



ACCENTURE TALKS ENERGY TRANSITION WITH JAMES SMYTH OF ANGLO AMERICAN

VIDEO TRANSCRIPT

Christian Hille [CH]: Hello and welcome to this discussion on what the energy transition means for companies across Europe. Our focus in this talk is especially on companies with engineering and manufacturing and operations as they are at the center of the energy transition discussion.

My name is Christian Hille, I'm Accenture's Energy Transition Lead in Europe for our digital engineering and manufacturing practice, which we call Industry X. We as Accenture are working with our clients every day to help answer some of the most complex questions on the energy transition agenda. And today I'm joined by James Smyth of Anglo American, who is really living and breathing the energy transition in his role as Strategy and Pricing Lead for Anglo American's NuGen business. James, thanks for joining us today. And with us we also have Björn Bernhardt from Accenture's Strategy and Consulting Service who leads the energy strategy and is an expert in hydrogen technologies. Welcome to both of you.

Björn Bernhardt [BB]: Thank you.

James Smyth [JS]: Thanks, great to be here.

CH: Well, let's take a look at some of the key takeaways from our brand-new European Industry X Pulse Survey, where we asked 200 leaders with engineering and manufacturing operations across Europe 10 questions to better understand their concerns, challenges, investment decisions and, of course, the opportunities they also see ahead on energy transition.

There were some key findings that we would like to talk about. And the first one is around enterprise-wide challenge. Well, more than 50% of the votes of the leaders were awarded to every function across the board. So, from supply chain to in-service support, sales and marketing, etc., etc. So a very broad challenge in the end. IT seems to be the pack leader for now, which was indeed surprising, at least for me. But executives clearly indicated that IT functions will be most impacted by technical and organizational changes, at least in this fiscal year. This in the next year, the spotlight is said to shift from IT to research & development and operations. What do you think about it, Björn?

BB: It's a point we would like to reflect on, of course, with James. As mentioned, the survey shows an impact across the bench. I think it's a bit surprising of course, the prominence of IT. But then also from moving from this fiscal to next fiscal and seeing that IT is getting replaced by R&D. And then maybe, also is that showing longer-term impacted products and services and operations are increasing in importance? Maybe, what's your opinion that is driving that shift? Is it that on the IT side, just that digitization budgets, its aftermath from digitations, digitization delays in the last decade are now associated with energy transition? Or is it also then on the other side, recognizing actually that there is quite some R&D to be done due to low technology readiness levels in the industry that enables energy transition? Maybe you can reflect a bit from your own experiences.



JS: Yeah. Absolutely. From our side, it's very much on the lack of technology readiness level. And so, the need for R&D spend to be able to create the products we need to make that energy transition. So, from my experience on the mining side, we need zero emission haulage. The very large haul trucks. And so typically we'd go along to the OEMs and pick their latest truck, which would hopefully be zero emission. Unfortunately, that's not available in the market today. So, what we've had to go and do is actually go and design and build the truck itself. And so actually, we're having to spend a huge amount of time and attention on the R&D side. I'd also probably add on the shift towards operations in the long run. It's actually seeing how, how there is going to be changes to operations to integrate these new products that are lower, lower emission products. So, trying to increase the amount of training, process change to be able to enable and do that. It's going to be an important step.

CH: The next key finding is around a nice topic because the outcome indicates that grid resiliency and the reduction in CO2 emissions are not mutually exclusive, which is good. Respondents are of course increasingly concerned about stable energy systems, especially during next winter. But electricity and gas systems. But despite these concerns, companies are beginning to reduce CO2 emissions with their own renewable energy sources. Which on the other hand, of course, also supports the energy security topic for them. Additionally, regulators increased carbon prices. Governmental subsidies are available to switch from fossil fuels to net-zero technologies. And this, of course, in the end also supports the energy transition and the energy resiliency. On the other hand, 57 % of respondents told us they are targeting between 10-20% reduction in CO2 emissions from the internal operations in the next 10 years. And more than 60% are targeting reductions between 20-30% of the product and services they make or provide to customers in the next ten years. I don't know whether this figure is fairly low or acceptable. Let's discuss it.

BB: I mean, I guess we all agree, right? The current energy crisis will continue to have an impact on us. What I would be also very interested in looking at are discussions that you might have with other industry strategists, right? Has there been impact of the current crisis on how companies are looking at changing portfolios of energy, or maybe their entire portfolio and to accelerate the energy transition? So, a bit of portfolio diversification, on the other hand, what would your advice be for those companies?

JS: So, we're certainly seeing that now, the complete Anglo American, that the resiliency and reduction of CO2 aren't mutually exclusive. And having that broader portfolio of renewable energy from wind, solar storage, as well as the grid in some of our key operations in South Africa, will increase resiliency, but have a significant reduction in CO2 emissions. And so that's certainly something that we're seeing at Anglo American and it's something that I can see more companies taking on, taking a more active role in how they think they get hold of energy and electricity, and whether they take a more active participation in those projects.

BB: Maybe an additional point. Looking at the figures, 10% reductions and a little bit more on internal operations. Does that sound about right? Is it falling maybe a bit short? What do you think about that ambition level?

JS: Yeah, I would say it's falling a little short. Well, more than a little short. So, take for instance, the mining industry where the major mining companies pretty much across the board, have a 30% target by 2030. Bigger than what we're seeing from the survey. But I'll also say that still goes too short because actually, certainly in the mining industry, you can cover a lot of that with your Scope 2 and shifting to renewable energy. For me, it's, it's making sure the technology is there for the next step through, it's 2050. So actually, that's one of the things that I think Anglo American has done a great job of, is coming up with an extra target of eight sites carbon-neutral by 2030. And so, then it's got to think about getting rid of things like haulage admissions, for instance. So that's where I'm working. But then there's still a long tail of other emissions from other uses of diesel, other sources of emissions. So actually, making sure we are trying to clear that long tail at eight sites is a big technical challenge and sets us in motion to actually then get the next, next wave up to the low hanging fruit is gone.

CH: Seems as if the CO2 emissions reductions targets are not really ambitious. At least the survey indicates it. That brings us to key takeaway number three, which is called Lacking the fuel. In this case, the title is a bit misleading as we're not talking about fossil fuels here, even though they might come as a resource in next winter. But when we ask clients what their biggest challenges in the energy transition are, they of course mentioned budgets. But aside from these financial concerns, which I would say are always there, they mentioned two major topics: missing qualified personnel and available public infrastructure seems to be a concern, as well.



BB: I think point to stress here is, as you've mentioned, right? If it's not about fuel in its original sense, it's fueling the energy transition. And so, we're looking at it from a broader perspective of infrastructure equipment talent and at Anglo American, specifically in the new business unit you've been part of setting up, it's literally born out of the energy transition and with all its facets of business and operations and management creation. How are you working to overcome those challenges?

JS: You're exactly right. That is a very broad set of challenges and each of those areas have significant things to overcome. I'd agree with what's been said in the survey around personnel. Making sure that there's enough top-quality engineering talent who really understand the energy transition and the technologies associated with it is key. And so that's a big area of our work trying to make sure that we can attract best-in-class engineers and retain them and keep them. I'd also agree that infrastructure is going to be a challenge on the hydrogen side, making sure things are certified so they can go on the mine and operate safely. And, and even things like the grid connections that many others struggle with around the world. It's going to be one of our challenges to work through, as well as energy regulations. The one thing I'll probably add is on the kind of large-scale capital projects side is seeing supply chains stretching out a little bit we're seeing lead times for components stretching out. So as more and more people push for access to the similar parts of equipment then actually I can, I'm expecting that kind of continue over the next few years. And hopefully supply chains can catch up to that demand.

BB: Thank you and then, Christian, I think this is also something we can share with the clients. You've mentioned manufacturing equipment companies we are dealing with. Also, what I've seen is we need a massive acceleration on production capacities to be able, once this is really picking up and it looks like there will be a short period of time, and then we really see a boost and that we are ready for this.

CH: True indeed, and also on the capital project site. But James, you mentioned it, I think we have to rethink the way of doing capital projects. We cannot grow engineers like trees, so we have to live with a number of engineers that are available, and I think we have to redefine the way we do these projects. I'd think digitization could also be an enabler for more efficiency on the one hand, and maybe security of supply chains on the other hand, as well.

CH: This brings us to another solution which is around key takeaway number four. Title is High hopes because it's a very interesting outcome. Almost every second respondent sees artificial intelligence as an important part of the solution around the energy transition. I, personally, was really surprised seeing this outcome. I wonder whether AI is seen as the overall miracle to solve all challenges. But there are just so many possible applications for AI that the respondents, of course, summed them up and this leads to the outcome we see here. I don't know what your impression is, Björn.

BB: And maybe what I would be really interested in is dealing with the latest technologies, right, as you're doing in your, in your business, James, and like dealing with complete new operational technologies and ecosystems in Anglo American's NuGen, maybe you can give us an example of how you are leveraging AI and how this is intended to help to accelerate on your transition path.

JS: Yeah, absolutely. You're right, with a blank slate. We certainly see it ourselves where new technologies don't have so much of a legacy system that may hold them back. And so, you can maybe think a little bit more outside the box on how far you push your digital technologies. And so, certainly we've seen it in, in the NuGen space where we are, we've worked really hard to set up a top quality modeling team where we've got a simulation of the end-to-end value chain from electrons-in through the hydrogen production refueling, to the trucks and the multiple trucks that are running around the mine site. And really understanding the energy it's consuming on a millisecond-by-millisecond basis. So, simulating all of that to try and understand, okay, well, if we've got this certain design of this component across the value chain, what does that do? And so, we can't just go and test that out on the mine site very quickly. So actually, the best way you do it, you test it in the simulation. So that's how we were trying to speed up our development cycle. And it's certainly proving successful so far.



CH: Indeed, great and thank you for joining the round, James, it was really a great discussion. I think you're really brought real tangible examples of the daily business you have within Anglo American and the challenges around the energy transition, but also your solutions and the way you approach it in this case. Thanks a lot for joining and also, Björn, of course in your direction, thanks a lot. For being part of this discussion.

BB: My pleasure

JS: Thanks so much.

CH: That's all from us here. Thanks for watching. For more information about the energy transition topic, or findings from our really interesting Industry X European Pulse Survey, please check out our website for more details. Stay tuned.

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