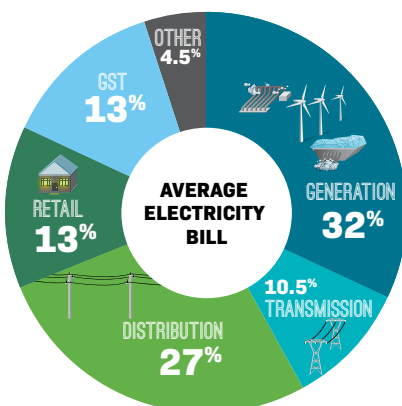


HOW ELECTRICITY DISTRIBUTION PRICING WORKS

DISTRIBUTION OF ELECTRICITY REFERS TO THE POWER POLES AND LINES THAT FEED ELECTRICITY TO AND FROM YOUR HOUSE.

There are 29 distribution companies in New Zealand. They provide and maintain the local power networks that carry electricity via power poles and lines from the national transmission grid to homes and businesses. On average, distribution accounts for around 27 percent of your electricity bill, so it's important that the costs of distributors' networks are carefully managed.



The proportion distribution takes up of your bill

Distributors provide a safe and reliable supply of electricity to your home or business. A reliable service has few interruptions to electricity supply. However, all electricity networks can have the occasional interruption. Interruptions may be caused by unplanned events, such as bad weather or accidental damage. They can also happen through planned events like outages for maintenance work or replacing old power poles with new ones. When building and operating their networks, distributors need to make trade-offs between reliability and cost, meaning a high level of reliability can be costly for consumers.

Distributors have two Government regulators that look at what they charge consumers. Distributors are monopoly businesses, so they are mainly regulated by the Commerce Commission. For the majority of distributors, the Commerce Commission sets and enforces minimum network reliability standards and determines the maximum amount of money each distributor can recover from consumers in its region through distribution charges.

The Electricity Authority oversees how each distributor can charge customers to recover this money. Simply put, in terms of the money distributors charge, the Commerce Commission sets the "size of a pie", while the Authority looks at how to "slice up the pie".

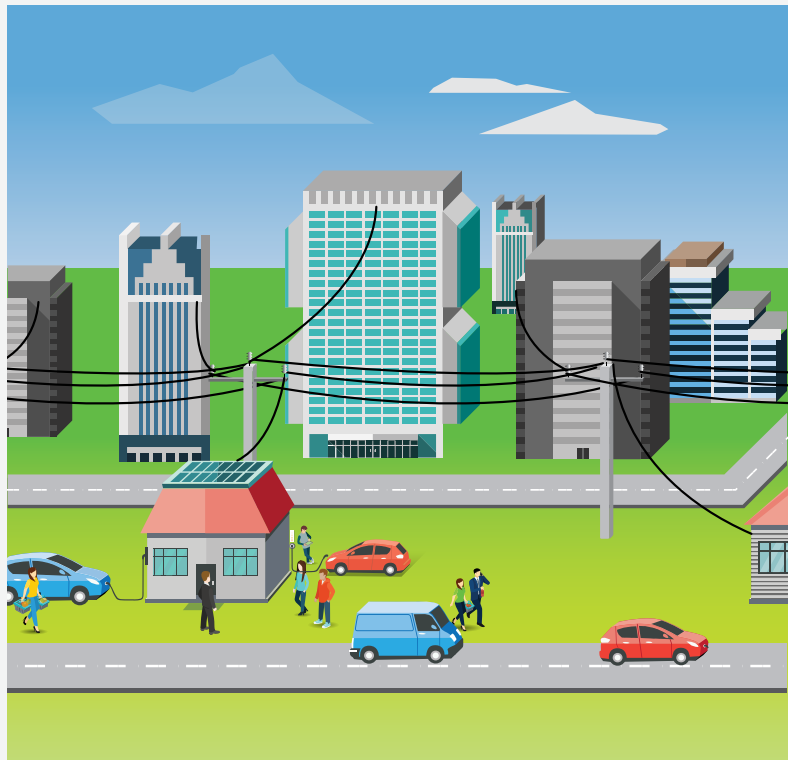
We want distribution pricing to send the right signals about the cost of the electricity that's being fed to your home or business. When these signals are correct, we should see better use of the electricity network. This means distributors will build new poles or lines only where they are needed. Distributors, consumers and businesses will also consider using new technologies to manage congestion when the network is fully used (like in the evening during the middle of winter). Over time, this means distributors will spend less in total on new investments and grid maintenance, keeping overall distribution costs lower for consumers. In other words, the way the "pie is sliced" is important as this influences how the "size of the pie" changes over time in terms of distribution charges for consumers. We call pricing that results in these outcomes, "efficient distribution pricing".

Distribution pricing matters now even more as New Zealand looks to electricity as one way to further reduce carbon emissions, which will require significant investment in the sector. Getting distribution pricing right helps to manage how much traditional investment (such as poles and wires) is required, and to make sure investment in new technology happens in the right place on the network. This helps contribute to providing electricity to New Zealanders at a lower overall cost.

Efficient distribution pricing will provide the right rewards for consumers who are installing technology, like batteries and roof-top solar panels. We call these distributed energy resources – storing or generating electricity on a smaller scale than traditional power stations, at a location closer to where the electricity is used. The Authority sees investing in distributed energy resources as an important part of New Zealand's transition to a low emissions economy. Efficient distribution pricing means people investing in distributed energy resources get benefits that match the costs they are saving, and aren't effectively receiving subsidies from other consumers.

The Authority published updated distribution pricing principles for distributors in 2019 and expects them to update their prices to be more efficient, consistent with these pricing principles.

Regions with a high population have more people to help spread the costs of providing electricity infrastructure (power poles and lines) to their local area.



A region with less people and a long stringy network of poles and wires usually has a higher cost per household for distribution.

