Genesis: Footprint reduction wins



For Genesis Energy's Chief Executive Marc England, a crucial component to committing to climate change action is to have direction from the outset.

"It's really important to us at Genesis that there are plans to back up and deliver on our commitments, and that those plans are in place before commitments are made," says Mr England.

Ambitious plans are what the team at Genesis is working to achieve, as the company continues to increase its emissions reductions and fulfil its purpose of empowering New Zealand's sustainable future.

Renewable generation

Around two years ago Genesis seeded what it now calls the Future-gen programme, aiming to displace 2650GWh of baseload thermal generation with new renewable power by 2030. The programme also supports the company's commitment to reduce its carbon emissions from electricity generation by 36%, which would see 1.2 million tonnes of carbon emissions removed by 2025 (from a 2020 base year).

In 2021 the programme reached a key milestone with the opening of the Waipipi wind farm in South Taranaki, generating 100% renewable, zeroemissions electricity for the national grid. Waipipi's 31 wind-turbines will generate 133.3 megawatts and produce around 455GWh per year – enough to power about 65,000 homes.



"Signing the deal with our partner Tilt and building the Waipipi wind farm was a really important milestone for us. It was a proof point for the market that we meant what we said we were going to do."

Solar generation is another pillar of Genesis' Future-gen programme. At the end of last year it announced FRV Australia as its joint venture partner, aiming to deliver 500MW of solar capacity over the next five years, generating about 750GWh per year – enough to power 100,000 households or 185,000 EVs.

"This was another important step on our journey. Every form of electricity generation has its downsides – sometimes hydro lakes are low and the wind doesn't blow - so we're trying to find a balance in what is categorised as renewable. Solar is a really important component of that mix," says Mr England.

2021 also saw the signing of a power purchase agreement to enable the building of the Kaiwaikawe windfarm in Northland over the next three years, as well as another purchase agreement for power from the Tauhara geothermal plant being built near Taupō. Combined with Waipipi and the solar programme, the four projects will deliver 1935 GWh per year of renewable generation for Genesis, putting the company well on its way toward its 2650GWh displacement goal.



"The plan is there; now we have to deliver on it."

"Equally as important to the plan are structures we wrap around it, such as our Science Based Targets and our recently signed Sustainability Linked Loan with Westpac. They are what give us the framework and backbone to deliver our targets."

The future of Huntly

As Genesis continues to work to realise its vision and purpose, the company is also focused on transitioning Huntly to a lower-carbon future. The team plans to run a biomass trial this year to see if it can replace coal with a more sustainable fuel source.

"We're going to see a massive reduction in coal consumption in the next few years, but the challenge is how we remove it altogether and which technologies will enable that. That means doing things carefully and thoughtfully, because ultimately sustainability is about doing business in a way that is enduring."



Walking the talk

In addition to its work reducing emissions in the electricity sector, Genesis has also walked the talk as a company in empowering New Zealand's sustainable future.

Internally that included moving its head office to a 6 Green Star building and doing away with company cars and carparks. Many employees now bike to work or utilise the company's 25% subsidy of public transport. Genesis is also part-owner of the EV car-share service Zilch, and staff use Zilch cars when they need to travel for meetings. The sustainable focus extends to employment and education initiatives in the communities near the company's generation sites, working alongside iwi, to support a transition that not only works for New Zealand as a whole, but for individuals too.

As more New Zealanders turn to EVs, Genesis is taking the initiative in developing technology to assist and reward customers for being sustainably minded. An example is EV Sync, an intelligent feature that connects smart chargers to Genesis' Energy IQ app, enabling customers to schedule and automate the most cost effective and emissions-friendly times to charge.

"This work is still evolving as we think through which products and services will be needed in the next few years for our business and residential customers. That's why sustainability for us is all about doing things that are not only right for our business, but right for New Zealanders and the environment. We're working to ensure our initiatives will endure and help New Zealand's energy sector transition to a more sustainable future."

About Genesis

Genesis Energy is the largest electricity and natural gas retailer in New Zealand. We also generate electricity from a diverse mix of renewable and thermal resources. We focus on caring for the environment we work in, the communities we work with, and the staff that are vital to our business' success. Examples of this in action include our partnerships with the Department of Conservation to protect freshwater habitats and ecosystems; initiatives supporting our local communities such as School-gen; and the Minding the Gap policy to address pay inequity where it exists.

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.

