Investor podcast #3 2026 – Transcript

Introduction
Michelle Schaller:
Hello and welcome to our third episode of our Investor Podcast 2026. I hope you are all doing well. My name is Michelle Schaller and I'm here once again with the CEO and founder of Pyrum, Pascal Klein, talking about the current development at Pyrum. Welcome back, Pascal.

Pascal Klein:
Hello, Michelle. Thank you for doing this third podcast again with me and to support me again in doing it. I have seen that you have prepared some nice questions, so let's hear some of them.

Michelle Schaller:
Before we're starting: Do you have any opening remarks you would like to share with our audience?

Pascal Klein:
Sure. I have so many things that are in my mind that I would like to share with our shareholders since quite a long time. One thing that is really touching me a lot is that many shareholders or many partners are constantly saying that we are too slow. That we are not working quick enough, that things are not moving forward quick enough. I can understand this. Honestly speaking, for me it's also heartbreaking sometimes, to see how long things take. But we all need to understand that Pyrum is not a sprint, it is a marathon. What we are doing here, is a generational technology. So, we are not developing here a computer chip or app that is outdated in one or two years. What we are doing here is really creating a new industrial environment with a market, with new products, with new regulations, with new laws, with so many things that are touching here one into the other. And that just takes time. And believe me, I am somebody who has very little patience, but we have to walk through that, because what we do today is something that will affect products and the life even of our children and of our grandchildren. What we are doing here today as a product, our end-product will be used still in 2040, 2050, and 2060 in products that are made by our customers. Already today, they're planning their production and what they will produce in 2050. And our oil and our recovered carbon black are in that. They are really planning with it. They're planning with volumes that will exist until then. And, honestly speaking, what we deliver today goes into very critical, system relevant and also security relevant products like tires. And it's better to watch two times instead of being too quick. It would be the end of Pyrum, if we deliver recovered carbon black to the tire industry tomorrow and there's an issue with tires, made with our recovered carbon black. And they will have to call back for thousands or millions of tires, before something happens. So that would be the end before it has really started. It is really a complicated time, but as you all know, things are moving forward - quicker than you could imagine.

Question #1
Michelle Schaller:
Yes, this is an important point. According to this, I think most of the audience is primarily interested in the current status of the second milling and pelletizing plant. Can you give us some insight about the actual status?

Pascal Klein:
Yes. As you all may know, we have ordered that mill- and pelletizer as a complete package turnkey-unit from one of the biggest suppliers for mills and pelletizer on that globe. Why? Because we didn't felt comfortable to design that ourselves. We are not a specialist for mills, we're not a specialist for pelletizers. And as it had to work, we have chosen one of the market leaders. To defend them a little bit: For them it was also the very first time to build a machine with that size. And honestly speaking, a lot of it was done correctly. So the mill is working fine. The pelletizer itself is also working fine. And they were quite quick and professional in turning and building them, turning them on and putting them to the ordered throughput. So, in the first half of the year, the main goal was to make it run at a stable production rate. So that it could be audited in May by Continental so that we were allowed to produce with it. But at that time we were just able to make 750 kilograms per hour, knowing that the ordered capacity of the plant is 1,600 kilograms. You see, there's quite a big gap between 750 and 1,600. But that was the starting point so that we could at least start production. They had the idea to change the plan over the summer, which was done now. It had a result, even a good one. But not the final result that was expected. Maybe I can explain it easily in some words: The mill is working fine and is even processing more carbon black than it needs to. It goes far up to 2,000 kilograms per hour. Then comes the dosing unit. That is the bottleneck since the beginning. Why? Because it's a static dosing unit. And I would like to compare that to something easy that we all know like a sand timer. You all know a sand timer is just sand running out a glass and with that you can measure time. You know exactly that volume X of sand is coming out of a glass in a very defined time. And that is how the dosing system works on our plant, as easy as that. You have a bunker or a silo, you can call it as you want, and there's an opening at the bottom and it was measured that in a time X a volume of 1,600 kilograms comes out of the silo. That was predefined with recovered Carbon Black, that was produced two to three years ago. But now we know, that different to virgin Carbon Black or fossil based Carbon Black, which is made out of oil or gas like in the last 100 years, that fossil based Carbon Black behaves always the same. So, if you have here a static dosing system like a sand timer, it can run for 100 years nonstop and you get always, every day, every hour of the day the same material that comes out. Recovered Carbon Black changes its habits. The more air that is injected in the recovered Carbon Black, the more liquid it is. And the more liquid it is, the faster it flows. If it has stayed too long in the silo, it becomes very agglomerated and is floating then extremely slowly. So in fact, you cannot control. So whatever the static behavior of the recovered Carbon Black is, the faster or the slower it comes out of that static silo. And that's the problem, because it is a recovered product, it is a recycling product. It is never 100% the same. That is what is blocking everything or that is what is making the system so unpredictable. That's the right word I would say. Then after that, as long

as the pelletizer, that comes after the dozer, as long as the pelletizer gets a stable flow of recovered Carbon Black, it works perfectly fine. We had even run that at 1,750 kilograms. So even more than it needs to deliver according to the contract. But the contract - and that is good for us - it's not saying that it needs to operate at full pace for ten minutes. It has to operate at full throughput for days. And that's the problem. It was only running at 750 kilograms.

Now, over the summer break, what have they done? They have installed in the dosing unit so-called Vacufills. These are like vacuums, that are sucking in the recovered Carbon Black and so separating the air from the carbon. That way, the carbon falls into the silo being derated as much as possible, so with as little oxygen as possible in between the particles. And they have put an agitator in the silo, that is constantly turning at two or three turns per minute, so that the air is easier going out from the carbon. And there is a blockage at the bottom of the silo, that slows down the flow of the Carbon Black. And all that brought us to a result now of approximately 1,250 to 1,300 kilo, sometimes even 1,350 kilograms. It depends on how the recovered Carbon Black behaves. That is the new throughput that we are able to do. If we go over 1,350, it is getting too liquid again and it flows out too quickly from the silo. Then it overfloats the pelletizer and then the process is dead. You need to clean everything. So the result is, as I said, roughly 1,250 to 1,300 kilograms, that works quite sure. So, we are at 80, 90% of what the machine should do.

In order to compensate the missing volumes, we have now just received the permit from the authorities here in our region to operate 24/7 instead of 16 hours per day. That helps us. It's easy to calculate: If you had 16 hours per day and now 24 hours, you have 50% more production time every day. So we can easily compensate the missing 10 to 20% throughput in one day. So that's how we plan how to go to 100% in the future. But one thing is sure - and the supplier agreed already - that with the existing static dosing system, we are now at the limit, we cannot process more. So now the plan is to switch the dosings, basically. So, the basis of the dosing system will be changed. From the static gravy metric we use, which uses gravity to dose, to a forced dosing system that is not using gravity anymore. It's not working like a sand timer. So, it's not the flow of the material that controls itself. There will be screws and agitators that force the material out of the silo at a very predefined speed. So you can really define in these much more complex dosing systems, of course, that we need 1,600 kilograms per hour and then the dosing system takes care, that exactly 1,600 kilos per hour are coming out. You can buy them from scratch. So, it's nothing new, it's nothing that needs to be redesigned. What we just need to know now: Who's the best supplier? Who can supply it quickly? And what has the best design so that it fits easily into the plant. But as said, we are not far away from 100%. But as we have a contract, and our supplier has a contractual obligation, he will have to make another modification to go to 100%.

Question #2
Michelle Schaller:
Thank you for the explanation. Well, during the summer break, the modification measures weren't limited to the mill and pelletizer. There were also some modification works at other parts of the plant. Can you give some insight into what's new and how does it come about?

Pascal Klein:
That is a long question, which needs a long answer. I hope you're all sitting well and you have something to drink. So I will have to explain a little story behind that. When we started our journey, we developed the technology. And at the beginning when we developed that, we thought that we will produce new products, new raw materials, but nobody did know if they're good enough, what is the quality of them? Who will buy them? For what can they be used? So, when you start with something like that, you create a basic thing. So, and you all know, that we produce oil, carbon black and gas. So, when we started our journey, we had our basic oil, basic carbon black and basic gas. Not knowing if it should be or needs to be adapted to any use, because it was a completely new market, new products and the market did not even exist. Lucky us, our oil was good from the scratch, more than good. Our oil, there's so much demand for the oil, as it is, that we will not be able to build enough plants to respond to the demand. And with crisis all around the world, which we all know with the street of Hormuz, with the lack of oil, with increasing oil prices, the demand is going higher and higher. And you all know that resource resilience, raw material resilience, is one of the biggest topics here in Europe. So, the oil is not a question anymore.

Gas, from the very beginning, we were quite sure that modifying the gas, adapting the gas is much too complicated. We could, for example, separate the hydrogen. There are things, that could be done, but all much too complicated. So, we took our gas quite early to make energy out of it. So that we are self-sustaining. That is working. We do that on a daily basis.

So, nothing new here. But then we had the recovered Carbon Black, which is - different to the oil - something that goes directly into security relevant products, like tires. So don't get me wrong. The oil is also a high-tech product, but our oil goes to BASF, for example. Then they treat our oil in very different processes. But at the end, the ibuprofen headache pastel that is produced by BASF thanks to our oil, this is made by BASF and they make all the quality controls et cetera. So, we are not involved in that. We deliver an oil, which is inside a certain specification and that works fine. But for the rCB, our rCB goes directly in a tire. And if our rCB is not good, the tire will not be good. We can really influence the quality of a tire with our rCB. So, we made the first offtake agreements. You all know that, with Continental, Schwalbe and now our newest partner Pirelli. And they are using our basic recovered Carbon Black, that we are making since several years now. And that's used for bike tires, forklift tires, building machine tires. That works. And you can use it also in very small homeopathic doses in car tires, truck tires. But not in big volumes. So that is why in 2021 we started a JDA together with Continental (Joint Development Agreement), in which we tried to improve our recovered Carbon Black. But not really improving.

Improving is the wrong word. We want to keep our basic material as it is, but want to create new grades. And you may know, that there's not just one virgin carbon black on that globe or fossil based carbon black. Since 100 years, carbon black is redesigned, redesigned and redesigned. Today you can buy, I don't know how many there exist exactly, but at least 100 different types of carbon blacks. And each carbon black is adapted to a different application. One is better for mascara, the other one is better for coating. The other one is better for tires, for the inlay of a tire or for the outside wall of a tire. Each carbon black is adapted to its use. But there have been 100 years or even longer to develop all these carbon blacks. And now we come to the market with one new recovered Carbon Black grade. And I think we can all agree, that this new grade cannot replace the 100 grades that were developed over the last 100 years. But we had a starting point. And then, Continental said that it is good for certain volumes. So that basic carbon black, as we call it now, the basic recovered Carbon Black: There's roughly a market, it's hard to estimate, but several tens of thousands of tons per year. That is good enough for three, four, maybe five Pyrum plants in Europe. But then the market for that basic recovered Carbon Black will be saturated. But what we want and what our rollout plan wants, is to have tens of Pyrum plants, 10, 20, 30, 40. And then Continental clearly said: OK, then we need new recovered Carbon Black grades, which we can use in more applications.

And that was the goal of that joint development agreement: to create - we called it in the project - the "Golden rCB". Why golden? Because it is the carbon black with big volumes, which can replace big volumes in car tires, truck tires. So that we get the volumes up quickly. And then we started to do test ones, because we can change the carbon black as long as we want in our lab or in our pilot unit. We don't know the effects on tires, if we have not the tire manufacturer at our side who's actually making tires out of it and is giving us feedback, if it's getting better or worse or what should we change. So that is a JDA. We really did trial and error, trial and error for hundreds of tests. And then, finally, we got the golden rCB end of 2024, which was a big milestone for us. We even made a patent together with Continental on that new recovered Carbon Black. And that was then the starting point to bring it to the industrial unit. That has nothing to do with the existing plant running. So, we have our tire shredder, the reactors, power plant, mill and pelletizer running with our basic recovered Carbon Black, like we do it since several years. But now, the idea is to produce beside of that basic recovered Carbon Black a second grade, a new grade called "New Standard". That is how we call it now. The "Golden rCB" was just a project name, but the outcome was two new grades. One is called the "New Standard", and the other one is called "Advanced". The "Advanced" is not ready yet. But we are close to finish that. But the "New Standard" is ready. But it was clear quite quickly that we cannot produce the "New Standard" in the reactors as they are. So then, during our summer break, we have done some modification to the reactors. We changed the isolation a little bit. We changed the way of operating the reactors, we changed the temperature profile, we changed the resilience time in the reactors. So, everything that we found out over the last, I would say, four years in the JDA, or five years, we applied it now in the reactors.

After the summer break, we turned it on for the first time, hoping that the “New Standard” comes out of the reactors. And lucky us, it worked. I can tell you, for me that was brilliant. Nobody did expect that it works so quickly, but it did. So, we produce now not only basic, but “New Standard”. So right now, two reactors are running, one is still producing basic quality with the settings that we use for the basic rCB. The other reactor is running with the new settings for the “New Standard” material. So, at the moment, we are making both. Then we were of course analyzing what happened. And these changes had side effects. And one of the side effects was an increase of the oil output.

The “New Standard” recovered Carbon Black has also been processed now in our mill and pelletizer. Good part of the story is, the mill works even better with the “New Standard” material, because the “New Standard” material is softer. It is easier to mill. So, the mill needs much less electricity to run. Also, nice side effect, the reactors are now running at lower temperatures and quicker throughput, so also the energy consumption of the reactors went down. The backside of the medal here is, that we also have a little bit less gas. So, we produce a little bit less gas. We don't have the final results, but it more or less balances itself out. So, we produce less electricity, but we also need a little bit less electricity. That are the results on the oil and on the gas side. From the recovered Carbon Black, as said, the mill works better and with less energy. The pelletizer works, too. So the pelletizer is also able to adapt itself to the new material. And there we have again the problem that I already explained before: The mill can adapt. The mill can run quicker, slower, with more or less energy. So, the mill can adapt to the basic material, which is harder and needs more energy to be milled, or to the “New Standard” material, or even in the future to the “Advanced” material, which we don't know if it's harder or softer. But the mill can adapt. And with the pelletizer it is the same. We have seen for example, that the basic material needs less water to create pellets than the “New Standard”. The “New Standard” needs just more water. At the end, the pelletizer can be adapted to the input material, so you get good pellets out of it. But here again with the “New Standard”, the dosing system, which is a static system, you cannot adapt anything on it, that's again the issue. Now it works quite well with the basic material. But the “New Standard” material has a completely different floating behavior. It is much more spiky, if I can tell that so, the particles of the recovered Carbon Black, the “New Standard” recovered Carbon Black, are much more spiky, so the carbon black particles stick more to the other. So they almost glue together. And that makes the flow of the material in the silo or in the dosing system much slower.

And what have we done in the summer modification? We have installed many things in the static dosing to slow down the material. So, we are having now the exact counter effect then the “New Standard” rCB needs. So, what is happening now if we process the “New Standard” rCB in the mill and pelletizer? The material is coming extremely slow out of the dosing system, so that the pelletizer is not getting quick enough material to process. And the basic material came too quick. So, you see that having a static dosing system is not a solution. Knowing that there will be new recovered Carbon Black grades in the future. And I can tell you as there are hundreds of carbon black grades from fossil based one, there will be maybe one day hundreds of recovered

Carbon Black grades. If we really want to replace completely fossil based carbon black by recovered Carbon Black, that's the logical next step and we are working on that. But I can assure you that the solution for the basic is the same solution as for the "New Standard" or the "Advanced". You need a forced dosing system that doses whatever material comes in. So, the changes that we do for the basic are in fact now the same as for the "New Standard".

Question #3
Michelle Schaller:
Thank you for the detailed explanation. If you actually look at our plant site, you'll see a row of big bags. Can you give us a short explanation what they're for and what will happen with them?

Pascal Klein:
Yes. We get that question quite often why we have so many big bags. Long story short: Shredding is a very complicated process and you have sometimes crashes in shredders. With crash I mean, there is something in the shredder that doesn't belong there, like a break or a big metal piece from a car or whatever, something that has nothing to do in a tire shredder. And if that happens, you have a big boom and then the shredder is dead. And what happens most of the time in these cases? That the knives are broken or that the shaft itself is deformed. And if that happens, you have to take out the shaft of the shredder and change that one. And that takes two weeks. So, you have to send back the shaft to the manufacturer. They make it wide again, they weld it, they repair it. Then it comes back two weeks later and then you can shredder again. That we had at four times last year in 2025. So, for eight weeks we were not able to shred tires to make rubber granules and the clear consequence of that is, that we couldn't operate our reactors without rubber granulate. And to avoid that in the future, we have now two shafts in stock. So, if a crash like that happens, we can now - not within two weeks, but within two days - switch the shafts and start operation. But that is not enough: We have now built up a rubber granule storage for 25 days. So, meaning, whatever happens to the shredder, we have enough rubber granules in stock for 25 operation days. With that the reactors can run 24/7 for 25 days even without having a running shredder. And that is mostly what you see in the big bags out there. 25 days is hundreds and hundreds of big bags of rubber granules. We have just found a site not so far away from Dillingen, which we are renting now, starting November. And we will put all the rubber granules big bags there, which will be our emergency rubber granules stock so that we can quickly access this in case we need it. I think that over the November we will see that the number of big bags will go down once the rubber granules can be stored in our new storage for it.

Question #4
Michelle Schaller:
Thank you. So, let's move on from the plant side in Dillingen and talk about our own plants and partner projects. A lot has happened in the last few months. Can you give us a quick overview what's new?

Pascal Klein:
A lot of things are new and one of the things, I'm most proud about and most proud for our team, is that we finally sold our first plant. The plant for reTIRE in Czech Republic. That plant is now being built in Sokolov. So, the plant purchase agreement has been signed, down payment has been made. And you have to imagine the effect that that will have in the future, because now we have proven that the machine can be sold and that big multinational companies are buying it and it is financed by a bank. So, there's a bank financing of almost 70% of the project. And that shows now that the technology is bankable. We are building right now there on the side. Foundations are being done right now. Halls are ordered. Core long lead items are also ordered and the planning is that the plant starts operation in March 2028. And that is also important to know for all of you now: We need now to define which type of forced dosing system we put in the mill and pelletizer, because that one needs to be ordered for Czech Republic latest end of March. So now we have roughly four months left to install the new forced dosing system in the mill and pelletizer, that in the future also the plant in Czechia, the plant in Greece, the plant in Sweden - whatever plant we are building - are all able to produce all types of recovered Carbon Blacks and not just the basic one but also the "New Standard", "Advanced" etc. We are a little bit in a hurry here so that we can quickly finish the last orders.

Coming now to Sweden: Sweden is a project that was more in the background in the last months because the financing there was not very clear. But four to five weeks ago, and I was surprised myself because I didn't expect it, our customer from Sweden, GreenTech, came to us saying that they have received a grant of EUR 24 million. Which is great, congratulations to them for that. And yes, suddenly the project comes into the first rang now. It becomes one of our primary projects because suddenly, things move there very quickly because the financing is there. And let's see what happens in the next weeks or months. Hopefully we can soon announce that the project has actually started, and the plant has been sold.

Greece has received a big grant of EUR 29.4 million between 2025 and 2026. So roughly nine to ten months ago. That grant has changed the design of the plant, because the plant was initially made or designed for three reactors. But that grant demands that the size is doubled. So, we're not making three, but six reactors. So, the grant is from the one side very good because it's a much bigger plant creating much more turnover for Pyrum to sell it and the plant is becoming the biggest one in Greece. It will be the biggest tire recycling unit in whole Greece. On the other hand, we had to redesign a lot of the plant in Q1, Q2 and even a little bit in Q3. But that is done now. And the planning asked us to deliver our final binding offer for the plant latest at the end of August. That was made. We gave our offer and now we are in the middle of the negotiations. So,

our Greek customers of course asking questions: Can we make that cheaper? Can we make that better? Can we save some money here? Very regular negotiations. And the plan is that they order the plant before end of the year because that is the planning of the grant. According to the grant contract, they need to order it before the end of the year. So, we are very confident that maybe this year we are not just selling one plant, but two. That's it about Greece.

So, certainly you also want to know what is about Perl, our next own plant, which is not a joint venture or a corporation plant. Perl is a little bit a thing that doesn't make me headaches, but it is not moving at the speed as it should. That has several reasons: One of the reasons is of course that we are very busy with our other projects, which have a little bit priority because they are customer involved. But the other reason is that there are still EUR 10 to 15 million budget missing for the Perl Besch unit and already at groundbreaking ceremony last year in November, the authorities here from our region agreed that they will close the financing gap. And we were actively working with them about that subject. We had a lot of meetings over the year with lawyers. And there were many approaches how the government can give us these EUR 10 to 15 million to close the gap in the financing. But this gap in the financing is mainly securities, not really actual money that has to be spent. And long story short, it took now until end of September beginning of October this year to find a solution. In the last meeting we had with the authorities, they told us clearly that it will be done until end of the year. So, we hope that will really be the case and that we can trust the words of our authority.

Question #5
Michelle Schaller:
We're hoping the best for that. But it's not just Pyrum’s projects that has seen some developments in the recent months. Also Pyrum’s corporate identity has evolved. How did the new look come about and what was the thinking behind it?

Pascal Klein:
As you may all know, our brand ambassador, Felix Magath, is pushing hard for Pyrum to become better known. He is quite often in German TV. And sometimes he is wearing Pyrum shirts or having the Pyrum logo on his collar. And he told us very quickly that the Pyrum logo is beautiful, but nobody can read it. People, who know the Pyrum logo, can identify it. But people, who don't know what Pyrum is, they cannot even read it from the logo. And that is extremely important for people who don't know us, that they read the name. So, it was for us priority number one, to create a new logo in which you can read Pyrum properly. And I think everybody knows the new logo. If you cannot read Pyrum, you need new glasses. That was one of the reasons.

The other reason was, that we found out from a political side. And on the political side, so many things are moving towards our direction. If it's the end-of-life vehicle regulation, the Circular Economy Act, that will be revised in 2027. The export ban for tires to non-OECD countries. So, there's so much happening on the regulatory basis that will help us. But no politician is really

speaking with us or was speaking with us, because the topic “recycling tires” is not really a topic that is sexy to hear. Even ask yourself, if you hear tire recycling, is it really something that interests you? I don't think so, because it's not a sexy topic if I'm allowed to say so. But if you speak about “rethinking resources” and if you speak about the fact that you can create oil, carbon black, gases - some of the most security relevant or most essential raw materials that we have. And with the closing of the street of Hormuz, with the war in Ukraine, and Russia not delivering carbon black anymore to Europe - the whole industry or we all feel it at the pump, when we need to fuel our car. We all see that we depend so much on raw materials and mainly oil, carbon blacks and gases - some of the core raw materials. And if you start with that, “rethink resources”, we can create oil, we can create carbon black out of waste, then suddenly everybody's listening to you. They all recognize that it's made out of tires, but that is just secondary. So, they hear it, they realize it, but let's speak about the oil that you can make and let's speak about how many resources and how much can it replace. And so just a little sentence - “rethink resources” - is opening so many doors. And of course, the new website, the videos and all that stuff that have been made beside of that. These are, all these things are opening a lot of doors that we didn't think about before. So, the effect of it is quite good, better than I have expected.

Outro

Michelle Schaller:
Well, thank you for sharing all these insights, Pascal. And a big thank you to everyone who's listening until the end. I hope we've given you a helpful overview of what's happening around Pyrum. That's all from my side. I'm wishing you a good morning, day or evening and hand back to Pascal for the final words.

Pascal Klein:
So, are we already done? I was just getting into the flow, but...

Michelle Schaller:
It was only the warm up.

Pascal Klein:
Yeah, it was a nice warm up. But I hope that the next podcast, you do it again with me. And I hope that I have again a lot of interesting news for you the next time. And don't forget, feel free to ask us questions and don't be mad at us if we don't answer them immediately. The law obliges us to inform everybody at the same time. So, like the question now was where the big bags coming from? What is in the big bags? These questions are answered in this podcast or in another way. But please understand that we need to inform everybody at the same time. So, thank you very much for listening to the podcast and I wish you all a nice day.
Thank you.