

## Who is Electricity Invercargill Ltd?

Electricity Invercargill Ltd (EIL) is consistently ranked as one of New Zealand's best performing network owners on key measures of reliability and efficiency.

EIL owns the electricity network assets in Invercargill and Bluff. Almost all of its customers (90 percent) are residential.

The decades' long vision of EIL's management and directors to install network assets underground makes the EIL network one of the safest and most dependable in New Zealand.

Other ongoing projects such as relocating substations and link boxes above ground also demonstrate the company's relentless commitment to providing a safe, efficient and reliable electricity supply to Invercargill city and Bluff.

EIL proactively and strategically invests beyond the region, bringing the benefits back to Southland.

Since 1905, EIL has provided power to Invercargill city under different names, most notably as the Invercargill Municipal Electricity Department. Solely owned by the Invercargill City Council through a subsidiary company, Invercargill City Holdings Ltd, EIL was formed in 1991. The company contracts PowerNet to manage, construct and maintain its network and metering assets.

EIL's directors are Tom Campbell (chair), Karen Arnold, Sarah Brown, Joe O'Connell and Ross Smith.



### EIL Network Stats as at 31 March 2017

Connected consumers	17,377
Residential	15,244
Industrial	127
Commercial	2,006
Network length	665km
Consumer density	26.1 consumers/km
Number of distribution transformers	444 (capacity 149 MVA)
Distribution transformer density	224.2kva/KM
Maximum demand	63MW
Total energy conveyed	268GWh
Regulatory value	\$75 million



## Diversified Investment Brings Benefits South

EIL continues to diversify its asset base through various investments.

While historically EIL's main investment has been in the Invercargill and Bluff networks, this now accounts for 42 percent of the EIL Group investment portfolio.

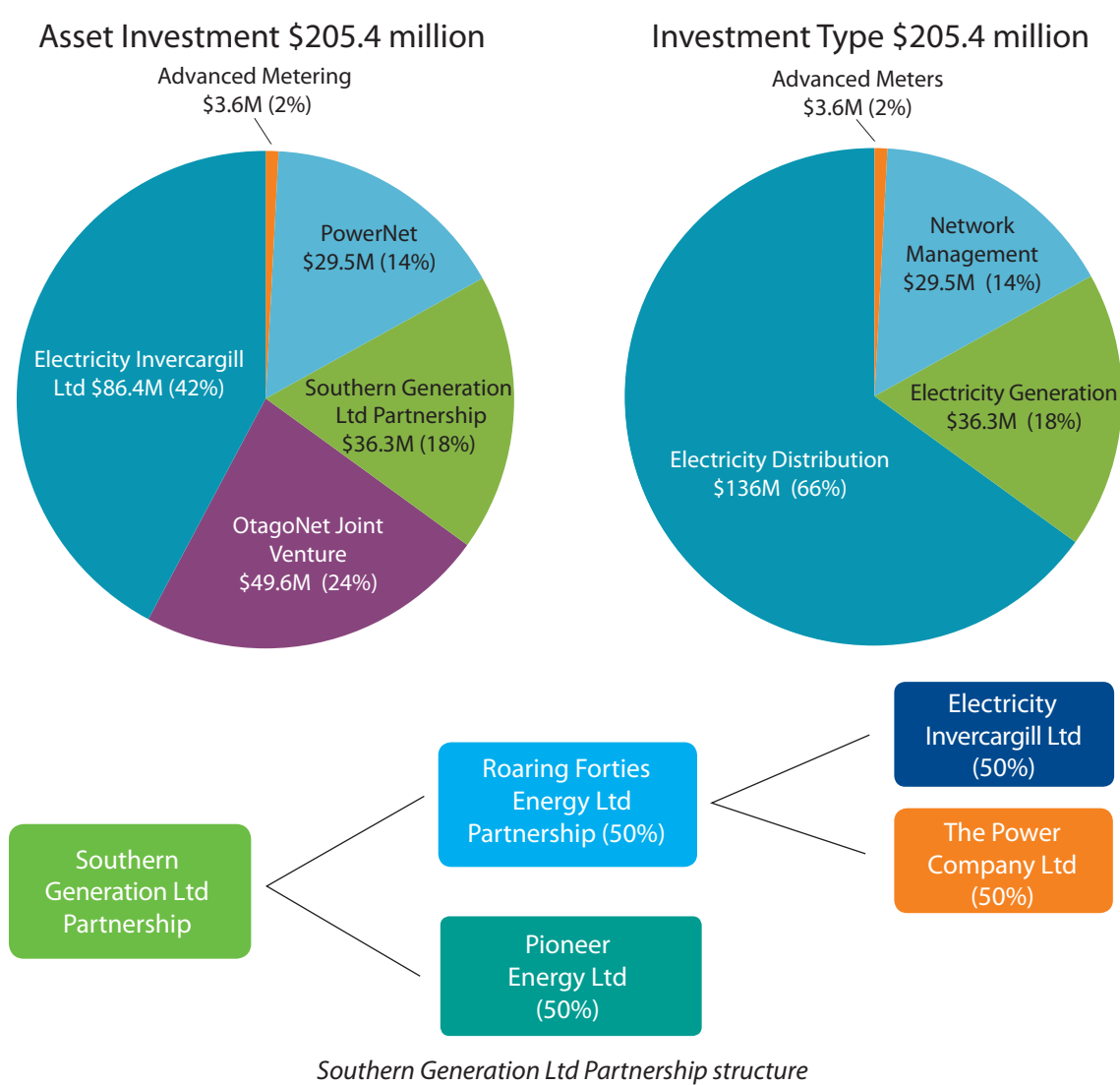
Electricity distribution accounts for 66 percent of EIL's investment by type. The company is also diversifying into electricity generation to secure long-term sustainable returns.

EIL joined with The Power Company Ltd and Pioneer Energy Ltd in 2015 to create the new Southern Generation Limited partnership (SGLP). The partnership owns two wind farms – Mt Stuart near Lawrence in Otago and Flat Hill near Bluff.

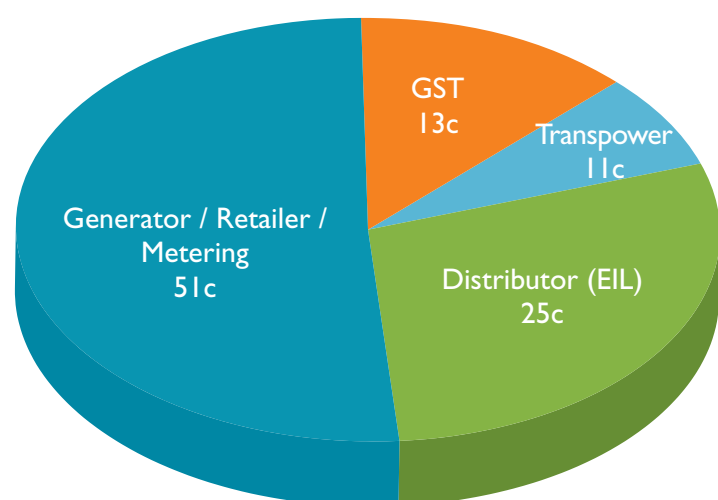
In 2016, SGLP also acquired the Aniwhenua hydro-electric power station in the Bay of Plenty. This asset coupled with a long-term supply agreement to a power retailer adds value through increased investment return. The benefits of these diversified investments flow back to Southland.

Further growth is planned, with SGLP committing to build two new hydro power stations, which will be commissioned in 2019. Construction is underway for the Upper Fraser station (Central Otago) and Matiri station (Buller region).

Wind and hydro generation are clean, green, renewable energies that fit with EIL's wider strategies, including the transition from fossil fuels to renewables wherever possible.



## A breakdown of your electricity account



## Underground substations upgraded

A seven-month long project to upgrade two inner-city underground substations was successfully completed in November.

A PowerNet team led by substation maintainer Jason Nicolson worked on the project with Bond Contracts providing the civil works.

The project entailed replacing aged equipment in two substations, sub 526 located in lower Esk Street and sub 511 located in the centre plot (Troopers Memorial) at the Dee/ Tay street intersection.

The high voltage switchgear was replaced with modern vacuum interrupter equipment which project manager Phil Hartley says has one of the highest arc flash ratings on the market.

"The new switchgear is very safe for our field staff to operate, it also requires very little maintenance compared with the traditional oil filled equipment and we would expect it to last 50 years or more."

The central business district (CBD) project was always going to face some challenges but Phil is very pleased with what the team achieved.

"It was a great team effort and one that the guys can be proud of knowing that they have done a good job and made a significant improvement to the EIL network," he says.

Technically, the work was challenging given the confined, underground space. Interactions with 400V link boxes also expanded the amount of work required and increased the amount of new cable that needed to be installed.

Geographically, there was telecommunications infrastructure to negotiate during excavations and the CBD location also meant working to accommodate high traffic volumes, business access, power supply issues and noise concerns.

Phil says the project's primary driver was 'safety always' and he is very pleased with how the crew handled the challenges.

"We really appreciate the efforts of the staff who worked out of hours so as to not inconvenience business owners during shutdowns. There were many early mornings, late nights and weekends so we must also acknowledge the understanding and support of their families."



Excavation work at the site of Substation 511 (Troopers Memorial).

## H&J Smith Invercargill gets AED

EIL's support for the health and safety of local communities continues.

In August this year, EIL chair, Tom Campbell, presented an automated external defibrillator (AED) to H&J Smith, Invercargill. The donation is the fourth AED that EIL has donated to Invercargill and Bluff communities.

The donation of AEDs is part of PowerNet's extensive sponsorship programme with St John. Now into its fourth year, the programme includes annual donations of AEDs to communities on behalf of EIL, OtagoNet and The Power Company Ltd networks. The sponsorship programme supports first-aid training across Southern communities and schools, with a goal of a first-aid trained responder in every home.

Along with the AED donation, a level 1 training session for H&J Smith staff was also provided.



Tom Campbell, EIL chair and Jo Hutton, H&J Smith store manager.

## Thinking about an electric vehicle?

PowerNet is encouraging Invercargill businesses to include an electric vehicle (EV) in their fleet in a project co-funded by the Energy Efficiency Conservation Authority.

The project aims to get 10 local businesses on board with an EV or plug-in hybrid.

"As an incentive for participating businesses, PowerNet is offering to install an onsite juice point charging unit for free," says PowerNet project manager, Dyson Gentle.

"In return, we're gathering data from these charging stations that will help us to plan for the most cost-effective electric vehicle network."

So far, six Invercargill businesses have participated in the project.

Interested? Email us at enquiries@powernet.co.nz or visit our website for more information.

## Power Issues?

We're always working to improve the reliability of EIL's network. This means far fewer power outages – but occasionally they still happen.

Check out our website at [www.powernet.co.nz](http://www.powernet.co.nz) to view or report outages. Alternatively you can phone our System Control team on 0800 808 587.

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[www.powernet.co.nz](http://www.powernet.co.nz)

