

New technologies from China and Taiwan: ready for the impact on your manufacturing business?

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Herman Derache
Paul Peeters

How Sirris is bringing top foreign technology such as humanoid robots to Belgium

Agoria's Tech Dragons of Asia | 24-28 Nov 2025 mission brought Sirris, along with 65 industrial companies and entrepreneurs, to the heart of two of the world's most advanced technology clusters: **Shenzhen** (China), known as the 'Silicon Valley of Hardware' and **Taipei** (Taiwan), the strategic centre of the global chip industry and electronics manufacturing. The visit made it clear that the next wave of technology breakthroughs is coming at us faster than expected, and from the Far East: **humanoid robots, autonomous drones** and **AIoT systems**, for example.

But what does this mean for Belgian manufacturers? And how can they prepare for these rapid developments? We spoke to **Herman Derache**, CEO of Sirris, and **Paul Peeters**, Community Manager Manufacturing & Energy Transition at Sirris.

Tech Dragons of Asia - 2027

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In this article, you will discover which technological breakthroughs from China and Taiwan are coming to Belgian manufacturing companies, what their impact is on production and innovation, and how Sirris can help you test, understand and apply these technologies today:

- How do you feel after returning from the Tech Dragons of Asia mission?
- Humanoid robots: are they a market reality yet?
- Why is it so important for Belgian manufacturers to start testing with humanoid robots?
- What innovations from China and Taiwan really made an impression on you?
- What can Belgian manufacturers learn from the ecosystem around Shenzhen?
- The second part of the trip took Sirris to Taipei. That’s a totally different profile from Shenzhen, isn’t it?
- Are terms such as AIoT and edge computing the new normal there, then?
- What should Belgian manufacturers learn from China and Taiwan?
- What has Sirris itself taken away from the Tech Dragons of Asia mission?
- Conclusion: now is the time to look ahead

How do you feel after returning from the Tech Dragons of Asia mission?

> ‘We ain’t seen nothing yet. The next five years... it will be like an explosion of a pot of popcorn.’

This was how AWEX’s Didier Denayer put it, but everyone felt the same way, says Herman Derache.

> ‘You could feel it everywhere: one after the other innovation was popping up. In **Shenzhen**, we saw speed, boldness and live experiments. In **Taipei**, we saw maturity, dominance and focus. But everywhere we felt the same thing: technology is moving faster than we think.’

The mission began in Shenzhen, a city with futuristic architecture and state-of-the-art infrastructure that serves as a **living test laboratory** for, among other things, new generations of **humanoid**

robots and **autonomous systems for vehicles and drones**.



Humanoid robots: are they a market reality yet?

> ‘We knew humanoid robots were coming, but not that they were so close’, says Herman Derache.

In Shenzhen, we saw robots that walk, turn, balance and stand right up again if they fall over. During demonstrations, they even danced and made fast, complex fighting moves.

Technology is moving fast: UB Tech alone has delivered 500 robots this year and is targeting 10,000 within the next two years. Major players such as Audi, Foxconn, BYD, BMW, Tesla and Mercedes are already running tests in logistics applications.

> 'That’s why we too need to start testing and preparing our businesses starting from tomorrow’, Derache stresses.

Industry is also the first target market for humanoid developers, as Paul and Herman witnessed on several occasions during the mission. The reason: **data**. Industry runs 24/7, has many processes and continuously generates training data that can improve humanoid AI models more quickly.

Why is it so important for Belgian manufacturers to start testing with humanoid robots?

> Paul Peeters: ‘We’ve been actively working on flexible, mobile and smart cobots for some years now, but what we saw in Shenzhen is the next generation. According to UB Tech’s road map, humanoid robots will reach **80% of human productivity** in logistics tasks such as picking up, moving and stacking parts and boxes by the end of 2027. Moreover, they will be able to carry heavier loads than is allowed for human operators today.’
>
> 'Fine motor skills such as hand movements remain the big challenge, but the first industrial applications are on the way.'
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> ‘We have two or three years to prepare for this with industry’, stresses Herman Derache.



What innovations from China and Taiwan really made an impression on you?

Besides humanoid robots, the move towards **fully autonomous systems** such as autonomous cars and flying autonomous drones stood out in particular. China calls the latter the ‘low-altitude economy’ (LAE): applications between ground level and low flying altitude, especially for logistics.

In Shenzhen, Paul and Herman came across:

- **Autonomous cars** that drive themselves in heavy and mixed urban traffic (for now, with a driver sitting idly by)
- **Autonomous drones** delivering parcels and even coffee

The government allows these tests so that start-ups and companies can learn on a large scale.

> ‘But make no mistake’, says Paul Peeters. ‘We ordered a coffee and it was still hot when the drone arrived. That’s not experimental: it’s operational.’
>
> ‘In Europe, we’d spend five years on regulations before drones were allowed to fly over a city. In Shenzhen, the city is a testing ground that’s part of a strong ecosystem’, Herman adds.



What can Belgian manufacturers learn from the ecosystem around Shenzhen?

> Paul: ‘As Herman said, the city itself is a testing ground where a huge number of new ideas emerge. From there, it goes to the Greater Bay Area (Macau, Guangdong), where companies can quickly launch production. The boat then goes to Hong Kong, where all the money and commerce come together.’

Everything there is literally close together. That proximity ensures rapid development iterations. A young robot entrepreneur said during the mission:

> ‘Our prototype supplier delivered three new versions of our robotic arm in one week.’

> ‘You see a lot of young entrepreneurs starting out in hardware and deep tech. Universities also play a big role in this: they act as incubators for those start-ups. The government is moving it all forward with a strong technology push. “We’ll create the market afterwards”, the thinking goes’, says Herman Derache.



The second part of the trip took Sirris to Taipei. That’s a totally different profile from Shenzhen, isn’t it?

> ‘Yes, that’s right. Taipei has been working on **silicon production** for the past 50 years and, as a region, has an **extremely dominant position** in the global chip industry and related electronics production. For example, TSMC chips sold globally account for 13% of Taiwan’s gross domestic product and Foxconn has a 40% global market share in smart electronics hardware, ranging from the latest developments in smartphones to edge AI servers and fully electric vehicles.’

At companies like **ASUS**, the impressive R&D capacity was particularly striking, says Paul.

- 16,000 employees
- Including 5,500 in R&D
- Including 1,100 working in AI R&D

> ‘Belgium is among the best in Europe’, says Herman, ‘but our R&D rates in AI-related research need to rise sharply if we want to keep up with China and Taiwan.’


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Are terms such as AIoT and edge computing the new normal there, then?

AIoT: a combination of artificial intelligence and Internet of Things, isn't a concept of the future in Taipei: children do their homework with AI-supported education tools or wearables that continuously register what is happening around you, so you don't miss anything if you are momentarily distracted. The advances in edge computing also stood out.

> Paul: 'Edge computing is running there on a large scale and ensures more security, speed and reliability. We can learn a lot from how Taiwan makes AI systems cloud-independent when necessary.'

Another striking feature was the emphasis on people-centred use of technology.

> 'We don't make a robot to be a machine, but to be useful for everybody.'

Paul: 'That was something we heard all the time during the mission. To them this is what ESG means: **tech for good**. Of course, that's been our basic vision in Europe for a long time, but their pace of implementation is incredible. This attitude is also reflected in their European strategy. Many Taiwanese players are actively preparing for the European AI Act and stricter cybersecurity requirements.

> 'Europe is good at regulating everything', said one of our hosts.

They want to ensure that their technology can find its way into the European market **without any barriers**. We have to be ready for that.

Paul: 'It's clear that in Europe we have to be 100% prepared to go for what they call "collaborative transformation" in Asia. A country like Taiwan sees international cooperation based on trust, openness and mutual added value as a strength and even a necessity especially in the current geopolitical context. This fits perfectly with our European values of quality, sustainability and partnerships, which makes collaboration strategically attractive.



What should Belgian manufacturers learn from China and Taiwan?

We asked Herman and Paul for practical lessons you can start applying today:

1. Speed up and prepare: pace and skills need to increase

Our innovation needs to be doubled or tripled. Shenzhen has a culture where rapid experimentation is normal. That speed stems from a **can-do mentality** and the fact that companies are given plenty of room to test and start over.

But speed isn't enough. Paul and Herman stress that companies also **need to prepare** for what is coming:

- Where can you deploy humanoid robots, AIoT or autonomous systems?
- What tasks are realistic, and what are not as yet?
- Do you have the right knowledge and skills?
- Do you have test scenarios ready for the years ahead?

2. Actively follow Far Eastern technology

Chinese companies are increasingly actively targeting **Europe** as a sales market. By now, most companies already have European branches and/or are working with local business development experts. They are increasingly adapting their products to European standards to gain a foothold here. For Belgian manufacturing companies, following trends is no longer enough. They need to **identify at an early stage** which technologies and solutions will become relevant here in the short term.

3. Work in ecosystems

In China, they saw that speed is not only generated by individual companies, but by a strong ecosystem in which universities, start-ups, manufacturing companies, investors and the government work together. Belgian companies need to take the same approach: collaborate with knowledge centres, suppliers and other companies both at home and abroad to get technology onto the market faster.

4. Diversify your technology resources and make conscious choices

China and Taiwan are building new solutions that will soon come to Europe, in some cases faster than US competitors. Make careful comparisons in terms of functionality, maturity, timing and compatibility with European rules in order to make robust and forward-looking technology choices.

5. Focus on European strengths

China and Taiwan are extremely strong in high volume low mix products. In Europe, we are strong in terms of low volume high mix, an area where we can keep the lead for years to come.



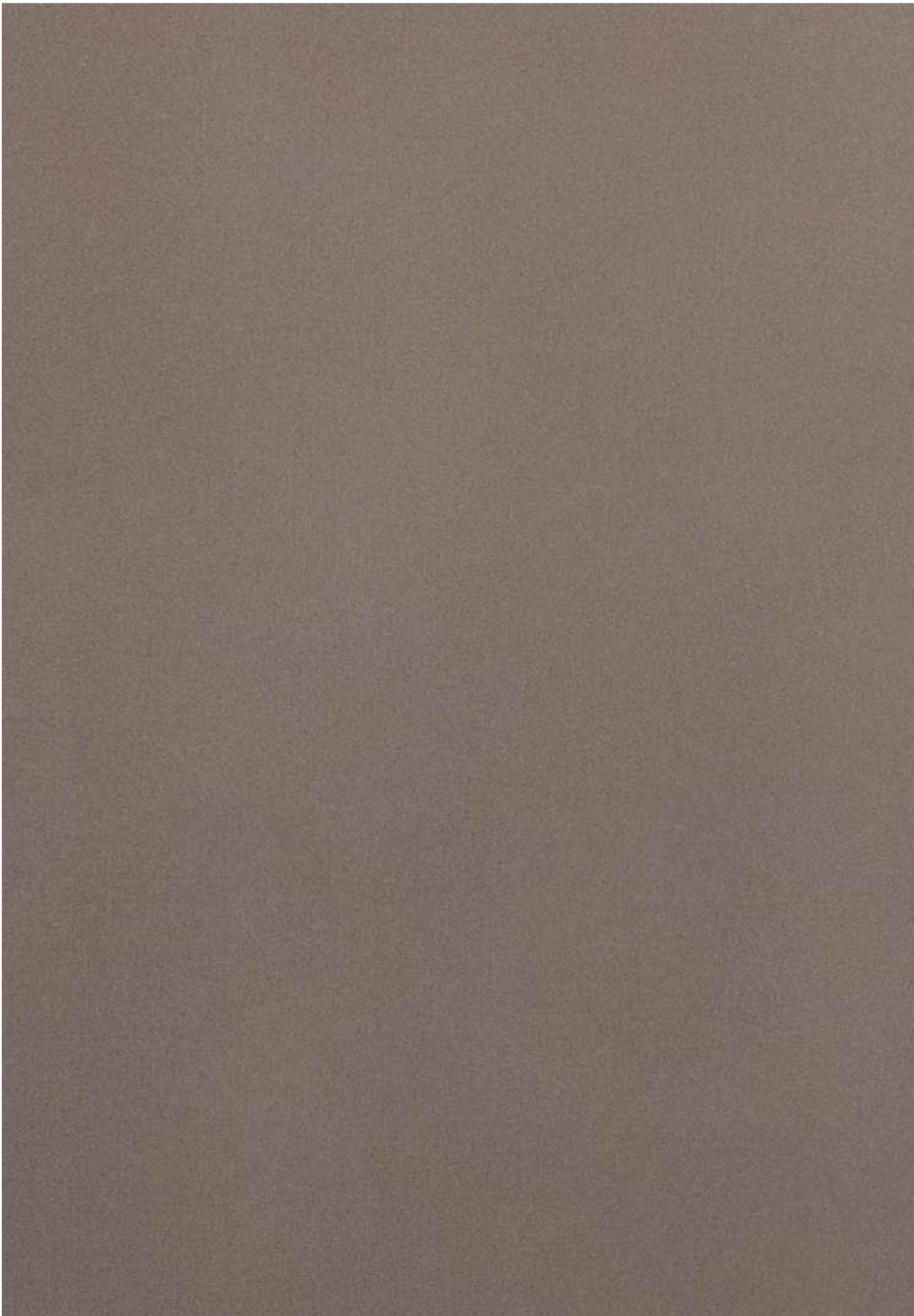
What has Sirris itself taken away from the Tech Dragons of Asia mission?

> Herman: ‘Our role is clear: **test, interpret and inspire**. We bring international technology expertise to Belgium and make it applicable to your products and production. Specifically, this means contributions such as buying humanoid robots, testing AIoT and autonomous systems and creating a laboratory environment where companies can experiment safely.’
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> ‘Everything revolves around **productivity**’, adds Paul. ‘Technology should make your manufacturing business stronger.’

He therefore sees a role for Sirris here:

- Building **demonstrators** for humanoid robots AIoT and autonomous systems that give companies the **will to succeed** and the chance to experiment
- Practical training, hands-on sessions
- Strengthening the **R&D + production combination** in line with the Taiwanese approach

Both agree that this is best done within strong ecosystems.



Conclusion: now is the time to look ahead

The Tech Dragons of Asia mission shows that technology development in Shenzhen and Taipei is happening at an unprecedented speed and scale. Humanoid robots, autonomous systems and other innovations are arriving much faster than expected. If Belgian manufacturing companies want to remain future-proof, they must:

- Test and experiment faster
- Learn faster
- Implement faster

And that is exactly what Sirris can help you with, through demonstrators, advice, guided programmes, training and master classes.



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Who are our contact people we interviewed?

Herman Derache - CEO Sirris
Over 35 years of experience in innovation, technology adoption and industrial transformation. Heads Sirris as a reference centre for productivity, sustainability, digitalisation and innovation.
Paul Peeters - Community Manager Manufacturing & Energy Transition at Sirris
Brings technology and international trends to the manufacturing industry and translates them into practical applications for Belgian manufacturing companies. He also works for Agoria as a business relationship officer.

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