

Electric Kiwi and Sustainability



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Our principles

01 Electric Kiwi and Sustainability

Electric Kiwi is committed to making a difference for our customers and our world. Our purpose is to Make it Better.

Our goal is to be straight up with our customers, help them understand how they can have the biggest impact, and build systems that make it easy for them to engage in the energy transition. We have exciting projects on the go, and there's always more we're working on!

Our principles



02 The NZ Electricity market

In NZ we have a large supply of renewable energy. In fact around 85% of our energy is from renewable sources. This compares very favourably to many overseas markets, so you can be confident that switching energy sources to electricity is making a dent.

The way the NZ electricity market works means all customers get a mix of the same electricity to their premises, regardless of the retailer that they are with.

03 Electric Kiwi's role

We are focussed on making it easy for our customers to load shift, so they enjoy savings on their bill, and also help to lower emissions. Below are examples of our residential products.

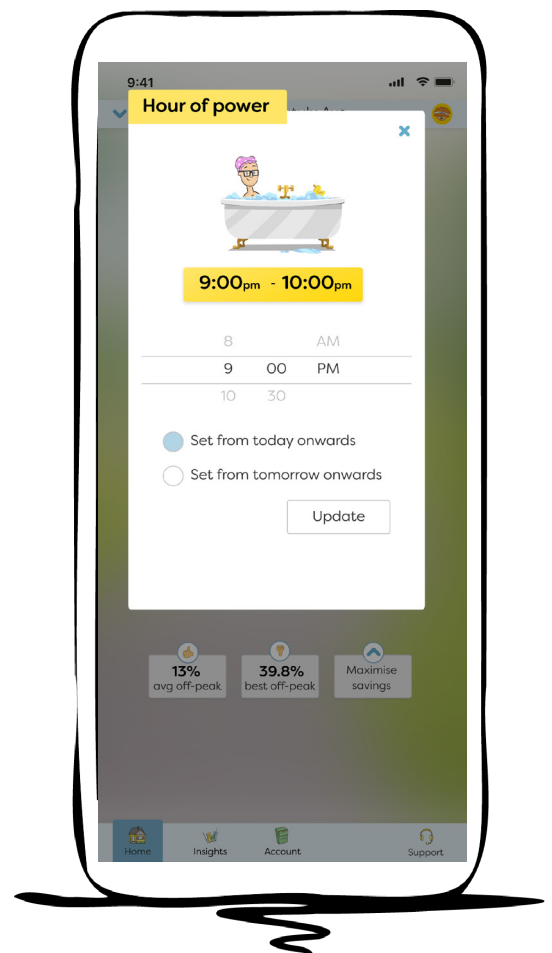
Hour of Power

Electric Kiwi has always been into load shifting - it started in 2015 with our famous [Hour of Power](#) - a free hour of off-peak power every day on all of our residential plans. The result of this is that Electric Kiwi has a materially flatter profile than the average residential customer with another energy retailer.

Time-of-Use

We introduced NZ's first time-of-use (TOU) plan to Kiwis, and with this we promoted the benefits of load shifting to save both cash and carbon. We now have nearly 20,000 residential customers on our Movemaster plan and on average they move 10% of their peak load off-peak due to the strong half price overnight pricing signal.

With peak prices getting ever higher, TOU plans are now the solution for all Kiwis to save some money and help the planet. Due to this we made the bold call in December 2023 to make all of our electricity plans time-of-use - with cheaper off peak power on every plan.

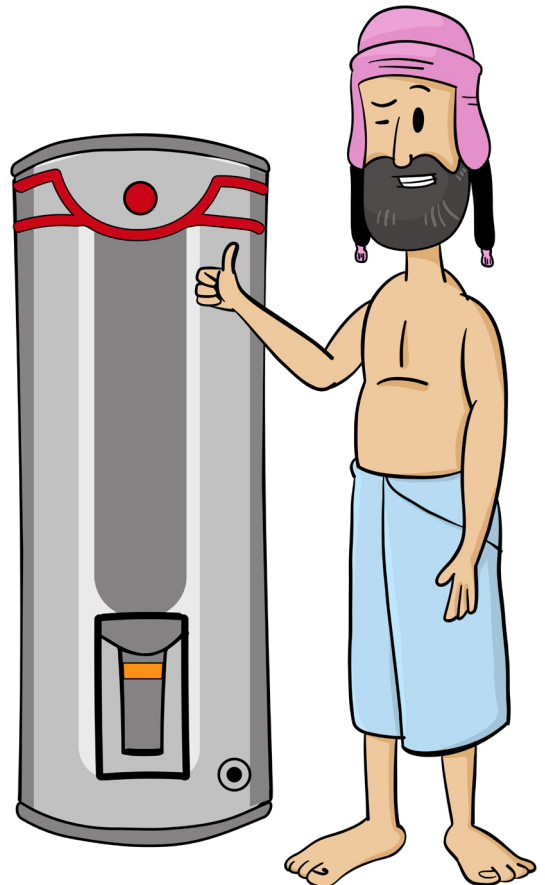


Residential Hot Water

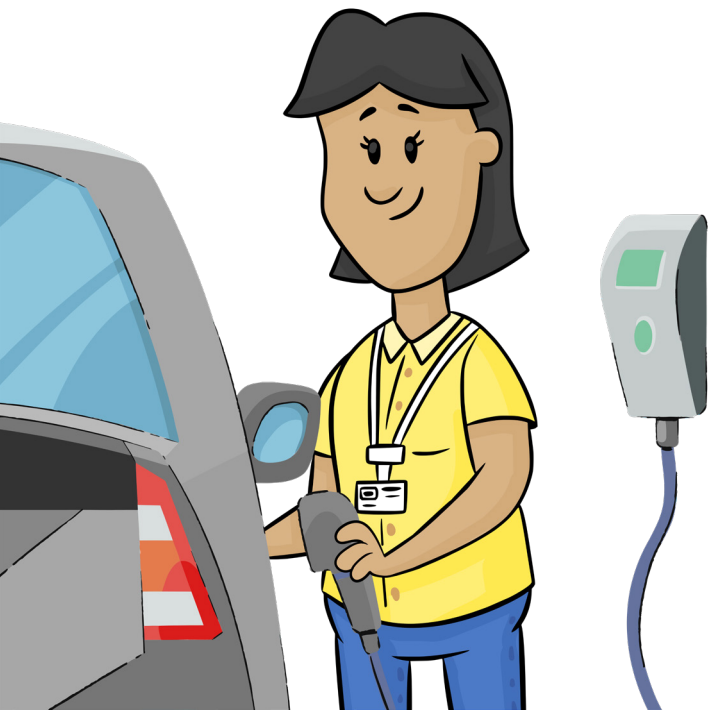
Hot water accounts for around 30% of a residential customer's bill. With pricing signals and automation, this represents a huge load shifting opportunity for NZ and Electric Kiwi that will only be surpassed by EV-to-home in 2040 (according to the Boston Consulting Group).

We have two streams of work in flight to control hot water, and we have a target to have more than 2,500 controlled hot water cylinders by the end of February 2024. One is through [smart control with Vector metering](#) - we currently have 100 customers on that trial and it will ramp up soon - and the second is a ripple control solution via Orion that will allow us to move ~1000 customers onto modes where their control matches our TOU bands.

These customers are saving around \$150 a year each on power, and using power at times with lower emissions. The big opportunity here is to use these two case studies to get everyone to copy us. The largest impact for NZ will not come from the customers we control directly, but from action taken market wide. Wider adoption is what will have a meaningful impact on peaks and therefore wholesale costs and emissions, and that is what we are pushing for.



Our role



EVs

We have [teamed up with EVNex](#) to help our customers with EVs to buy discounted high end smart chargers. Along with this we have partnered with ChargeNet to allow our customers to get their charging in the wild charged back to their Electric Kiwi bill.

We are in the process of building some advanced technology automation systems for EV charging that will allow our customers to access cheaper off-peak rates, and allow us to control actual charging patterns to optimise for the lowest carbon emissions. Like hot water, the goal here is not to beat the competition so much as show them the way that it can be done in the real world.



The Green Meter

Our Green Meter is a live view of how the grid is performing in relation to emissions. This allows our customers who are starting to understand loadshifting, to make decisions about when they use power based on the real time and forecasted emissions profile of the NZ grid.

Our role

Battery Automation

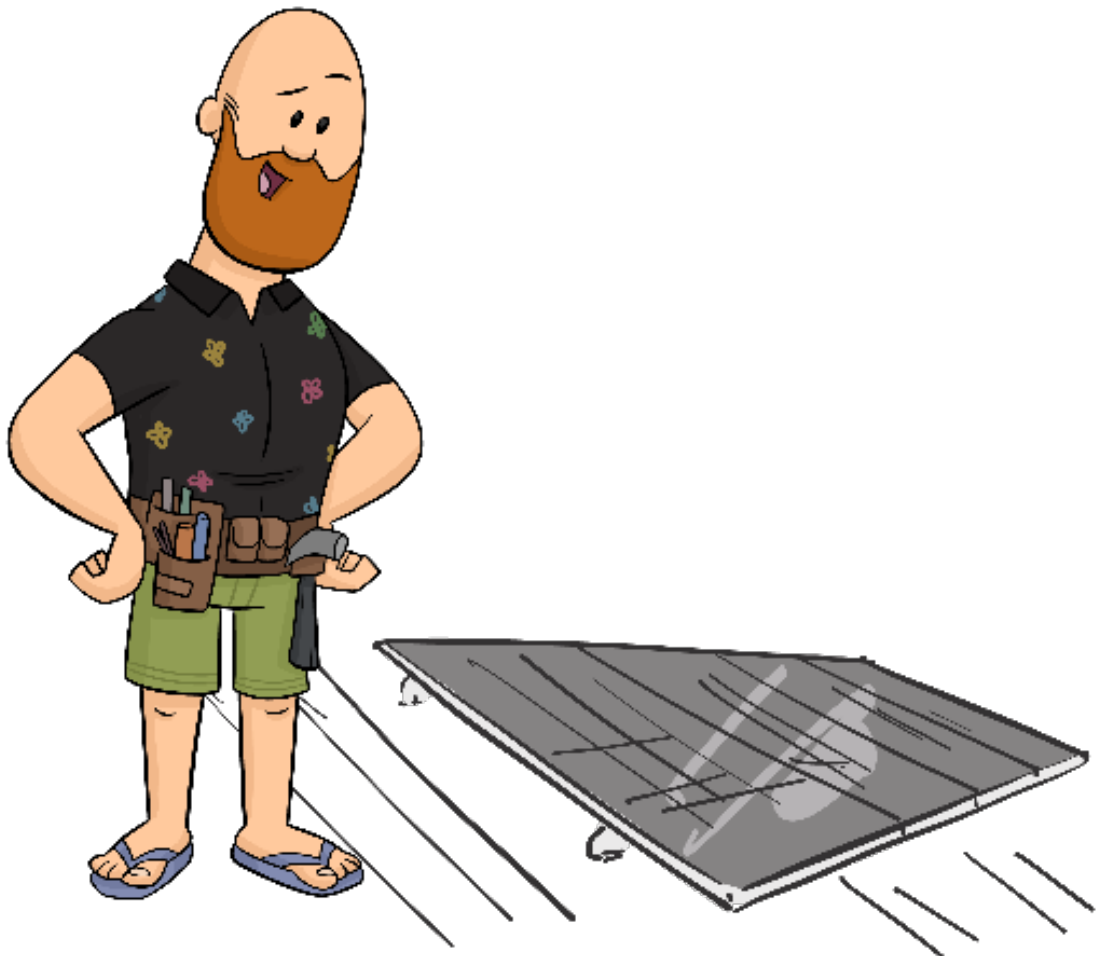
We have a [number of trials](#) underway that will help us analyse the role that batteries can play to both reduce customer costs, and peak time demand. We will make these results public so that all of the industry can see what we have learned.

Solar discounts

We have [teamed up with Zen Energy](#) to provide discounted solar installs. Customers on our MoveMaster plan also get a generous 12.5c Solar Feed-in Tariff to go with the half price overnight rates.

Challenging Greenwashing

As an independent retailer, we have a role to play in challenging bad behaviour. We feel that the market settings are not adequate to move NZ in the right direction, as the large players make a lot of money out of inflated peak time pricing. We will stand up to this, with the goal being that we can help accelerate the path to renewable energy, and also put downward pressure on wholesale prices for the benefit of all New Zealanders.



04 What can I do to reduce my emissions?

Great question. In NZ we have a very peaky weekday profile. This means we have high demand in the morning as everyone gets up to make toast, and again in the evening when we all give the kids a bath. Carbon emissions tend to be higher when demand is higher, so individuals and businesses can support the grid by moving as much power out of peak times as possible. This is called load shifting.

Load shifting has several benefits:

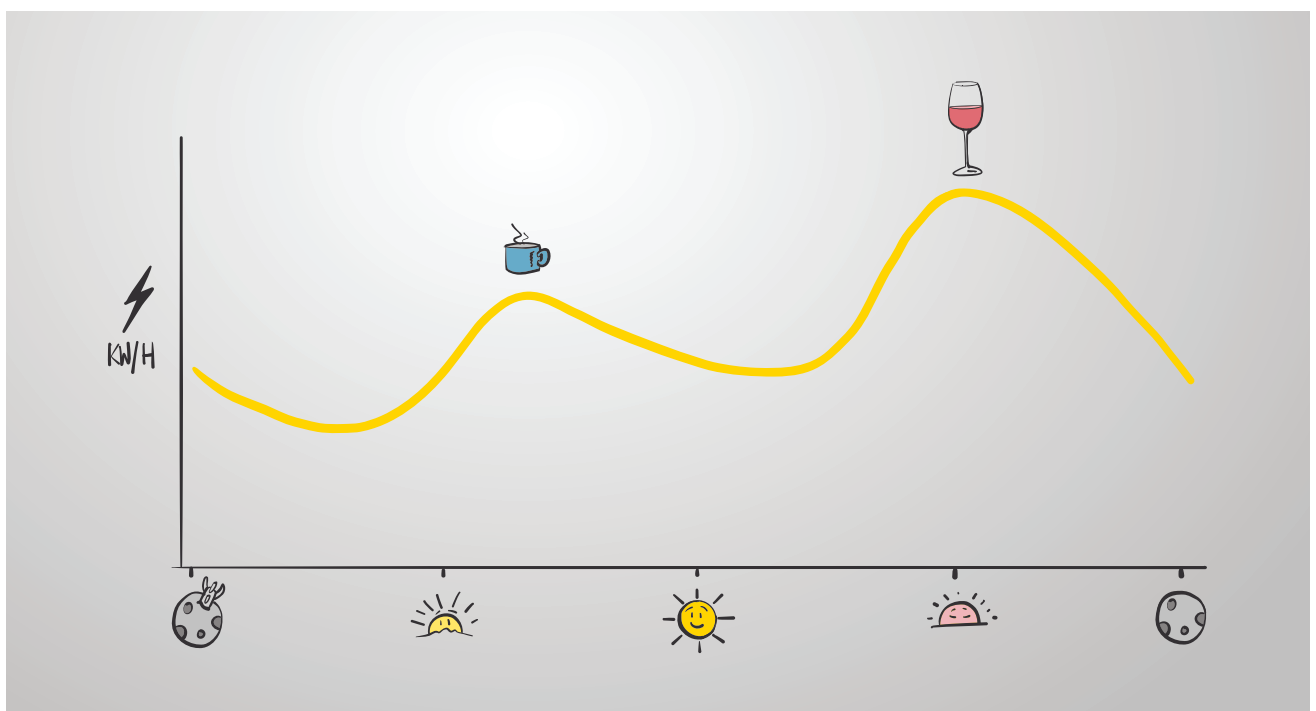
1. You will be using electricity that has less carbon emissions associated with it.

2. You will reduce peak demand, which at scale will lessen the investment that is needed to upgrade our lines infrastructure. Over time this will save every Kiwi money.

3. By reducing peak demand, we put downward pressure on wholesale prices (that are driven by very high peak rates), so again, all Kiwis benefit.

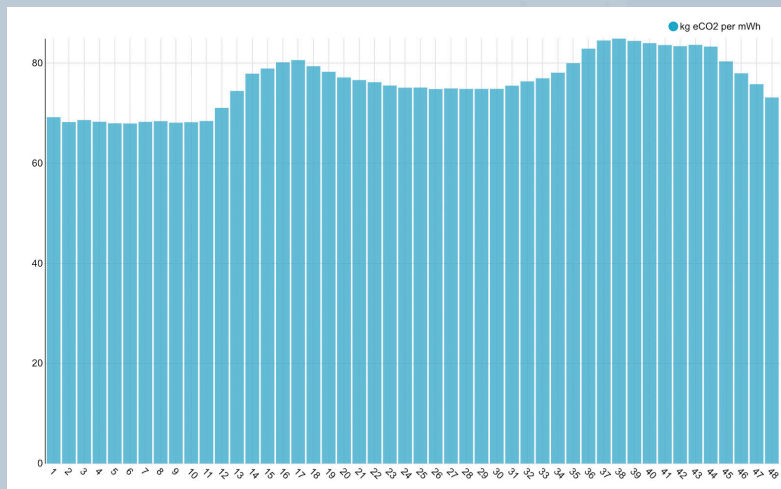
4. You are helping to bolster the business case for renewables (for example, the more daytime demand we have, the better the business case for solar).

5. On a time-of-use tariff, load shifting can save you a lot of money.



What can I do?

The emissions profile of our grid varies by time of day as shown below (this is actual data for the 12 months to October 2023 and shows the 48 half-hour trading periods, e.g. trading period 1 is 12am to 12:30am).



While load shifting is not as simple as purchasing offsets or certified renewable energy, it's easier than it seems.

Businesses can help with simple actions such as adjusting thermostat settings, employing timers for equipment, or optimising refrigeration systems during peak periods - all of which can make a significant difference. As well as this you can explore emerging technologies designed to automate load shifting, making change and savings even more accessible.

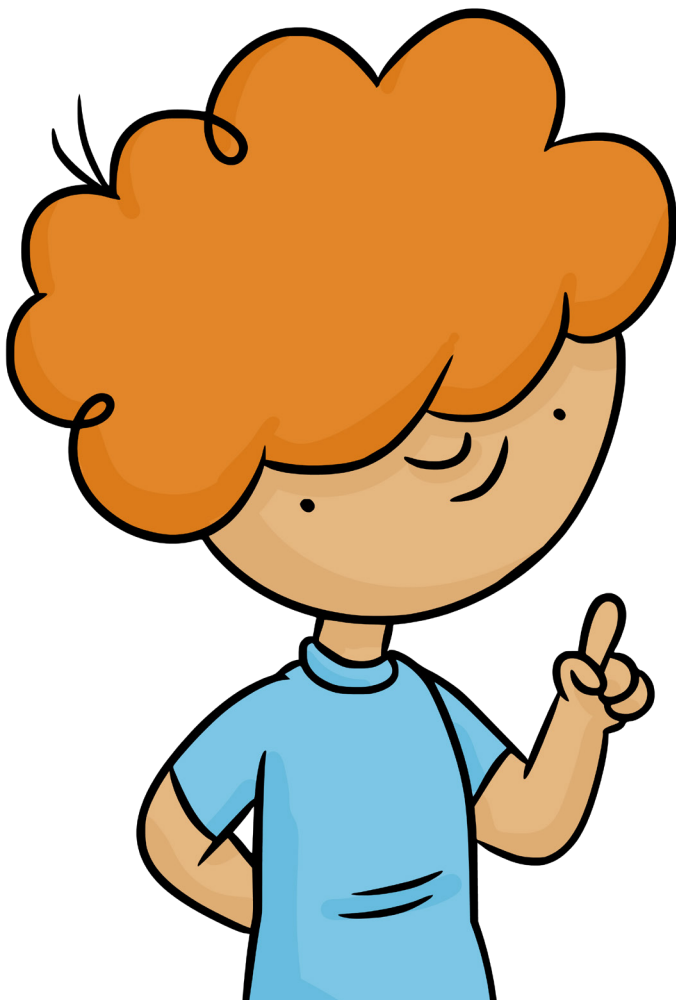
By embracing load shifting, you'll secure substantial cost savings while genuinely benefiting the environment.

What can I do?

Load shifting stands as a powerful strategy for companies committed to making a positive impact on both their bottom line and the planet. It encourages a shift in behaviour that aligns with the global push towards sustainability, allowing businesses to play a pivotal role in a greener, smarter future.

Advanced load shifting

Intelligent Demand Response is a way for businesses with significant usage to save money by altering when they use power if the electricity market is under stress. Electric Kiwi can work with you to identify any suitable equipment that can be turned down or off with minimal (or no) disruption to your operations or change to your comfort levels. We can then intelligently change when you use energy, unlocking an opportunity to save you money when wholesale costs are high. It also means you'll be using less carbon intensive energy so it's a win for your business and the environment.



05 our commitment

We want to help you on your journey to being more renewable, and we are happy to roll our sleeves up and help you do that. What we promise is that we will tell you what we really think, and we give you simple advice based on facts.

Electric Kiwi does not sell Renewable Energy Certificates because, after careful investigation, we do not believe that they materially reduce emissions in New Zealand.

This is a complex topic, but in NZ we have a voluntary RECs market that is not overseen by the government. There is no mandatory participation or science based targets. NZ also has a lot of renewable energy (around 85%), so the purchase of these certificates (or other kinds of “renewable energy”) is unlikely to drive material additional renewable build.

Experts on the topic, such as Toitū, have stated publicly that RECs are unlikely to have a material impact. So while you can use these instruments to report zero type 2 emissions (using the market-based reporting methodology as per the GHG Protocol’s Scope 2 Guidance), our view is that a lack of real world impact makes this a poor choice for those who want to actually have an environmental impact.

For more information on this, please get in touch with us.

