistics and supply chain issues we've experienced have actually favoured local producers such as our Coatis business as customers seek to secure their supplies.

The Chemical segment EBITDA was up 18% thanks to higher prices across all businesses. The Chemical segment delivered an EBITDA margin of 28.2%. Now down 2.2% against Q2 last year and that's largely because of the outages I've referred to.

Turning to Solutions segment on slide nine, you can see that sales in the quarter were up 33% driven by strong demand across all businesses.

Sales in our Novecare business increased 25% year-on-year, almost entirely due to pricing. With strong demand in agro, in coatings as well as the home and personal care market. Growth in agro was driven by demand for green solvents. Sales to coatings and HPC, home and personal care, was also strong as demand for sustainable solutions continues to grow in these markets. And clearly as you know we've been upgrading our innovation and product offering to our customers in this regard. For those of you who attended our consumer market webinar, you will recall that we have dramatically improved the quality and the performance of this business in the last three years. We did this through a number of decisive actions including shifting our product mix towards more specialty solutions, investing in innovation, commercial programmes that focus on the most strategic growth-oriented customers and also pruning our product portfolio of our less strategic business lines. Cost reductions and the results speak for themselves.

Turning to oil and gas solutions, sales grew 43% continuing the strong momentum from the first quarter of the year. The strong sales performance was driven by price increases and by some market share gains in the sector.

Special chem sales increased 37% thanks to strengthening electronics although it was partially offset by weakness in automotive catalysts due to softer demand there.

Technology solutions sales increased 34% organically compared to the second quarter last year. That reflects sustained demand in mining and end polymer additives. Pricing measures were able to more than offset cost inflation.

Turning to our aroma performance business it delivered record sales in the quarter with 43% growth compared to Q2 last year. Demand was particularly strong in the food and beverage sector and sustained in flavours and fragrance markets as well. Pricing was able to more than offset cost inflation due to that strong demand.

Second quarter EBITDA in the Solutions segment rose 58%. I've never seen numbers like this frankly. 58%. And that extended the trend of the first quarter of the year. EBITDA margin in the segment was up 3.8% taking it to 22% which is frankly outstanding, because as I said if you look back to three years, we were in the 17% range three years ago. This performance really reflects our team's focus, their determination on meeting our customers' needs, especially for higher value products as well as the benefit of structural cost reductions and the simplification that we've been delivering and that we're sustaining.

And before I move on to structural cost reductions for the Group, I will say a few words on the EBITDA contribution of our Corporate and Business Services activity which was a negative €84 million in Q2. The €38 million increase in the quarter was due to the acceleration of investments in digital transformation together with important investments in our growth platforms as well as in cybersecurity and a modest loss from our activities in our energy business in France. As well as remuneration supplements that we announced on 12th July this year which will assist to come to the assistance of many, many of our employees globally.

Moving on to slide ten, structural savings for the quarter came in at €22 million in the quarter, just as it did in Q1, resulting in a total structural savings of €44 million in the first quarter. Half of the cost reductions relate to labor costs and the other half from a combination of productivity increases and lower indirect spend.

Cumulatively, structural cost-savings now amount to €430 million since 2020. And as we look forward and perhaps I'm stating the obvious and confirm that we will deliver the targeted €500 million in structural sustainable cost reductions well ahead of our 2024 commitments.

Slide 11 details for you the results of the price actions on volume development clearly showing how we're more than offsetting the 16% of fixed cost increases that is propelling our EBITDA performance forward which is up 32.6% year-on-year.

Let's talk about cash. On slide 12 you can see and the figures speak for themselves. Free cash flow reached €257 million. The strong EBITDA growth nearly offset the higher working capital. Clearly, as you can see everywhere, working capital is ballooning. It's increasing because of price and cost inflation and to higher value inventories. Indeed, if you take a look back to June 2021 you will see that our working capital has increased by €578 million in the space of 12 months. But our focus, our discipline which has been embedded really deeply in the organisation in the last couple of years is helping us to deliver what I would suggest is a class-leading working capital to sales ratio of 12.6%. I said the same thing last year in June if I look back at my notes and then it was 13.7%; so the teams are raising the bar. 12.6% against 13.7% and that is what's really helping us to deliver strong cash flow. And at the same time, we are investing. Our capex increased to €180 million for the quarter as we continued to invest for our future growth. And to make sure we support the energy transition in our decarbonisation.

Finally, and most importantly, free cash flow conversion has stood at 35.4% and; we've been over 30% for more than two years. And remember we said we'd get to over 30% by 2024. This is history. We're there and we've been there for quite a while now. That'll be all from me and so with that I'll hand you back to Ilham.

Ilham Kadri

Thank you, Karim. And I'd like to take now a moment to address something that is on all of our minds and the potential natural gas shortages that Europe may face in the near future. Just to put Solvay's exposure into context, I refer you to the map of our sites in Europe on slide 13. Solvay consumes natural gas at 32 of our 45 sites in the region to power our production processes, to power co-generation stations that produce electricity for our own plants and for the grid, and to a small extent as a raw material. Our top ten sites consume 90% of that gas.

Turning to slide 14, our teams are diligently working on contingency plans to ensure business continuity. In fact, every European site in Solvay has developed contingency plans to mitigate such challenges to the maximum extent possible. With these plans underway, we are confident that we can ensure continuity in our operations with up to 30% gas curtailment. For example, several sites are switching to alternative fuels such as LNG, coal or diesel fuel and while adapting our burners to use these alternative fuels. Other sites are using mobile diesel boilers that can complement steam production in the sites. We are also negotiating with authorities to secure gas supply to our core generation plants, as they supply the national grid and are critical to balance the national electricity system. In essence, our measures are about conservation, substitution, and smart planning.

We are also defining and prioritising production that is considered critical for our customers and the communities. We can leverage our global assets outside of Europe in the Americas and in the Asia Pacific region to compensate for reduced volume in Europe in order to ensure continuous supply. Our global footprint is a critical value proposition that is truly appreciated by our customers and partners these days. Not that many of us need convincing, but recent developments provide more motivation to stay true to our carbon neutrality roadmap, ensuring that we further derisk our businesses, and do more to look after our planet. In fact, some of our most energy-intensive plants are already converting to biomass as you all know. We've identified potential measures at each of our sites across Europe to implement and to manage our risk. Take for example our site in Rheinberg, Germany. You may remember the story, but it's particularly relevant now as we say it, this potential gas situation in Germany, and we are well underway switching to biomass or woodchips as part of our Solvay One Planet sustainability roadmap.

Other examples of sites that are making this switch include our site in Devnya, Bulgaria, and refuse derived fuel or RDF at Dombasle in France. And these projects will continue, or even accelerated while we also take additional measures to manage through the potential short-term impact related to the Russian supply. Of course, all of these proactive measures are those that are within our own control, and this obviously doesn't consider the indirect impact associated with our suppliers or our customers abilities to operate.

I will now say a few words about our outlook for the remainder of the year. Our teams have consistently demonstrated our ability to manage through many challenging periods and difficult market environments. The current volatility in energy prices, risk of natural gas curtailment, high inflation rates around the globe on top of an already challenging supply chain increases the uncertainty of the market environment in the second half and specifically in quarter four. Newsflow be it from the IMF or other independent authoritative bodies point to storm clouds ahead for us all. So it's important to brace ourselves to be prepared. As you would expect from us, we continue to stay focused on what is in our control. Manufacturing quality products, innovating for the future, investing in growth and sustainability, and most importantly staying close, very close to our customers. And you know, we are changing the game, and we are winning.

To date, the underlying demand environment in the third quarter remain healthy based on our current order book. The positive demand trends are expected to continue, driven by auto, aero, electronics, agro, mining, and healthcare, yet we cannot ignore all the uncertainties in the macro environment as we look to quarter four. Taking all of this into consideration and based on our strong performance of the first half, we are upgrading our 2022 full-year EBITDA estimate to grow on an organic basis in a range between 14% and 18%. The range reflects- on the low side- a scenario where we begin to feel the effects of a market slowdown in quarter four and -on the high side- a scenario where business remains robust with limited new risks or macro developments and normal year-end seasonality. Please note our guidance doesn't include any major additional headwinds associated with further curtailment of natural gas supplies in Europe.

As I said before, we are confident in our contingency plan, but this only supports our own production, and doesn't include the indirect effect of our suppliers or our customers operations, and this could be significant in such a scenario. As a result of the improved performance, we are also increasing our cash guidance. We continue to invest in growth in – with capacity expansion and decarbonisation projects in the course of the year. And CAPEX is expected to be around EUR 850 million to EUR 900 million, so 15-20% more than in 2021. Half of that increase represents inflationary effect. Taking these factors into consideration as well as the strong performance in the first half, we increased our full-year free cash flow estimates from EUR 650 million to EUR 750 million.

Now, on the separation project that we announced in March, the project management office is up and running. All indicators are green, and we are on track. Project teams are fully mobilised and progressing on critical matters such as defining distinct operating models for Specialty Co. and for Essential Co., and critical work such as defining how we will disentangle and realign many of our 300-plus legal entities in a way that preserves value. We're also very careful in making sure that we engage our senior leaders without diluting their focus on our customers and on maintaining the delivery momentum.

Lastly, I would like to remind you all of our series of webinars that we have presented to analysts and investors on various topics. These will continue in the second half, and our investor relations team will share those details with you once available. We have accomplished much already in the first half of this year, but there is much more to do. I remain confident in our people. They continue, every day, to demonstrate our ability to manage through significant challenges. On top of this, our improved portfolio coupled with our sustainability roadmap and strong balance sheet keep us well-positioned to progress on our transformation journey, which will unlock value for our customers, for our shareholders, and for our employees. And with that, Karim and I are happy to take your questions.

Operator
Thank you very much. Ladies, and gentlemen, we will now begin our Q&A session. If you wish to ask a question, please dial zero one on your telephone keypad and you will enter a queue. After you are announced, you – you can ask your question. Once again, please dial zero one on your telephone keypad. Your first question comes from Chetan Udeshi from JP Morgan. Please go ahead.

Chetan Udeshi (JP Morgan)
Yeah. Hi. Thanks for letting me ask a couple of questions. The first one was, you know, Ilham and Karim, you talked – both of you talked a lot about record margin, record EBITDA, and currently for us when we hear the word record, our alarm bells start to ring in terms of what's going to come next. So, I'm just curious in terms of how do you guys think about sustainability of all the numbers that we see you print today, especially on the materials side?

And I think the related question, iif you can provide any sort of colour, how much of the materials pricing is driven by PVDF if you can break that out?

And the second question is, just to clarify, did you say that based on your contingency planning you can ensure business continuity for your plants in Europe even with 30% cut to gas supply? Thanks.

Ilham Kadri
Yeah. Hi Chetan and thank you for your questions. I think there was pricing, the PVDF specialty polymer and the curtailments, one, two, three. So, pricing, Chetan, and when we talk, when we say record, it's clinical. It's comparing to the past, and it's just a record. So, on the pricing grid question, I think the stickiness is an important question. And remember, Chetan, we were a lagger in pricing for a long time, and I told you we were going to fix that in the first semester in 2021. And you have seen us do just that. We invested in H2, I'm not sure if it's visible to you, and we retrained our almost 800 salesforce in the front line in H2 2021 on value pricing. We coached supervisors, we changed incentive. We stopped selling products; rather we start selling value proposition and invoicing product. And this is what has been implemented, not knowing, frankly, that we are going to face one of the most inflationary environments I've ever seen in my career, as starting from March this year.

So, now, at high level, 50-60% of the portfolio probably, Chetan, is supply/demand driven and could be seen as semi-commoditised type of dynamics where pricing elasticity is important. And by the way, we are leaders and the supply is tight. So the good news is that, again, we are leaders in our market. Secondly, we have some degree of cost protection, pricing mechanism. We have revised our formula second half last year. Like in soda ash, we baked the energy cost, again, without knowing that we are going to face an energy inflationary environment, which is helping us. And the supply is tight and the customers request reinvestment, including in soda ash, for example.

The rest of the portfolio is more specialty where value pricing is key. This is based on a strong value proposition, combining high-quality specs, innovative products with IP and differentiation solution that customers can win with it. And number three is the lower total cost of ownership, so much of which comes from our specialty business.

So, yes, one is value proposition. Our relationship with customers are becoming more strategic. So the top 20 now strategic customers have a senior account manager sponsored by one executive leadership team, including myself. And three is our global presence. Security of supply more than ever today is as important, even sometimes more important, than pricing. And continuously bringing innovative products, and reinvestments. I mean, you've seen us accelerating our reinvestment in beautiful organic businesses, organically, is important to our customers.

Second question was about specialty polymers and PVDF. For instance, sales in specialty polymers reached, indeed, new records, 43% compared to the second quarter of last year and 20% sequentially versus quarter one. Pricing accounted for around 75% of the total net sales increase, the volume growth made up around 25%. But this is not a story of just one quarter, Chetan. So last year, if I give you a number, quarter one 2021 was 18%, quarter two was 57%, quarter three was 46%, quarter four, 12%, this year 30% and 55%. So it's not an anecdote. We have been growing at double-digit rate since quarter one 2021. And I think we we've told – and this is in auto and the numbers I gave you, by the way. So, it's not an anecdote. We've told you that automotive – and the webinar in auto has been clarifying and sharing with you the equity story. And we use a variety of high-performing polymers in auto. This is not only PVDF. PVDF is probably less than 20% of the specialty polymers sales, but we have PPA, PPS, PEEK, which go, by the way, under the hood application for electrification, reducing the vehicle weight. Specialty polymers supplies other markets from electronic to consumers and food packaging to healthcare. So it's truly a broad-based growth across our entire material portfolio.

Last one is gas. Yes, you heard it right, up to 30% we can run our operations. And, obviously, there are some plants like Rheinberg, and this is the good story, I remind all that we have switched one boiler already to wood chips in Rheinberg. And today it's helping us to be able to run these plants up to 50% of gas cuts. So yes, each plant is not one size fits all. Each plant has its own plan. We've shared with you our plan B. And, indeed, we are preparing, as I told you, with different measure to run without disruption. Obviously, if the situation becomes dramatic, we shall see, but so far so good and our teams have worked relentlessly to really secure and continue to work on preparing plan B for each site. Back to you.

Jodi Allen
Operator, I think we're ready for the next question.

Operator:
Thank you. The next question comes from Jaideep Pandya from On Field Research, please go ahead.

Jaideep Pandya
Thanks. And congrats on a very strong result. First question really is around the chemicals business. So could you just explain to us, how is the pricing for soda ash and peroxide being set these days, given you guys hedge a lot of your key ingredients such as coal, natural gas, electricity, and you've been doing that historically and you've incorporated energy surcharges. Because when I look at this year, you've had about €100 million growth for EBITDA for first half versus last year, although volumes have been relatively flattish. So what is the story in chemicals this year? That's my first question.

And the second question, sorry to ask this again, but goes back to Chetan's question on PVDF, and I appreciate this is a portfolio of polymers, but PVDF prices have started come off in China and there are new technologies coming from players like Tichi [inautible]. So, how confident are you that PVDF is going to be used in the same form as it is today in the outer years in 2025, 2026, and the content of PVDF in a battery is not going to go down, given the prices have gone to such astronomical levels? Thanks a lot.

Ilham Kadri
Thank you, Jaideep, and thank you for your words. Well, listen, in chemicals, the only reason you've seen the volume slightly down is because of the force majeures as Karim mentioned, and this is behind us. And only slightly down. The markets in soda ash, as you referred to, remains extremely tight at this time on top of the inflationary environment. Remember what I told you in quarter three last year, that we reopened for the first time in our history, the annual contract. Because inflation indeed started already last year, I mean, it just aggravated in quarter one this year. So the first time in our history, we reopened the annual contract with our customers when energy prices were starting to rise. And since then, what we have done, we have included energy clauses, surcharges on coal, on anthracite, natural gas, and have been systematically embedded, which made our life, if I might say, a bit easier as from March this year.

So our contract remains still negotiated annually, but the surcharges come on the top of the existing contract in order to manage the volatility. So you can think of the surcharges as temporary because when energy costs decrease, so will they. And our surcharge, to give you an idea, Jaideep, they are calculated each month and invoice quarterly.

Silica, I mean, you didn't talk about this, but we have solid volumes there thanks to – for example, we have more silica in EV, by tyres. The EV vehicles and hybrid, they need more – they need better tyres, so they need more silica and better rolling resistance. So, that's something which we see and we are there, increasing our market share.

You came back to the question of PVDF for us and additional – well, listen, we talked about it during our webinar where we explained to you that our technology is also differentiated. What matters is the availability of high-quality products for batteries that are approved and specified. Qualification time can be long and complex. I remind you that we have a suspension technology which is very different from the immersion technology. Note that one day, probably, there will be more suspension capacity, but it's very unique. It's high-end batteries as compared to the immersion. It goes to the high-end batteries with longer autonomy, with better performance. And the volumes you see in our section of the nominal global PVDF capacity, that explained better the supply shortage.

The price hike has been driven primarily by one raw material, you may know about it, 142b's dramatic price increase. And those people who are also upstream converted and have access to such upstream integrated products are going to win. And that's something we look at.

What – there was another question on hedging, right? Do you want to take the hedging question, Karim?

Karim Hajjar
Yeah, sure. JD I mean, fundamentally, I'm not going to get into the specifics on chemicals and the impact of hedging; as you'll appreciate, this is commercially-sensitive for us. What I can confirm is the following, and you probably know it, but we have been consistently prudent in hedging forward our energy exposures, including, obviously, gas and CO2, etc. That has not changed and we will continue to do that.

What I will say is that that gives us a benefit in the context of a rising energy cost environment, clearly. And without telling you what that number is, I can tell you that the positive pricing power, margin expansion you've seen will have happened even without the hedging across Solvay Group. And that's an important point to make because we appreciate hedging, but we don't want, in any way, our frontline teams, our commercial teams to lower the bar because of hedging. We need to be cost-competitive, price-competitive day in, day out, even without hedging, and we're seeing the results of that. Thanks.

Operator
Thank you.

Karim Hajjar
Operator, please?

Operator
Thank you. The next question comes from Wim Hoste from KBC Securities. Please go ahead.

Wim Hoste (KBC Securities)
Yes, good afternoon. A couple of questions from my side as well. Maybe, first, if I can come back to the full-year guidance, and if I look what you did in the first half in terms of EBITDA and then look what the guidance implies for the second half, there is at least €4 million reduction of EBITDA in the first half – in the second half versus the first half, which seems, really, a lot, also based on your commentary that Q3 started off nicely. So can I get some additional clarification on how you composed that guidance and what kind of, also, market growth or demand growth, or demand slowdown, you incorporated for Q4 when you put this guidance out? So that's the first question.

And then a second one would be on the outlook, specifically for composites, both, yeah, defence and civil. You mentioned some decline in defence in Q2 as a result, amongst others, of supply chain disruption, etc. How do you see that situation evolving into the second half of the year? Those are my questions.

Ilham Kadri
Yeah. Thank you, Wim. Well, listen, on the guidance, our current visibility shows a really healthy demand, based on our quarter three order books, right? And you know, since COVID, we implemented a centralised, bottom-up order book in the company, so we are, you know, taking advantage of that. A similar market trend continues, as I mentioned, or Karim mentioned in the prepared remarks, and this shows good demand in auto, civil aero, electronics, health care and agro, right? However, as you are reading, you know, or listening from our peers, you know, visibility later in the year, especially in quarter four, remains uncertain. You have likely heard the revised, again, IMF global forecast. Given the macroenvironment and this energy volatility, it's difficult to accurately forecast the impact on our business, hence our updated guidance range, right, which reflects the strong, you know, first semester performance, together with this uncertainty in quarter four.

So, all-in-all, quarter three, similar market trends continue. Quarter four, the low end of the guidance assumes a decline in demand, beginning in quarter four, indicating a modest decline in, you know, second semester EBITDA versus the second semester of last year. And quarter four, the high end of our guidance assumes only normal seasonal declines, not yet indicative of any retention, and growth up to 7% in the second, you know, semester, if you do the maths.

There was another question. What was…

Jodi Allen

On aero, Ilham.

Ilham Kadri

Ah, on composites. Well, listen, composites, you know, it has been, you know, a good quarter for composites. We've seen, indeed, increase in single aisle, so that's – and, you know, we have a bottleneck there due, actually, to shortages in raw materials, and we are going to continue, you know, pushing that. On defence, the volume decline is mainly due to raw material shortages, so including from our supply chain. So nothing to worry about. I think our bottleneck, without sharing you a number, it's really in the order book, so as much as we can produce, we can ship and bill. So composites is not yet in rebound mode. It's been recovering, but, you know, it's very steady and very supportive to what we've seen in the past quarters.

Anything else? Did I miss something?

Wim Hoste

No, I think we're good.

Ilham Kadri

Yeah, okay. Back to you.

Operator

Thank you very much. There are no further questions. I give back the floor to the speakers.

Jodi Allen

Thank you, everyone, for your participation in today's call. As always, our Investor Relations team is here if you have any follow-up questions. With that, have a great day.

Ilham Kadri

Thank you.

Karim Hajjar

Thank you.

Operator

Ladies and gentlemen, this concludes today's conference call. Thank you all for participating. You may now disconnect.