



Plant-e Water level SensorStick

Revolutionise wetland restoration with
autonomous, sustainable monitoring



Your mission

Wetlands are among the most precious and powerful ecosystems on Earth. They store massive amounts of carbon, safeguard communities from flooding, filter water naturally, and support an incredible diversity of life. Yet, decades of drainage and degradation have left many wetlands in critical condition.

Restoring these ecosystems is urgent, and it hinges on one key element: **maintaining the right water table**. But managing water levels in wetlands is no easy task. Traditional monitoring approaches require frequent site visits, rely on battery-powered equipment, and risk disturbing the very landscapes they aim to protect. They are often **labour-intensive**, **expensive**, and **difficult to scale**. **Our mission is to change that.**





Our solution

The SensorStick is a game-changer for wetland monitoring: a **simple, smart, and sustainable tool** designed to meet the unique challenges of remote and sensitive landscapes.

Powered by nature itself, the SensorStick generates electricity from the living plants in its environment, eliminating the need for batteries, wires, or regular maintenance. Once installed, it continuously records water table and temperature data and transmits it via satellite, ensuring that critical information is always within reach, no matter how remote the site.

This makes it not just another sensor, but a truly autonomous system that dramatically **reduces long-term labour and equipment costs** while minimising environmental disturbance. Whether you are a project developer, ecologist, landowner, or NGO, the SensorStick frees up resources and time to focus on the heart of your mission: restoring ecosystems, protecting biodiversity, and fighting climate change.

Key benefits

Long-term durability: with a lifespan exceeding 50 years, the SensorStick provides a resilient solution for wetland monitoring. Powered by plants, the SensorStick removes the need for disposable batteries.

Boost restoration success: accurate & continuous data delivered every 24 hours ensures optimal water levels for thriving wetland ecosystems. Our customers benefit from a dedicated account manager who is always responsive to provide personal support.

Reduce costs and labour: eliminate manual monitoring trips with autonomous, remote data transmission.



99% accuracy
powered by nature



Save 50%
on monitoring costs

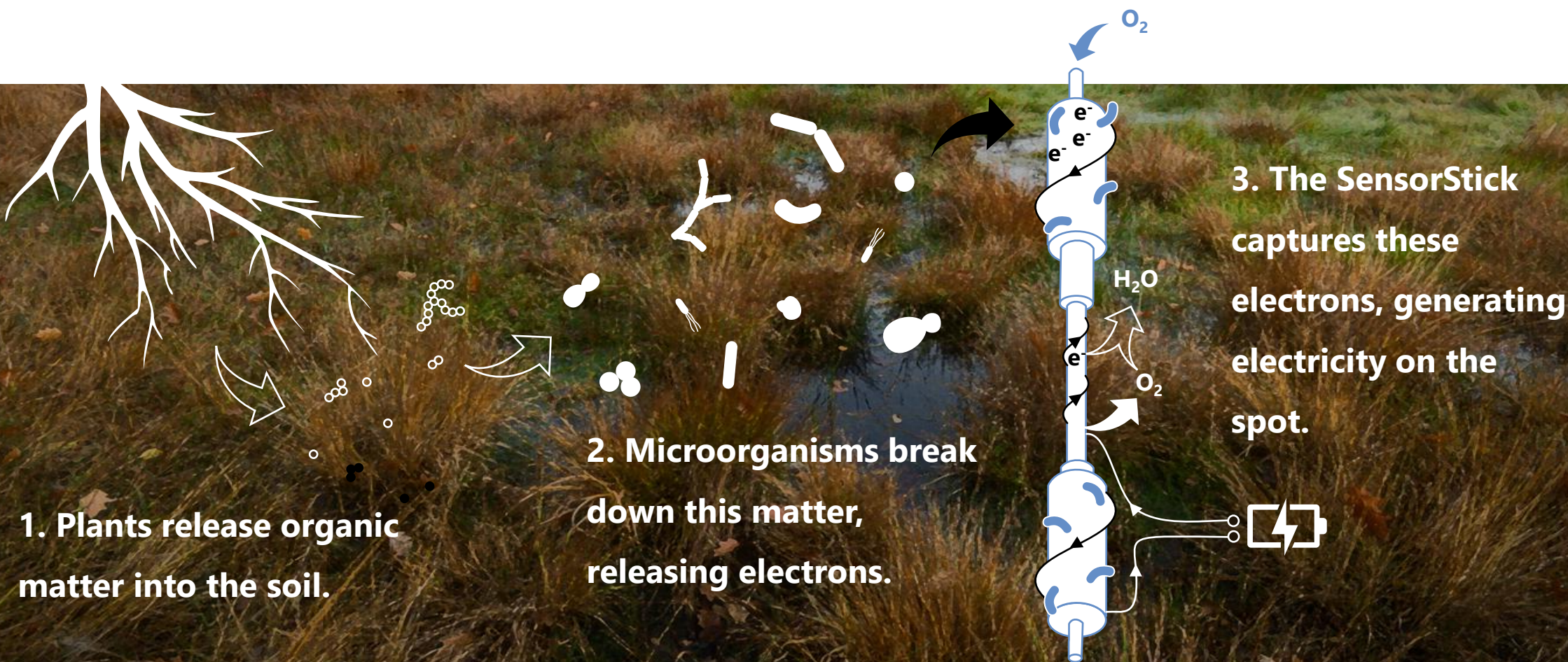


50+ years
lifespan



How it works

The SensorStick is powered by Plant-e's groundbreaking and patented plant-power source technology. It works 24 hours a day and year-round, and thrives in a wide range of soils as long as, water and sufficient organic matter are present. Combined with the back-up solar panel, this power source is always on. This is how it works:



Planet-wide connectivity via satellite

Our SensorStick ensures continuous, gap-free monitoring, even in the most remote peatlands and wetlands. Our sensor sends its measurements straight to satellites passing overhead, completely independent from local gateways, SIM cards, or terrestrial networks.

Regardless of local circumstances, our SensorSticks always send their data directly to the satellite, fully powered by its own power-sources.

1. The SensorStick collects data from the soil.



2. The built-in node in SensorStick transmits the data directly to the satellite.



3. Users receive the data, secured and encrypted.



Quick and easy installation

The SensorStick is built for **simplicity and speed**. Installation takes just 15 minutes, even in remote or rugged terrain. You simply insert the device into the soil, position it vertically, and it begins operating almost immediately.

Once deployed, the SensorStick begins to autonomously generate electricity using the energy produced by surrounding plants and microbes. It starts transmitting **real-time hydrological data**, including water level and temperature, to a satellite-connected dashboard accessible from anywhere in the world.

With this telemetered system backed by the **Peatland Code** and **NatureScot**, you're ensuring the highest standards in restoration and data integrity.



Easy-to-use online dashboard

Plant-e's dashboard is designed for simplicity, featuring three intuitive panels: one for viewing sensor data (including water level, temperature, and battery status), one for the location of each SensorStick, and one for data downloads. There, you will also find direct contact details for your dedicated account manager and technical support team.



Success stories

You're in good company! Our products have been deployed throughout peatlands and other wetlands all over the world. Here's what our customers had to say about their experience.

"A game-changer for peatland monitoring." North Pennines National Landscape team

The North Pennines project marks the UK's first installation of Plant-e's SensorStick to monitor water levels and temperature on a remote peatland site. The system now transmits real-time data via satellite without the need for on-site visits, offering a low-maintenance, cost-effective solution that supports long-term peatland restoration and carbon monitoring efforts.

"The SensorStick has consistently delivered precise and dependable data, enhancing our environmental monitoring efforts." Forest Carbon

The Sumatra peatland project showcases Plant-e's SensorStick in the challenging conditions of tropical peat forests. Deployed deep in remote, rewetted areas, the SensorStick network provides critical, continuous insight into hydrological dynamics, supporting evidence-based peatland restoration and improved carbon credit verification, all in regions where manual monitoring is often impractical or impossible.

The best solution for water-level monitoring

Contact Plant-e to explore how the SensorStick can empower your conservation goals.

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