

## **TOP 5 SUSTAINABILITY SOLUTIONS AT MOBILE WORLD CONGRESS 2023**

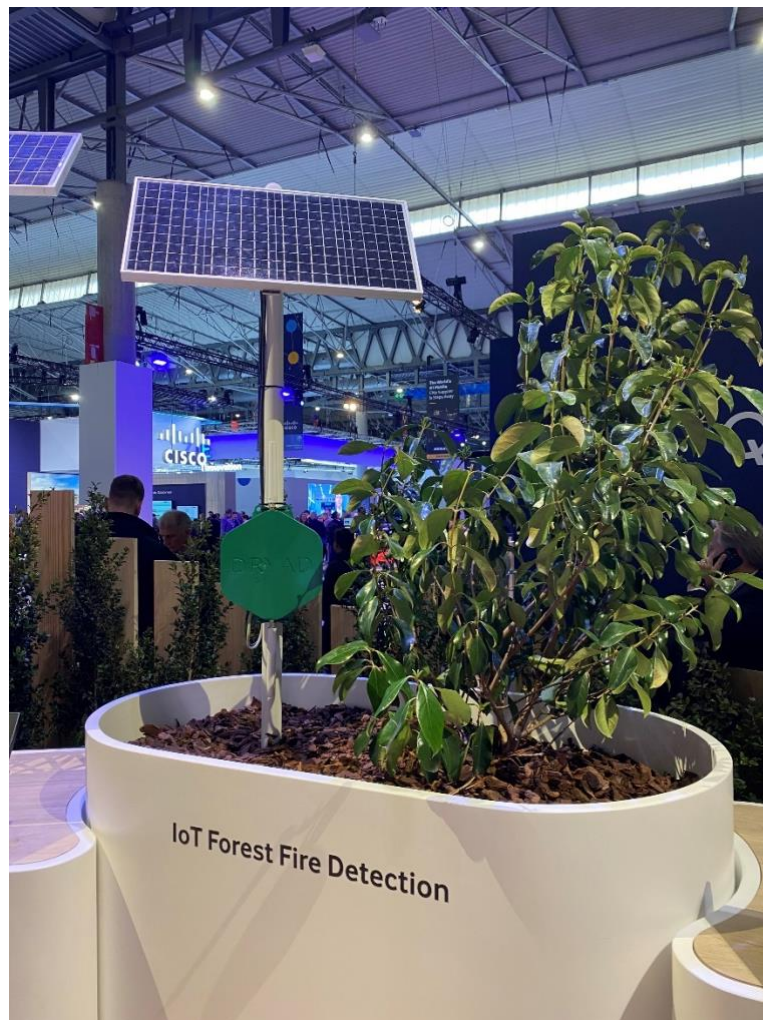
Connectivity providers are coming to understand the vital role they will play in enabling their enterprise and consumer customers across the world to reduce their environmental impact. At MWC Barcelona 2023, it was clear that there has been a more mature and sustained engagement with sustainability by telecoms operators and their technology partners than in previous years. In this article we list the top 5 sustainability solutions we saw at MWC.

Anna Boyle, Consultant

## Vodafone – Forest Fire Detection

Vodafone had several new IoT-enabled sustainability solutions on display at MWC, a solution for Forest Fire Detection stood out as one of the most innovative. The solution is designed to detect wildfires while they are still in their smouldering stage, using solar-powered gas sensors, and alert authorities. Vodafone is set to provide the connectivity for a large-scale deployment in Spain; Spain suffers an average of 13,000 wildfires each year.

We have previously analysed other solutions designed to abate the impact of wildfires, you can read our analysis of the work that [Mast Reforestation](#) are doing to help reforest land devastated by wildfires in the United States in our [Net Zero Use Case Directory](#).



**Vodafone's IoT Forest Fire Detection demo at MWC**

## Fujitsu – Demand Based Irrigation in Stadiums

Fujitsu announced that it has partnered with Eintracht's IoT centre at Deutsche Bank Park, to reduce natural resource intensity at sports stadiums.

As part of this partnership, Fujitsu have developed a **demand-based irrigation solution** that uses an AI Machine Learning platform to conduct predictive analysis of hydration data collected by IoT sensors on the pitch, to prevent over-watering and reduce water consumption. The solution addresses new mandatory sustainability criteria developed by the Deutsche Fußball Liga.

## Wiliot – Ambient IoT for Carbon Footprinting

Wiliot, an IoT platform, shared a **presentation** on their **ambient IoT labels** that enable businesses to track assets, including groceries, apparel and pharmaceuticals, through the supply chain. The labels are single-chip and battery free, using recycled energy from radio waves to power themselves. They record and transmit high-accuracy location and temperature data that can be used to create an ultra-lean supply chain that reduces waste and extends shelf-life of products.

The technology can also allow businesses to calculate product carbon footprints by creating a digital twin of the supply chain and validating its predictions using near real-time data from ambient IoT labels.

## Telia – Autonomous Field Robot

At a panel discussion about accelerating the deployment of green digital solutions across Europe, Alison Kirkby, CEO, spoke about the work Telia is doing in the smart agriculture space. She shared details about **EKOBOT**, an autonomous mobile robot providing precision weeding and feeding. The robot was developed in partnership with Swedish autonomous field robot company - **Ekobot**. The robot operates 24/7, generating data on climate and crop quality to automate more farmwork and reduce the use of pesticides.

We've seen similar solutions from other telcos, including Proximus, and analysed their relative strengths, weaknesses, impact, and maturity in our **Net Zero Use Case Directory**.

## Orange – Home Heat Management

At the Orange stand, we saw a demonstration of a **heat management solution** that uses IoT devices to connect older-generation heaters, allowing customers to programme them remotely and according to their habits. Orange believe that these devices can achieve a 35% reduction in household electricity consumption. The devices can also reduce heat and energy consumption in periods of high demand on the grid, potentially avoiding the

opening of additional power plants. The plan is to deploy a fleet of 800,000 of these devices in France over the next five years.

### **How STL Partners Sustainability practice can support you**

Tackling climate change has moved to the top of everyone's agenda. This includes the telecoms industry. Operators and their partners are committing to reduce their carbon footprints over the next decade: in many cases to net zero.

Sustainability is a key component of the Co-ordination Age: STL's vision for the future of telecoms. Through our research, consulting and participation in telco sustainability events we share best practice, insights and supporting rationale for the industry to accelerates its transition.

Get in touch to understand how STL Partners can support you:

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Or visit STL Partners' Sustainability hub

[www.stlpartners.com/telecoms-sustainability](http://www.stlpartners.com/telecoms-sustainability)