Spark: Technology taps into a sustainable future

When speaking to SBC, Spark CEO Jolie Hodson is frank about the change needed to create a more sustainable future.

"Aotearoa is facing a number of interconnected environmental, social, and economic challenges which require us to shift to a low-carbon economy, and we know the adoption of smart digital solutions will aid that transition. The science is clear and well understood – New Zealanders know we need to reduce our emissions dramatically but are looking for solutions to do so.

"New research released this year from the World Economic Forum shows that if brought to scale, digital technologies could reduce emissions by 20 per cent by 2050 in the three highest-emitting sectors: energy, materials, and mobility.

"As a technology business, we have a key role to play in helping businesses decarbonise by enabling innovation and providing digital solutions that drive greater efficiency and productivity.

"Solutions to reduce emissions using technology already exist in energy, industry, property, transport, food, forestry, and agriculture, and although the gap between science and understanding is closing quickly, we now need to close the gap between understanding and action."

Looking in the mirror

Spark's operational footprint is small compared to some other industries, but it is committed to playing its part in reducing both direct environmental impacts and engaging with suppliers to address impacts in its supply chain.

Spark matured its approach to sustainability in 2021 and undertook a significant programme of work to establish and verify an emissions reduction target through the Science Based Target initiative (SBTi). Spark has committed to reduce its absolute emissions by 56% by 2030 and will focus on its supply chain to ensure that at least 70% of its suppliers by spend for purchased goods and services and capital goods have science-based targets in place by 2026.

Hodson says, "We know this is an ambitious target, but it's achievable over time. We expect to see efficiency gains as we decommission legacy equipment, shift to electric vehicles, and optimise our office footprint.

"Around 80% of our emissions come from electricity, so we are focussed on our role in supporting the generation of new renewable energy capacity.

"In addition to reducing our own environmental footprint, a key pillar of our sustainability framework is to help New Zealand transform to a high productivity, low carbon economy. We will do this through our investment in infrastructure and innovation, and by supporting Kiwi businesses to adapt to become more sustainable through technology," Hodson continues.

Technology proves the difference

The scaling of internet connected sensors and Internet of Things (IoT) networks is already proving a strong enabler of sustainable solutions among Kiwi businesses.

For Kiwi-owned EV charging company, Evnex, the extension of the Spark IoT network across 263 cell sites means it can now install and monitor EV chargers in real time in more rural towns, homes, and isolated parts of the country – helping to ensure more of New Zealand's power grid is working at peak performance and removing one of the roadblocks to EV adoption, charging availability.

Ed Harvey, CEO of Evnex, says the extended coverage will aid the shift to a low-carbon economy as data insights from IoT sensors lead to productivity and efficiency gains.

"Added IoT network coverage in rural areas will help remove some of the barriers to owning and using an EV for rural residents, contributing towards Government's ambitions of getting more people in EVs.

"As we move towards a smarter, more resilient electricity network, there is now more incentive for EV charging companies to set up chargers in locations with IoT network coverage, because we have the ability to collect and analyse data from them far more accurately.

"This is where the additional IoT connectivity will make a real difference. Knowing the usage patterns from residential or public charging data means we can work with energy companies to manage the load on the electricity network more effectively. This is crucial to ensuring the energy consumption in our regions is sustainable. The two-way data connection from having real-time monitoring also means we can slow down or stop charging during times of high network demand to avoid excessive generation or transmission costs, and even blackouts."

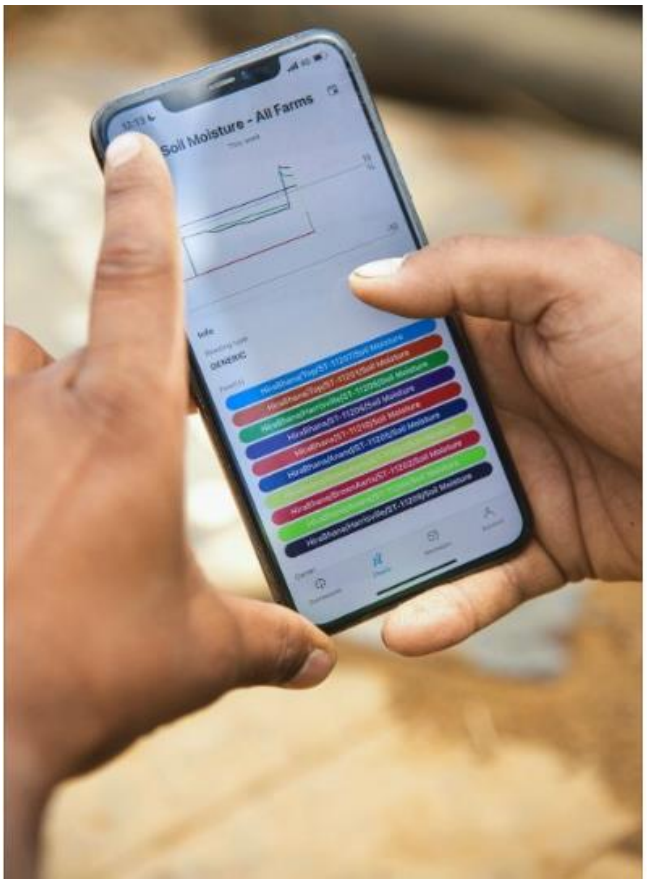
Less water, more vegetables

Technology is also proving its worth in the agriculture industry, with well renowned market gardeners Hira Bhana turning to IoT technology to ensure it can keep growing high quality produce while saving one of our most precious resources – water.

Bharat Bhana, son of founder Hira Bhana, acknowledges that to safeguard the family business for generations to come, they needed to develop a more sustainable operation by utilising smart technology.

"Our family holds extensive knowledge of the local climate, nutrient rich soils, water, plants, and geography, fine-tuned over years of trial and error, and passed down through the generations and Hira Bhana employees.

"With this new technology we build on that deep expertise with real time data – enabling us to see exactly where and when water is needed. We have found that we can use less water on crops than what we were putting on previously, and given water is such a vital resource for market gardening, this delivers significant efficiencies to our business while preserving this precious resource at the same time."



Bhana continued, "To keep pace with changes in the industry and ever-growing demand we knew we needed to operate smarter, and this IoT technology will help us create a more sustainable farm, so the Hira Bhana name continues in the fresh fruit and vegetable industry for years to come."

About Spark

Every day we seek to help millions of New Zealanders and businesses successfully connect with the people and things that matter to them. New and emerging technologies offer exciting possibilities for the country as it faces up to social, environmental and economic challenges in the years ahead. We're stepping up to take an even more active role in the future of our country. As a truly New Zealand technology company, we want to play our part in shaping the direction and the stories of tomorrow and helping New Zealanders and Kiwi businesses succeed.

About SBC

SBC is a member organisation that connects businesses, partners, and sectors to create impact that no single business could achieve alone. We work with executives and sustainability professionals to maximise their positive impact for shareholders, communities and the environment. We hold our members to account by asking them to fulfil member commitments. We deliver impact by championing our members to be at the leading-edge of sustainability and inspire other businesses to take action.