

KRISTINN INGI LARUSSON

Head of Business Development and Commercialization of Carbfix

Lucia Sinapi-Thomas, Executive Director of Capgemini Ventures

I would now like to move to Kristinn and with Carbfix, you are downstream in the value chain compared to carbon capture. What is Carbfix about?

Kristinn Ingi Lárússon, Head of Business Development and Commercialization of Carbfix

Thank you for inviting you here. What we do at Carbfix is we are simply imitating mother nature's way of storing CO₂. With that in mind, our mission is to significantly contribute to climate recovery by continuously innovating by way of improving how we can actually store CO₂ by mineralization. I am drinking Pellegrino sparkling water here and what we do is simply dissolve CO₂, just like this, and we inject it into the ground where it starts to mineralize into the bedrock itself. We are not injecting gases we are injecting sparkling water that has mother nature's ability to mineralize into the bedrock.

There are simple chemical components in the bedrock itself and in our case we need three ingredients. First we need CO₂, second we need basaltic rock and third, we need water. What we do here is dissolve the CO₂ in water and then gently inject into the bedrock. Once it reaches the bedrock at a very low depth of an average 500 meters, it starts to mineralize so the cationic ions in the bedrock itself are released and the mineralization process takes place. The easiest way to explain is that the water is the means of transport so we can say that the water is the train and the CO₂ is the passenger and once the train reaches the bedrock the CO₂ jumps off while the water carries on. We are borrowing the water for a few minutes but the mineralization happens in less than two years instead of what usually takes millions of years, and this is a permanent solution.

Lucia Sinapi-Thomas

That is impressive. First, congratulations because we have seen that Carbfix has made the cover of *National Geographic's* recent issue, which is great. You also recently signed an important contract with the European Union to sequester carbon in Iceland. Does that mean that Carbfix can only operate in Iceland?

Kristinn Ingi Lárússon

No, but we are an Icelandic company so obviously we have been piloting and demonstrating this for quite some time. Originally, Carbfix was a research project between three universities, Columbia University in New York in the US, the University of Iceland and the CNRS in Toulouse in France. The ambition was to replicate nature's way, which is based on basalt, which is not limited to Iceland, it covers approximately 5% of all land on earth but approximately 70% of the ocean floor. It is definitely not limited to Iceland but it is the origin of the research company and the project so we are now exploring the globe as you might say.



Lucia Sinapi-Thomas

Then you have a worldwide ambition, that is wonderful.

Kristinn Ingi Lárusson

It is not a problem that is limited to the UAE, the US, Japan or Iceland, it is a global problem so we have to address it like that.

Lucia Sinapi-Thomas

Absolutely.