I'm Frédéric Jourdain, working for NTT Belgium in the department called: New Ventures and Innovation.I'm an IoT expert.

I am William De Angelis, the Chief Information Officer of CILE.

CILE is a water production & distribution company.

We provide water to 800.000 people across 24 cities in Wallonia.

We live in Belgium where it rains a lot, yet during the summer, we often face water shortages.

With NTT, we address this challenge by providing new services to the citizens in order to change how we are consuming the water.

With CILE we have a real trust partnership.

It was important for us that we understand the sustainability ambition together.

We are addressing three problems, three issues:

The first is being informed of what kind of leakage we have at home.

This is specifically for the citizens so they know where they might have a leak and know how to address it.

We can also address the leaks in the pipelines.

We know where we have a problem with a pipeline, by having the consumption from the water tower and from the households.

By collecting the data from the water tower and from the citizen, we are able to predict the consumption of the next coming days.

We are able to save the groundwater because now we are pumping just the water needed with the prediction model.

In Europe, we know that more than 55% of water is lost in the pipelines, between the citizen and the water tower.

Regarding CILE, our water network is 3.500 kilometers.

You can imagine the number of leaks we have on this network...

I would like to show you what a smart meter is.

Everybody has already a normal meter at home.

This meter simply indicates the water consumption.

On the smart meter we added a sensor on top.

This gathers all the information of the consumption and using this small antenna, the information is sent to the IoT network.

Known as the LoRaWAN Network.

In this small box, there's a battery that retains the information for 15 years.

The LoRaWAN network is a specialized IoT network.

The LoRaWAN is a low-power, long-range network.

This is important because by having just 53 gateways (antennas), we are able to cover a huge region like the Liège region.

Secondly, it is also a low-power network.

Meaning that,all the sensors that we are deploying are able to send the data once a day for over 15 years.

The LoRaWAN network is covering the entire region.

This means that 27 municipalities have access to this network.

And thus, they can take a further step in the field of smart cities.

We are providing a lot of sensors as well, allowing them to monitor air quality.

They are now also able to analyze traffic.

They can now save energy by connecting these sensors to the IoT network.

It's important to understand that what we did at the CILE site, is as an example of what we can do everywhere in Europe.

The problem is the same everywhere.

Water distribution company's want to gather this data to be able to detect leaks, but also to be more sustainable and save the water they are pumping from the ground.

This project is incredibly sustainable.

We save water.

We reduce energy consumption.

We no longer use cars for the inspections.

And by the way, no more paper invoices.

NTT is not just a provider, it's a partner, who helped us to transform the idea into reality.