OUTLIERS PODCAST || SEASON 6 | EPISODE 4

Dr. Alexandros Yfantis | Chairman & Managing Director, Sychem Group

Panagiotis: Alexandros, thank you very much for being with us.

Alexandros: Thank you as well.

Panagiotis: I'm excited about this discussion today. First of all, let me say that we've known each other for many years. You were among the first companies and you are among the first entrepreneurs to be selected by Endeavor. You've been an Endeavor Entrepreneur since 2013, I believe. Late 2013, early 2014. So, we've been together for many years. We've known the company for many years. We've all witnessed this amazing growth, but I also think that at the same time it's very interesting because as a company and as a person you are dedicated to the environment and its resources, and to sustainability. And I think we're going to have a very nice conversation. But I don't want to be the one to talk about Sychem. I would like you to give us a quick overview of what Sychem is before we get into everything else.

Alexandros: Alright. Sychem today is a group of companies operating in four main sectors. One sector deals with water—essentially desalination as well as wastewater treatment, both in the urban and industrial areas. This is currently the company's main field of activity. The second sector is related to energy. We are essentially the largest manufacturer of large geo-exchange systems—that is, cooling and heating of large installations using boreholes or seawater. You will always find that water is involved in everything we do. It is water and energy. It's where they intersect, we could say.

Panagiotis: This is the core of the business.

Alexandros: This is the core of the business. We are a water and energy nexus. That is, we are at the intersection of these two forces, these two natural elements I would say, which are also the elements of life. And we develop technologies that combine these two, because only when they are correctly intertwined do you get a

sustainable result. You can't look at them separately. And you'll see that in all examples, you'll see that everywhere, for there to be sustainable development, we need to solve the issue of water and energy. So, to return to the topic, the third area is biogas, biomethane, about which some people also ask, what does that have to do with water again? It is essentially the energy generated in water through suction digestion. This is what nature also does in a swamp, which we simply simulate on an industrial scale. So, it is the reaction of water with organic matter; this is what essentially produces biogas. And the last part has to do with cathodic protection, meaning the protection of metal structures, pipelines, etc., from corrosion. Also, a key factor, because for all these to operate you need to have a way for them to remain free from corrosion issues during their operation. So, these are the four main sectors of the company at the moment, the four business units of the company. This year or especially last year, we were over 80% export-oriented. As a rule, since 2012, we have generally been export-oriented from 40 to 60%. Approximately 250 staff today, the company's personnel.

Panagiotis: Interesting and very complex. And I know that this is a company you built from scratch. I would like us to touch a bit on where you started, where you were born, where you grew up.

Alexandros: I was born here in Athens, in Chalandri, in a middle-class family essentially. My father was a professor at the Polytechnic. That was an asset when it came to the technological aspect. But otherwise, in a family which obviously had no financial comfort. Well, we managed to get by, but that was about it.

Panagiotis: Dad is the one who kind of steers you toward the Polytechnic.

Alexandros: I would say that, at first, he certainly serves as inspiration. Anyway, I started with the intention to get involved in research. Essentially, I graduated from the Polytechnic, but at the same time, even before I finished, I had already started working in industry. And at the same time, when I was doing my PhD in Germany, basically I would come back and had started a small business with hotels. I was very interested in the field of construction, and I wanted to see what I did actually work in

practice. And I've really liked that since I was a child. Perhaps that's a big difference with my father, who is obviously much more theoretical. And I liked the whole aspect of being able to combine technologies and deliver a result that you can see working. So, I wanted to see machines working and performing a physio-chemical process, to see it right before your eyes and to have designed it yourself. That's how the dream began. I started out practically as a freelancer, as a design office. So, I started as an engineering consulting office in my home, just one person, together with a classmate and friend. Literally, two people started this whole journey.

Panagiotis: In the part before you get to the Polytechnic and decide to enter the Polytechnic, has something contributed to your own drive for application? Have you done something that introduced you to machines?

Alexandros: Look, I think that all kids, looking at my own children too, they show their inclinations from a very early age. As a child, I was dismantling my toy cars, because I wanted to find their motors. Since I was young, I liked to build things. Beyond that, there was an aspect I really liked about the environment. So, when I started, in reality, yes, I chose chemical engineering, it was definitely a field that suited me. But from there on, the field I actually worked in, in any case, was not the field my father was involved with at all. So, my father has no involvement in the company, because he always dealt with his own field anyway. Of course, he was definitely a role model, but I would say more as a model of an honest person who believed a lot in the value of work, who believed very much in having moral principles in what you do. Finishing my studies and being in my second year, having gone on a student exchange to the IAESTE in Germany, I found myself in paradise compared to hell—that is, coming from a university in Greece, the Polytechnic, where you couldn't do anything, even if your father was a professor; you didn't have reagents, you didn't have anything. You wanted to set up an experiment and I was the one running around on my scooter to buy materials with our own money, not with Polytechnic funds, because you simply couldn't set up an experiment. And suddenly you find yourself in paradise, in Germany, in Tübingen, at one of the oldest universities, where you might be a nobody, but you just wrote down what you

needed, and the next morning they brought it to you, plus there was a lab downstairs. Whatever you wanted to do, you could do it. You just needed a signature from your supervising PhD. Anyway, that's where a nice story happened, practically with a discovery, a patent which was actually my first patent, and it had nothing to do with the subjects we are working on now. It went extremely well. That's also where I got my first money from the award I received for Best Young Scientist in Brandenburg. And there, yes, came a key decision. Either I stay in Germany with a research and industrial career, with a salary at that time three to four times higher than my father's salary in Greece, obviously. Or I return to Greece, pursuing my own business and my own path in Greece. I would say that was a pivotal decision, so I decided to return to Greece.

Panagiotis: This was with IAESTE, which I would like us to discuss a bit further. You come to Germany; I think you also study in Germany.

Alexandros: I went to Germany in my second year for one month in Tübingen. I found something which they had been struggling with for ten years, like an apprentice wizard, to be honest. Luck and craziness also helped me very much. They produced this material once a month and I was making six a day. Experimenting, I was mixing, reading, and combining materials. And suddenly something incredible succeeds, it gets published, and my professor tells me, once you finish, you have a position here, come do your PhD. I didn't have money to go abroad anyway, so it wasn't even possible. So, essentially, they suggested that I go there. And that's how I was able to do my PhD abroad, because there was no other way. I mean, if I didn't have some form of scholarship, I obviously couldn't do a PhD.

Panagiotis: You did it there.

Alexandros: I did my PhD abroad. And that's where the journey begins. I finish my PhD and I get an offer to stay as a researcher.

Panagiotis: But you return to Greece.

Alexandros: But I return to Greece.

Panagiotis: Because we like the application.

Alexandros: Because we like the application, and to be a bit more honest, I'll say that I didn't like living abroad. I wasn't feeling well and also had the feeling that if I started a career abroad, I'd never return to Greece.

Panagiotis: You return from Germany and start your own consulting business at your home. How do we go from there to doing industrial projects for water treatment and management at hotels in Crete?

Alexandros: It starts with studies, and when you try to implement those studies and build the systems, you run into representatives and machines that don't work under Greek conditions. And you realize that these things need to be designed differently. That's where I see an opportunity and say, why don't we build it here? So, I start small and rent a very small place, where literally with a plumber, we begin making machines for the hotels. Reverse osmosis.

Panagiotis: Is this place in Athens or Crete?

Alexandros: In Crete. Because the first clients were in Crete. So, it started in order to provide technical support as well. For me, always, an element of the company's great success is its support. That is, the product comes with support. And in our category, this is a huge issue. Because if there is no support, you have the machine to produce water. If it doesn't produce water, what good is the machine, no matter how good it is? Or if it doesn't deliver quality water. And no machine, no matter how good it is, if it doesn't have proper technical support—because we're not talking about a simple air conditioner, which also needs maintenance, but you can forget about it for a bit. We're talking about machines that, if they're not maintained, will simply fail quickly and cause problems for the customer. Also, in Crete we found a more vital space, in the sense that there was no competition either, because no one else was there. The others were in Athens. We also somewhat escaped, let's say, direct competition as a very small company coming out in Greece, in a field where, yes, there weren't any large companies, but there were clearly companies much bigger than us and with many more years in the business.

Panagiotis: Describe these steps to us a bit, because I think that's where many in our society and in the Greek market have the most questions.

Alexandros: You start from a small business, as we say, you begin to build, you see that the product is gaining traction, and you learn from the product. You have to be willing to invest a lot of time, a lot of effort in Greece, because you have to build everything yourself. There is no ecosystem. And in reality, my own strategic decision was that I preferred to lose money than to lose the customer. After all, in the technical world, to be able to move forward, and especially when talking about B2B, it's mandatory to create references. Because as your projects get bigger, the first question you are asked is, okay, where have you done this before? If you've done it before and at that scale. So, the main difficulty is that you have to follow this whole curve, starting from smaller machines to learn, moving on to larger ones, and each time you take a step, you have to find and convince the client to trust you with that step. Greece does not have the scale to support an industrial installation when a company starts to become truly large. So, that's where we started and had diversification, meaning we also did energy saving projects, and that's how it all began. We didn't just work in water, we also worked in energy and air conditioning systems, which is why we moved into geothermal energy and anywhere, starting from the hotel, we could intervene technologically—solar, everything. We would enter a hotel to deliver exactly what was mentioned earlier—sustainability. So, we would take care of all aspects of water and energy in a hotel, which essentially resembles a small village, and we developed technologies to solve both the energy and water issues. So, starting from hotels, we essentially moved into industry, and then, to the point of how important this ecosystem is that we're talking about. In 2007, we had the opportunity to do our first project at Motor Oil, our first major industrial project at Motor Oil. It went extremely well and started from a unit of one thousand cubic meters and evolved into a unit of fourteen thousand. Which is also the largest in Greece. All this happened, however, because we started and, in fact, they said exactly this: "Come on, let's see what you can do, do something small so we can see if you can do it." They gave us a second chance, it also went well, a third

chance, and then we ended up there. Just like with METKA on international projects, when we went abroad in 2007. That is, if we didn't have some large companies that trusted us, maybe even a bit emotionally, like, "Alright, let's help out a Greek company, you seem to have good ideas, let's help you out."

Panagiotis: So, we put good faith into a Greek company.

Alexandros: Bravo, we put in good faith, not that we're giving you a blank check, but neither a German nor an Italian would give you that, nor could you get it. If you are not given the opportunity in your own country to develop a product, how can you export it? It's impossible. So, the problem in Greece is that what is slowly being created, the ecosystem, needs to exist. You need the large companies to trust the smaller ones for this cycle to happen.

Panagiotis: At the same time, though, from that point until you reach Motor Oil, I understand that the product itself also evolves. So, you're in a small warehouse with some pipes that aren't yours and with a plumber, you're somewhat changing the way some things are applied.

Alexandros: We decide to build a factory and we make the decision.

Panagiotis: And I want you to also tell me a bit about the difficulties in these. Huge difficulties.

Alexandros: Huge difficulties. And the worst part, the risks are very high. That's why, for so many years, everyone would look at our balance sheets and say, you guys are doing amazing work, etc. But, guys, you have a lot of loans, your company is heavy, it's doing well, it's succeeded all these years, but it's very heavy. And why can't it make this leap? Which finally happened, but it took 20 years. In order to be able to make this step, to build the technology, to build the system, to build the staff and to maintain it, and to take all these steps. Well, to be clear in general, even in Europe, industrialization can't move forward quickly. We're not software companies that can just puff and poof and take off in two or three years. That doesn't happen anywhere in Europe, but in Greece, if something in Europe takes three or five years, in Greece it takes twenty. Let me say that when I built my first factory in Crete, the

privately-owned one, and not even the whole thing, just a third of it—because who dares to build the whole thing at once. I had the whole lot, but only built a part of it. It's 2012, when the crisis hits, I have my factory ready, my projects ready, and they tell me—obviously the worst year I've ever experienced—everything freezes, all operations, domestic and abroad, and I find myself in 2012 with my new factory, joking around with the then—not a few—50 employees, almost saying, guys, should we play some football? And that's when I realized what a crisis really means, because, to be honest, since things generally were going well, we hadn't really felt it in 2009, 2010, 2011, when the crisis was starting; we hadn't understood what was coming our way. Maybe most companies hadn't even realized it, either. Some people were telling me, are you sure you want to build a factory? Are you sure? We were the first factory in Greece, a proper factory, because even our competitors of 20 or 30 years were working out of basements—they were manufacturing at an amateur level. They did not have an industrial space to manufacture. So, we built an industrial space with all the infrastructure to manufacture containers, larger units, with welding—that is, a full industrial space.

Panagiotis: So, you build processing units.

Alexandros: We make desalination units to start with, and any other prefabricated water treatment system.

Panagiotis: In boxes.

Alexandros: Either in containers, or mounted on frames. In other words, they are prefabricated water treatment systems. This is the factory.

Panagiotis: Which you manufacture with your own technology.

Alexandros: We design, yes, 100%. We design everything.

Panagiotis: You assemble things that you have, that come from the market.

Alexandros: We select the materials, 90% imported, and we assemble them, but we also do the programming ourselves. So, the software of the machines is also ours. So, it's not just that we assemble it, it's that we provide everything. That is, we also do the programming and the design. And in fact, these machines—this is the

difference in our market—they are customized. That is, no two are exactly the same, because depending on the water and the problems, you are obliged to change the specifications to fit the client. So, you can't standardize the product and say, now I've made a good product. You have standardized certain technologies, techniques, and materials, which you have learned how they work. But you adapt them each time to your client. So, we start with this approach to differentiate ourselves from the market. And because the discussion starts in hotels, obviously after we made ours, others made theirs too. It's obvious, right?

Panagiotis: In Greece.

Alexandros: Yes. So, we started to say that a strange kind of competition began in the public sector, between the cheap machine and the good machine. That's where we differentiate, and we go directly to the client and say, guys, what matters is the production of water. So, I am ready to commit for the coming years to a price per cubic meter in euros. That is, to the cost of water. So, I guarantee you a machine that may be more expensive, but I will guarantee its operation. Something that the market still does not offer even today. This differentiation initially opens up a new path for us, which is also the path to foreign markets. Obviously, I participate in international conferences, I travel, so I see the trends in the global market and I know that's where the future is anyway. And we are also starting the second part, which is that we are focusing much more intensely on industry. Because in that sector the technical aspect matters much more. So, our strength is that we essentially started out as consultants, we have very strong engineering and we have all this added value of innovation and technology. This could not, in any way, be capitalized on in the hotel market. And in reality, by remaining committed to wanting our machines to be reliable, so focused on quality, which was also a significant difference compared to the competition, we built machines whose standards are now capable of competing abroad. So now we're leaving Greece, and in fact in 2012, with everything frozen, in September when the country stabilizes, with the famous coalition government, 180 degrees, all the frozen orders are unfrozen. From the point where we were at, my God, we had started not being able to pay our staff, like

most companies, and we were trying to make sure the managers didn’t get paid, to step up and support, to decide what we could give and to whom. Of course, a major factor was also the bonding of the team, how it operated during the period when we were under enormous stress. At that point, both the projects abroad we were fighting for and the domestic projects said, okay, now you’re stable and we’ll take you on. And 2012 is the worst year we ever had, a nightmare, and 2013 is the best year with more than triple the turnover, basically the big leap. We were around 5 million.

Panagiotis: You go to 15.

Alexandros: We drop to 3.5 and then go to 14. After that leap, we start making larger investments, so all the money coming in and all this ease we now have, we continue our export activity. We are now much better prepared. We see the problem in the country, we see what will happen. I am much more mature as an entrepreneur, having taken the knocks needed to understand how things work and how you need to be careful and operate as a businessperson. We are prepared, so when the new crisis hits in 2015, it finds us in a very peculiar model, being export-oriented, which means the crisis affects us very little. So, capital controls were not a problem for us. We lost business abroad, so it did affect us, because there were some people who said, 'I can't trust you with the project because your country has so many issues; I believe in you, you're the best, you gave me the best price, we've been discussing for a year, but I want the project in five months and in five months your country might not have oil.' And there, imagine, it’s a crazy story—we had already started our company in Cyprus and had a backup plan to set up production there, and we told them, 'Guys, we’ll make the deal from Cyprus and move manufacturing to Cyprus, so you can be sure it will be available.' I mean, it was incredible, and that’s where it became clear—personally, to me—what country risk means.

Panagiotis: Exactly.

Alexandros: And all these things we take for granted, which really aren’t at all obvious, like how much your country as a system can lift you up or destroy you. What can you do if the country collapses, no matter if you’re the best company in the

world. If the country has collapsed, you're done for too. And this is something that perhaps all entrepreneurs, and citizens in Greece, should understand—that we criticize the state, we throw stones at it. But in the end, if you lose your state, even that one you curse and say isn't right, yes, which isn't right in many ways, well, very simply, nothing exists. And I think this is not something people are aware of.

Panagiotis: I think for sure Greece, but also the whole world, whether through the crisis that happened in 2012 and the bankruptcy, and definitely also during COVID, if there's one thing we've learned it's that we are not detached and independent from what exists politically and fiscally. That is, on the contrary, our viability is threatened, our health is threatened, our happiness is threatened—in other words, if we don't have people who can lead the country properly.

Alexandros: That's how it is. And then COVID comes to prove to us that nothing is certain, not even exports. Because when COVID hits, exports drop to zero. Well, we are experiencing that too.

Panagiotis: What turnover are you at there?

Alexandros: As a group now—with the other companies—we're at a turnover of actually about 20 million, and we drop almost 25% that same year. We expected it to be worse. Yes, why? Because that year we happened to take on some important projects domestically and were ready to make a major leap in practice, which didn't happen because COVID came, which... And you'll see that our trajectory takes this strange turn. We have a strange phenomenon. During our most intense crises, we're like a spring. Right after, we make a huge leap upwards. That is, the company's huge leap happens after COVID, where we act like a spring, we take hits again, but the company doesn't stop. I decided not to lay off anyone, not even one, not even putting people on benefits etc. Everyone, 100%, preparing the next projects, especially when I gained the visibility that it would pass. Then I said that the company would continue 100%, that we would continue as a team, that we'd prepare and take advantage of this time when everyone else was sleeping, to lay the foundations and focus on internal projects. The expansion of our factory is crazy

again. Right in the midst of the big COVID crisis, we expanded the factory. We're doubling the factory. Since we didn't have any work to do, all the staff started building the factory. I mean, I used my people to save money, I used the staff to do internal work to keep everyone occupied.

Panagiotis: You take out loans, right? And tell us a bit about your exposure to risk. Because I get the sense, listening to your whole story so far, that you're someone who goes all in.

Alexandros: Look, I'm someone who takes very calculated risks. I don't take risks easily. Well, of course, as all entrepreneurs who have achieved something would say, we have obviously always underestimated things. You think you've made the right calculations. I always do that, but many times it turns out that maybe you've forgotten some things or you might even have deliberately ignored them, because if you had seen them, in the end you might not have taken the step. At least up until now, until two or three years ago, there was a total reinvestment of all the money. So, there wasn't any personal wealth, and the huge risk was the tremendous investment—everything, whatever there was and wasn't, went into the company. Meaning, I mean that the profits always stayed within the company. There were personal guarantees for everything, so the support that existed, which was from the banks. It was very important that there were banks that liked the company, liked the organization, saw that this company was moving forward, and supported us even with financial data that, if you looked at it coldly and said 'this guy is so indebted, he's making this much turnover,' you'd say maybe it would be better not to lend to him. Still, nevertheless, there was support from the banks. Of course, there was support because there were presentations, they could see who was involved and they saw that there was commitment. So, there wasn't—and we certainly weren't fly-by-night operators, nor were we trying to do anything like that. So, the risks I took were definitely significant because obviously I was exposed to a very substantial amount of borrowing in order to make all these investments—not just for the factory, which I would say is only one part. The biggest investment is in personnel. The staff you have when you undertake such a venture, your personnel cannot really be, you

cannot hire temporary workers. You don't have seasonal staff. Your expertise is found within your team. So, even when you don't have projects, you still have to keep your team together. And not only do you need to keep it, you have to expand it in anticipation of future projects that you don't know if you'll get. Because if you win the project and you don't have the team, you can't build it, and you can't deliver it. So, you make huge investments that practically limit your profitability significantly, in terms of your staff and infrastructure, until you manage to reach the level where you have the necessary production and also open up the market so your products can be absorbed. And you need to have constant, this is now the issue; to set up a serious factory, you need to have continuous workload. You can't have a factory that operates for just three months. It doesn't work. So, the big problem is how you will gain access to a market that provides you with projects and a pipeline so you can sustain all these people.

Panagiotis: And keep your factory running 24 hours a day, as it needs to, in order to cover its expenses and...

Alexandros: Right now, we're talking about the desalination plant alone having almost 100 staff. You understand what...

Panagiotis: And all highly specialized. I think this is also very important.

Alexandros: Yes, yes, exactly.

Panagiotis: Many factories have highly specialized personnel.

Alexandros: No, for us it's 90%. That is, we have 10% manual workforce.

Panagiotis: The blue-collar workers, who are the people doing repetitive jobs.

Alexandros: Yes.

Panagiotis: And maybe it's less costly or painful.

Alexandros: Maybe, and definitely easier to replace them, clearly.

Panagiotis: What have you seen work when you have people who are highly specialized in your industry and factory? How? Because now there's also this... We can't find people, there's attrition, they leave. What works?

Alexandros: For me, firstly, there needs to be a vision. People should work because they enjoy the subject matter. It's what we say—that with us, you'll see people are passionate about water, about the environment. They love what they do. And of course, they've seen this through crises as well, because there is obviously a very large percentage of staff that has remained stable. There is the sense that we are a team, and when we do better, we all do better. And that happened, as you saw, last year as well, when we gave both a 15th and 16th salary, because it was an exceptional year. And I told everyone that it was an exceptional year, and all together, because what we achieved was truly outstanding on an international scale. I won't hide that I'm proud of the team that has been created. Or I would say that this is now the greatest asset of the company. Its team. Its expertise lies within its team and its structure, as well as in its high-quality human resources. So, when you go and have taken on a project in Morocco and your people, without being told that they will... Alright, some overtime is paid. They stay up late at night, they get up at 3 a.m. so that the company can achieve its goal and deliver the water to the client on time, because everyone is aligned with the goal that this project and the client want it, and this client is very important. But the operation itself is also important. Thus, there is what we call passion, that we are providing water to people. In the end, we accomplish a project that has a social dimension. It's not just that we're doing a project to make money. We're doing a project that, as you say, protects the environment, gives life. In all our activities, we have something that has a very positive social impact. So, people like the fact that they are creators of a story, of products that have an immediate social impact, a positive social impact.

Panagiotis: And it’s also an issue that water, because of climate change—every year, at least speaking for myself at the moment—I am increasingly aware that it’s a huge problem. But each year I am dramatically more aware. I mean, I don't think that five years ago I was so concerned about water.

Alexandros: I think everyone, yes, it has hit home because now we’ve felt it ourselves.

Panagiotis: Now the concern is dramatically urgent. And I think this definitely contributes because we're all in the same boat here.

Alexandros: First of all, it's not just in Greece—let's say that at the moment, the huge problem of scarcity is much more intense elsewhere than in Greece. I would say what we're experiencing is very light. Very light compared to what other countries are going through. So, let's hope it stays that way. And I would say—I'm saying this—Greece is not in the worst situation. Nor will it ever find itself in the situation that a country like Cyprus is in. In a situation like that of a country such as Morocco or the entire North African zone.

Panagiotis: Yes, exactly.

Alexandros: Or Sicily. Or Crete. Crete, for example, which will face the greatest problems. But still, the rest of Greece, due to its mountain ranges and its terrain, you can't say that things are all relaxed. However, the problem of water scarcity, as it is experienced in other countries, clearly has nothing to do with what Greece will experience—even though Greece will face the problem, but in the coming decades, the next twenty years. But it will always experience something much less.

Panagiotis: We have time to manage it, in any case.

Alexandros: Exactly. And there is time to manage it, because precisely everyone has become aware of this. It is important. It is no longer Greece. It's that there is global awareness, which obviously has now also reached Greece. Greece receives four to five times its needs in rainfall. It does not have a problem with rainfall. It has a problem with managing the water that escapes, where it goes, how it is distributed. Water is not found where you want it and it's not easy to transport it either. So, what I want to say... It does not face extreme drought in the sense that it doesn't rain. Cyprus has a primary problem. Its rainfall is not sufficient. That's it. So, you start with the fact that the problem is explosive and no matter how much you manage it, there's only one solution. And that is called reverse osmosis or water reuse. There is no other option. In Greece there is plenty of room for management, many different solutions, and obviously much more economical solutions.

Panagiotis: Let's put things in perspective, since we're in the present and in your post-COVID era. From 2023 until now, there's been an incredible development. What is driving this growth? It's the climate crisis, but it's also specific countries and projects which, I think now—at least in my mind—as someone who, because of Endeavor we're connected, you end up intervening to save certain situations. In other words, you save situations.

Alexandros: We're absolutely vertical—100%. Perhaps the only European company right now, and one of the few globally, that can start from the design and go all the way to operation. So, we do everything from start to finish.

Panagiotis: And it faster than anyone else.

Alexandros: Exactly, you have the huge advantage of controlling everything yourself. You control the design, the construction, everything internally. You don't work with subcontractors. Because, of course, there are major contracting companies in the water sector, and they are much bigger than us. But they are contracting companies. So, they design to a certain degree and then have to subcontract, handle the construction, and so on. We, on the other hand, are fully vertical, so we are extremely flexible. We obviously have a significant advantage in management—it's highly specialized, decisions are made very quickly, there's very little bureaucracy, in resolving combined financial and technical issues. When you have to deliver quickly, you have to decide even which pump to buy, from which supplier. One is more expensive, but delivers faster. One has a product that has some issue and you have to do something different. You have to adapt to what is available and design in order to provide the client with what they require, for example, as Cyprus is telling us right now, "In four months, I want water." I want to give you the plot and in four months not to have you provide me with 500 cubic meters, but 10,000. In Morocco, they asked us for 120,000 cubic meters. The first 60,000 cubic meters per day were requested in an order in February, to deliver water in September. And we delivered water in September. So, you must understand that in this case you need to have a very well coordinated team. And our big advantage now is these prefabrications, the large prefabrications, something that differentiates

us and, of course, clearly sets us apart from the Greek competition, which can't even come close to our scale, and also internationally, now that we have the capability to prefabricate quite large systems. So, we have moved beyond the small systems, the containers as we call them, which are for hotels, for small islands, and now we're moving to other scales, where we offer the advantages of small systems to large—or to be more precise—medium-scale systems. So, we have found a market, which is now our niche market, where whenever speed is required in a medium-sized system, the very large companies can't even respond. That is, for a large contractor, the project is small on the one hand, and on the other he will need one to two years to manage it. They can't do it in six months, nor in four. A small company can't even touch it, not even in their wildest dreams, due to economics, size, and again staff organization, since it is a manufacturer. Of containers, for example. So, we found ourselves in the right place with a product that now has international appeal and opens up many doors for us to collaborate with contractors, because you should know that whether we have projects directly, or we are the technology providers for contracting companies that take on the entire project, we supply the equipment quickly, commission it, and in some cases even operate it for them. That's also a major advantage, because some will tell you, for one year I want you to operate it too, train my staff and hand it over to me. So, this chain has been created, which I believe has now given us a major international advantage in the water sector.

Panagiotis: I think the most representative example of this very specific competitive advantage and the market in which you are best positioned to exploit it is Morocco.

Alexandros: Yes.

Panagiotis: Tell us a bit about the story of Morocco, because I think it's the most... Personally, I feel inspired every time I hear it, and I think people need to know what has happened in Morocco.

Alexandros: Look, there it started, as always, with a project we took on from an international tender by OCP. OCP is a large, it's the largest fertilizer company in the world, a company owned by the king, so we would call it a semi-state entity, which,

to produce fertilizers, first needed industrial systems. So, in an international tender, we meet them, we win this tender, with countless hours spent on technical aspects, because these people have international partnerships backing them, meaning they're industrial and it's very difficult to get in. Just to even get a meeting with them, you have to be thoroughly vetted on the technical side, with engineers, etc. So, we do the first job and we have a good reference. They are very satisfied. The first one, which was for industry, we delivered on time and provided a very high-quality system. So, this is what we were saying, that we start with a very good reference for the client. The crisis comes, where Casablanca essentially runs out of water. This basically happens last year. So last January they realized that the problem in Casablanca had already begun. They know that they won't make it through the summer, and even worse is September, October—it's even tougher for them. Just so you know, it starts to cool down in December there. So, it's not really September, October. September, October is actually their season compared to August. And they understand that there's a huge problem in the city itself.

Panagiotis: A bit last minute.

Alexandros: Yes, last minute, classic, like everyone. Okay, let's not drag it out.

Panagiotis: We need to address this a little bit too. Casablanca realizes that they will run out of water.

Alexandros: Yes. And it receives an order from its government to do whatever it takes. We're now calling on the country's industrial champion to quickly set up a unit on their premises so they can provide water. Why? Because at the site of the fertilizer factory, there is already access to seawater. So, it's easier to set up the unit in terms of suction. So, the unit needs to be set up. And literally, we've been having discussions since December, and they come at the end, mid-January and say, guys, can you do this or that? And they tell us, if you manage it, and we know how difficult it is, be careful what you promise, you'll have a great future. If you don't manage it, you're in big trouble, because we'll all have a problem.

Panagiotis: Everyone will be thirsty.

Alexandros: Everyone will be thirsty. Everyone will.

Panagiotis: Tell us what, I mean help us understand the scale of what they requested.

Alexandros: They initially requested 60,000 cubic meters, we signed a contract on the 1st of February, and they asked for all the equipment—the pre-fabricated equipment for the entire desalination process—to be in Morocco by the end of July.

Panagiotis: In less than six months.

Alexandros: In less than six months, equipment worth close to 30 million euros. So, 30 million euros, when 30 million was the entire turnover of the group the previous year, equipment had to be made and delivered to Morocco. Beyond the fact that we're talking about materials coming by plane, because that's how it was done. The pipes were cut into three-meter pieces and shipped from China, India, or Germany, wherever there was stock. We brought materials by plane. By plane, to the factory for construction.

Panagiotis: Okay.

Alexandros: And then some materials as well, pumps etc., directly from our suppliers in Casablanca. With our own team there waiting and having the prefabricated parts delivered. So, the big achievement there, you should know, was not only the design and everything else. It was that the whole team worked together. That’s where you saw what we call having the logistics, the procurement department, and the construction department. Everyone, everyone worked as a team, because first of all, this project was a huge challenge from a logistics point of view. It wasn’t only a huge challenge to construct it. It was that all these things had to be transported there, with huge problems in the shipping. Some we sent by planes, others by trucks that crossed through Spain, others by ships from Piraeus to Casablanca. In other words, you had to constantly find a way to get the materials there. The good thing is that they got there. But the second part is that we also sent a team, as you said, a hardcore team to help them and to install it, because of course they also brought their own crews so that the assembly would happen very

quickly. It was part of our agreement that we would send the team that would essentially do the project management, but they would bring the local crews for the assembly. And indeed, in September we managed to deliver 60,000 cubic meters. And in June, the clients thank-you, to whom—let me repeat—morality matters. For me, ethics in business is very important. Sometimes, we've been taken advantage of, I say this for personal matters too, but in the end, in a magical way, it comes back around. Imagine that for two or three weeks they kept telling us to accelerate by two weeks and tell me how much more money you want. Half a million, 100, 200, 500, 1 million. It doesn't matter. What matters is that it starts in September. And we didn't ask them for a single euro. And we told them, guys, if you are satisfied, give us one more project. And suddenly they come and say to you, take a direct assignment at the same price, just as many, and deliver them in January. So suddenly this strange thing happened, that with this project, and of course we continue this year and have given another 20, meaning the client continues to give us projects, not all of them, he works with another five companies. The client is huge. But a relationship of trust has been built and that's why now we are setting up a company in Morocco, for which, what are we going to do? The operation. Because we know that if we want to keep our client, if you don't provide support, sooner or later it will fail and the client will ultimately be dissatisfied. After two years he will forget all the good things. You know, the good things are forgotten very easily. In two or three years, the customer won't remember it. If the machine you delivered starts malfunctioning, they'll later say, 'Guys, it doesn't work now, you're fooling me.' Good for you that you did it back then, but now try explaining to them that it's not your fault because they don't know how to maintain it. So, we also decided there, with a long-term strategy, to enter a market which right now is the largest after Saudi Arabia—the desalination market. That now we're entering with a very good reference, with an excellent reputation, and we're expanding. And it's not just there, but in other countries as well, where we're similarly trying to make steady progress. And this is the story of Morocco, which I should mention was also awarded at Global Water Intelligence as one of the... Because no such project has been done before; 60,000 cubic meters have never

operated—operated, not just to deliver the equipment—to supply water in almost six months, in seven months specifically, to be clear.

Panagiotis: You are the president of the Hellenic Biogas Producers Association. You are an active entrepreneur. I mean, you're not just focused on your own company. And this also reminds me of the very important work done by SEV with the industrialists of Greece, where again, the respective president in recent years has also been an Endeavor Board member, such as Dimitris Papalexopoulos and Spyros Theodoropoulos, who at this moment have put all their efforts into making Greek industry always be the driving force behind Greek technology and innovation, as it has always been. And I wonder how much the actions of organizations like these associations influence Greek strategy.

Alexandros: I would say that it is absolutely decisive. 80% of the things the state does wrong are due to ignorance. Yes, there is also a 20% that isn't ignorance, it's intentional. The 80%, and I believe this, is ignorance on the part of those who are trying to create regulations, laws, policies—ignorance of reality. Because the state has specific officials who can do certain things. It speaks with advisors, and let's be clear about that. The advisors are theoretical, and many times, to be honest, in some cases they don't have counterparts from the market to talk to. Because from the market, the state doesn’t want a counterpart who’s just going to seek favors, nor someone who’s going to push through their own project, nor an entrepreneur who wants to shape legislation in their own interest. Instead, it needs to find people who have vision and who care about the health of the market, and within that healthy market, aim to gain their own share. Not to dominate it or anything like that. They want a healthy market for their country and fundamentally believe in that healthy market and want to create the right framework. So, regarding biomethane, I’ll say that, with the law recently passed, there was a positive development through all the effort we put in and the discussions that took place, where we genuinely saw—and I would say this time very positively—when it became clear what it means and when we presented to decision-makers the need for changes to the bill in the right direction.

Panagiotis: And they were helped. They did it.

Alexandros: And they did it. And we saw that at a certain point, when you state things clearly and with substantiation—let me emphasize this, which is clear and has a beginning, middle, and end—when you can articulate a well-supported argument explaining why and what needs to change, you can actually convince them. This gives me optimism and it's also the reason I keep fighting, because as we've said, the state in Greece plays a decisive role in many sectors—and that's one of the problems of small Greece—and if the distortion starts from the state, it's very difficult; it ruins the whole market.

Panagiotis: Looking again at what happened in Morocco and knowing that there are other projects you are working on with similar urgency, how pessimistic or optimistic are you that in the coming years we will be forced to deal with bigger water emergencies?

Alexandros: I've said it before; there will be no war over water. Water is a solved issue; it's a matter of financial resources, etc. There will not be a war over water. The next problem coming in the next 5, 10, 15 years, when we've addressed the primary issue which is water scarcity—and it's purely an economic issue, it's about investments.

Panagiotis: Reverse osmosis is very costly, you mean.

Alexandros: Okay, yes, we'll figure it out. It will drop; we'll figure it out. It's pollution. That now the problem is not just... It's that the water starts becoming contaminated with all these chemicals. So, you need to upgrade your technology to better handle how you'll clean the water you are now trying to produce. So, in the future there are many challenges related to the environmental aspect of water treatment, and especially of course of waste, which is an issue that will never end. Literally, it will never end. Similarly, entering the so-called circular economy, which is currently in its infancy, is about how you'll utilize and produce products from, for example, water treatment or waste or organic matter. So, what I mean is that gradually all this technology we've developed—and that's why this year we're establishing a dedicated

R&D department, which we're now expanding in size. Here is the second problem. If you're not a company with large turnover, you can't seriously support an R&D department. So, for us, all the R&D and innovation was developed internally. Because who were the inventors? We ourselves. So, this cannot continue. This cannot go on. You can't seriously do a one-man show and expect to develop the technology. So, you develop only up to a certain level. So, what we see is that the company will become more and more specialized and will make a new shift, just as it did from hotels to industry, it will shift to have the market that now gives added value to its technology.

Panagiotis: Tell us a bit so we can understand your current figures. Where do you stand today? How big is the company? What assets does it have? How many people?

Alexandros: Last year, the company closed on the group level with 87 million euros. And this year, also group turnover at 30. So, it's almost tripling in one year. This year, we are striving, and we will manage to stay at the same levels. Obviously, this is something we have to digest. Also, if you look at it, that’s exactly how the company goes. It grows and digests. So, we have to digest this new reality. Obviously, we are already enjoying it this year. It was also clarified that it’s not just a single project. Because some people say—and they said it back in 2013 as well—many, including banks. Guys, even in 2013, 60% of your turnover came from one project. What’s going to happen? You got the lottery ticket this year. Will you have a lottery ticket next year? Every year a lottery ticket? That can’t happen. What makes us very optimistic now is that there is a very large pipeline of projects. We are now established internationally. We have a lot of inquiries. People have gotten to know us. We are recognized abroad as a company. I personally feel very proud when I go to the biggest water forums and they talk about us. A company in Greece that, I would say, five or six years ago was completely unknown. It was a very small player, like hundreds of other companies, even in Europe. So, we have built this pipeline and this year, for example, we are achieving the same turnover with different projects and different clients. For example, this year we signed the contract in Paphos. So,

we are saving Paphos instead of Casablanca. Now, in about ten days, we will be supplying water to Paphos, in a fast-track project, and in a second fast-track project that began just a week ago in Limassol. So, you see that we will deliver 20,000 cubic meters. Within four months, in Paphos and Limassol. And, of course, we are establishing our presence in Cyprus, where we were already present, but never with projects of this scale. Similarly, we now have projects, both smaller and larger, in many other countries as well. And we will be focusing more and more. Apart from the fact that in Greece, of course, there is currently a very big opening. So, in Greece we also have significant projects, but these suffer from the well-known problem of delays, etc.

Panagiotis: I think it's time to play a little game.

Alexandros: We have games too?

Panagiotis: So, these are cards that have a word on them and we'd like to hear your etymology for it. Management words, they're not historical.

Alexandros: So, disruption, upheaval, disturbance.

Panagiotis: What does disruption mean to you?

Alexandros: What does disruption mean? Disruption was, for example, COVID. A huge disruption that made you change everything you thought and everything you could have thought. It didn't apply at the time when this event occurred, which was completely outside any framework anyone could have imagined. But there is also technological disruption, which for us is a big challenge. That you must always be on alert. Also, let me say something. Yes, there are materials, in our case, there are things that can come along, and if you don't notice them and integrate them, such as artificial intelligence—which we have now incorporated into our systems—so that the system itself can tell you its problem. If you don't integrate this, you'll have a problem.

Panagiotis: You graduated from a Greek public university, a university like the Polytechnic, which has produced tremendously high-caliber talent worldwide. We need to acknowledge this, and I think that many times we forget to factor it into an

evaluation equation of Greek universities. As an organization that operates globally and seeks the Greek diaspora and foreigners, there are people who have come out of this university who are truly world-class.

Alexandros: The truth is that it takes work, and I believe that companies should help as well, but legislation and the way this relationship between universities, polytechnics, and research must be organized, so that we can truly produce research and innovation. And the second thing I'll say, which to some extent we do and we are more successful at, is producing graduates, scientists, or engineers who can really come into industry and contribute, thanks to the foundation they received. Because, you know, innovation, the university, and the polytechnic do not have a role. What they say, that if innovation isn't happening, it's useless. No, because the polytechnic has an educational role. It has to prepare the engineer and give them the tools and training to come to my company. How can someone come to my company who hasn't received proper training? So, we shouldn't underestimate the educational aspect, nor say that a polytechnic that doesn't do research or can't apply research is useless. Because there's also this perception that if it doesn't do research, well then, it's irrelevant. It has a dual role. It's just that when it comes to innovation, it has a huge problem. I would say that in Greece, there are very few exceptions where real innovation and research is actually happening. In terms of education, it's asymmetrical. That is, there are very good professors, very good opportunities to provide excellent education, and equally very bad ones.

Panagiotis: So, let's move on to one last set of questions, which will help us find small points that may not have been highlighted during our discussion about you and your personality. Quick, binary questions, either or.

Alexandros: Book or podcast? Podcast. Nowadays.

Panagiotis: Outliers.gr?

Alexandros: I mean it's easier; it's now easier to listen than to read.

Panagiotis: So, are you a morning or night person?

Alexandros: Night.

Panagiotis: What time do you usually go to sleep?

Alexandros: No, I don't sleep late, but I like nighttime more. I go to sleep around one, but it's fine, I'm not a night owl.

Panagiotis: Coffee or tea?

Alexandros: Tea. Never coffee. I don't drink coffee.

Panagiotis: We've reached 50 episodes. To find one tea!

Alexandros: One tea, okay, that's good.

Panagiotis: If you could dine with a historical figure or a great personality, who would it be?

Alexandros: Clearly, Leonardo da Vinci.

Panagiotis: You like inventiveness.

Alexandros: Yes, it's my passion. That's what drives me at work. Sometimes I even say I don't like being an entrepreneur. As strange as it may seem to you, I might be a successful entrepreneur, but what drives me is inventiveness. It's not the... And as the company grows, I'd be more interested in the role of technology rather than, let's say, the role of CEO.

Panagiotis: CTO more than CEO. So, what's your favorite city when you go especially on business trips?

Alexandros: Business, good question.

Panagiotis: Casablanca.

Alexandros: Casablanca now. But no, the truth is I'd say Paris, Brussels, when we go for business meetings, they are also nice. But now, yes, now Casablanca more, yes.

Panagiotis: Is there a book that has changed your life, left a mark on you, stayed with you, that you recommend?

Alexandros: I like two kinds of books. One of them deals a bit with personal values, very much a children's book, "Living, loving & learning," by Buscaglia, very simple, or

books like that. But there is also The Art of War, which is equally impressive, because at a business level, it makes you think about things that many times I saw—and things I considered self-evident—which shows you how you should build your strategy in a field where there is competition, and how you should think about small victories or how you should interpret defeats, how you should see the bigger picture of the game, without ever forgetting reality. So, it's nice.

Panagiotis: Is there any piece of advice you've received that has stayed with you in your life and that you follow?

Alexandros: I would say that the most important, one of the most important elements, I think—and it has been passed down in my family, but also, I have generally heard it and appreciated it a lot—is to have what we call honesty and integrity of character, to never compromise your values. I would say that's the most important thing there is.

Panagiotis: If you weren't involved in entrepreneurship, what do you think you would be doing?

Alexandros: Good question. I definitely really like architecture, which I am thinking of pursuing as a hobby. Also, I really like archaeology, very much. I mean, I would literally enjoy working in excavations, again as a technical, as a part that has a technical aspect, discovery and connecting the pieces of the puzzle of history.

Panagiotis: What do you think makes an entrepreneur an outlier?

Alexandros: I don't know if there's an easy answer to that. First of all, they must have vision. To have a vision that they believe in and pursue consistently. It takes time and effort. You can't reach any level thinking things will be easy and that without working hard and pushing yourself you'll achieve results. And I'd say beyond that, it's how you evaluate things and an instinct, which needs to be there regarding exactly what... And that doesn't apply only to technical aspects—it applies to everything. You need to have an instinct for what's happening in the market, which products are interesting, and you should be able to recognize that and follow it. I'd say those might be the advantages, along with—nowadays, I think, in the modern world—the team as

well. That is, you have to be someone who believes and can create a team. Because ultimately, your team is what will take you further. The more you believe that you will be the main character, that you'll create the "Indian's stage," the more I think you limit your ability to take a big leap. You might be doing just fine, earning money and everything's good. But to go further, well, you can never go alone.

Panagiotis: Alexandros, thank you very much.

Alexandros: Thank you very much as well.