



Fabian Riedel, cofounder and co-CEO at land-based shrimp farm Oceanloop. Photo: Oceanloop

'It's like the holy grail': Indoor shrimp farming group sees a path for competing with commodity producers

"We don't want to produce a high-end luxury product that only a few people can consume. That is not our vision."

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By [Rachel Mutter](#)

Most who venture into indoor shrimp farming are targeting a separate market from the commodity product churned out by producers in Asia and South America.

Costs tend to be higher, quality and traceability better, and the shrimp has a local production story bound to more lucrative pricing.

But Fabian Riedel and Bert Wecker, the brains behind and co-CEOs of German indoor shrimp farmer Oceanloop, have a different ambition. Their plan is to compete with bulk-produced shrimp by scaling the company to a size not yet seen in other indoor operations.

"We don't want to produce a high-end luxury product that only a few people can consume," Riedel told **IntraFish**. "That is not our vision."

After almost 10 years of operations, Crusta Nova and FordeGarnele, two pioneering land-based farms in Germany, merged to form Oceanloop in "stealth mode," and the company is now on a drive to secure investment so it can begin scaling its proof-of-concept 25-metric-ton operation to hit 2,000 metric tons by 2027.

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Underwater skyscrapers

Oceanloop can stock at higher densities than other land-based operations, up to 20 kilos per cubic meter of vannamei shrimp -- the most commonly grown farmed species globally.

And this is its path to the higher volume market.

Implementing a clearwater recirculating aquaculture system (RAS) with what it describes as "urban mangrove" technology, its farm concept is unlike any other land-based shrimp systems to date.

The urban mangrove adapts technology from Norwegian flatfish farming and plays to the fact that shrimp over a certain size like surfaces to perch on.

In the wild, mangrove roots and branches form these surfaces. In Oceanloop's farms it is vertical layers built at different heights in a raceway system, or "underwater skyscrapers" as Wecker describes it.



Bert Wecker, founder of FordeGarnele and now, co-CEO of Oceanloop. Photo: Oceanloop

With genetics in place, its own feed (produced in collaboration with insect meal group Protix), AI monitoring and short, three-month production cycles, Oceanloop is heading for farming costs of €5.80 (\$6.28) per kilo at full scale.

This would put its peeled and deveined shrimp on retail shelves at €33 (\$35.72) per kilo "matching completely" the price of traditionally produced imported and branded product, according to Riedel.

This final price is the whole fulcrum of the company's plans for success. "We were profitable as a company in 2017," says Riedel, who was founder of Crusta Nova, before joining forces with Wecker. "But the shrimp was €55 (\$59.53) per kilo... crazy extremely high prices for a niche market."

Their scaled up indoor growout farm will be built on a 40,000-square-meter site, along with a hatchery, feed production and processing capacity. The pair already has a site in southern Europe shored up.

Now for the money

With the technology proven and a site secured, what Oceanloop now needs is investment.

When Riedel founded Crusta Nova in 2016, he got €5 million (\$5.4 million) in seed funding from an established German meat processing company, building to investments of €15 million (\$16.2 million) to date.

In 2021, private equity firm Rigeto acquired a majority stake in Crusta Nova and together with Riedel carved out trading activities at the end of last year, which now operate under the newly established seafood brand Honest Catch.

At the beginning of 2023, Crusta Nova's farming activities acquired German R&D shrimp farm FordeGarnele together with RAS company Neomar and formed Oceanloop Group.

Now, Oceanloop is looking for €70 million (\$75.8 million) in 2023 to take it to its first phase expansion to 1,000 metric tons and a further €50 million (\$54.1 million) in 2026 to take it to 2,000 metric tons and complete vertical integration of its European farm.

A few weeks ago, Oceanloop completed a pre-closing of €2 million (\$2.2 million) from a German impact investor, Riedel said.

An important part of its sales pitch is the environmental sustainability of its operations.

Oceanloop claims its increased stocking densities mean 49 percent less land use. Its water exchange is just 0.5 percent per day, and it has calculated a reduction in global warming potential from its operations versus others of 77 percent.

We are not crazy

Riedel and Wecker are extremely passionate about the conclusions they have reached after a decade of work, but they are keenly aware of not seeming "crazy."

As they see it, Oceanloop's approach to high volume shrimp farming potentially fills a massive void in an industry with few integrated players.

Its investment drive also comes at a time when food security is at the top of many countries' agendas, and where other aquaculture producers are being asked to pay for their use of the natural environment.

Land-based RAS aquaculture production saw \$1 billion (€924.6 million) in investment last year. While most of this has been in salmon, Riedel foresees growing investment in shrimp.

"The salmon market is worth \$15 billion (€13.9 billion). The shrimp market is worth \$34 billion (€31.4 billion) today and will be worth about \$50 billion (€46.2 billion) by 2030. It's a superfood, but all major markets are still 100-percent import reliant," he said.

Target markets for Oceanloop farms are the United States, UAE and Japan, with long-term potential to build a €400 million (\$432.96 million) company.

The holy grail

It looks to be an incredible opportunity, but for many indoor RAS shrimp producers, the proof is not yet there, according to Riedel.

"It's like the holy grail if one company is able to scale up a saltwater land-based shrimp farm," he said.

"There is also much higher pressure for the shrimp industry to produce more sustainable alternatives," adds Wecker.

"Presenting this alternative on the European market, this is really disruptive."