

# Connections

# 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.

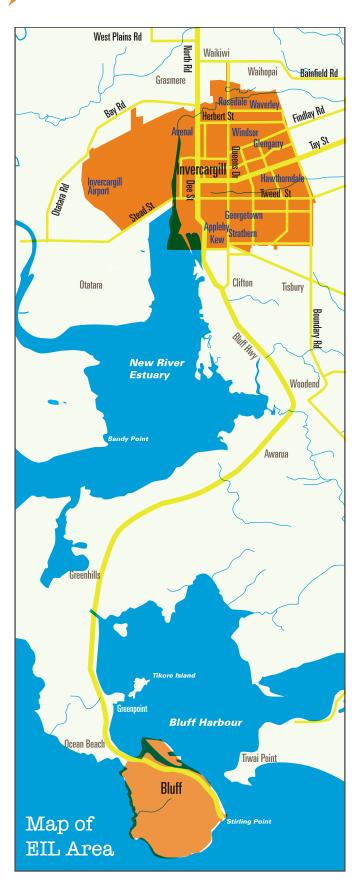
The decades' long vision of EIL's management and directors to install network assets underground makes the EIL network one of the safest and most dependable in New Zealand.

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. Looking further afield, 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.

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

EIL Network Stats as at 31 March 2018	
Total connected consumers	17,422
Residential	15,273
Industrial	127
Commercial	2,022
Network length	656km
Consumer density	26.6 consumers/km
Number of distribution transformers	442
Distribution transformer density	227.0VA/km
Maximum demand	63MW
Total energy conveyed	265GWh
Regulatory Value	\$81 million



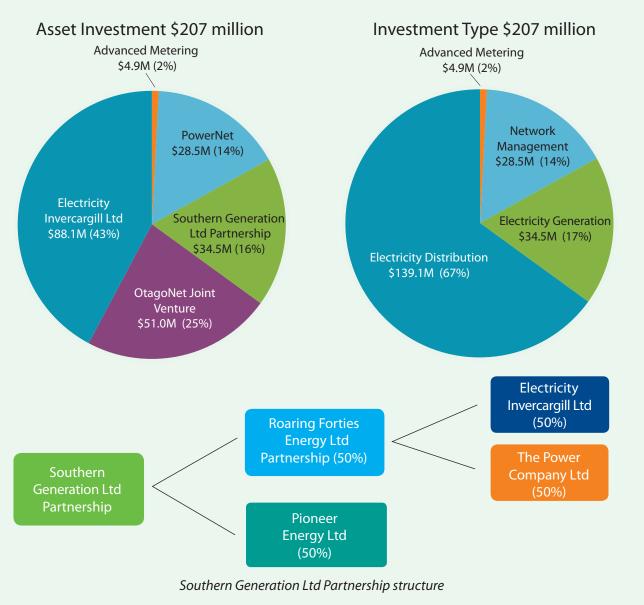
### Southern Generation Ltd Partnership

Investing in clean, green renewable energies like wind and hydro power generation is vital for our future.

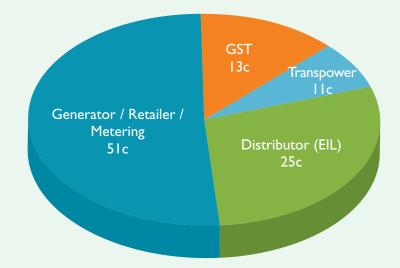
Diversification and investment in these new generation assets has been an important strategy for EIL over recent years. It fits well with our other strategies, including the transition from fossil fuels to renewables where possible.

EIL along with The Power Company Ltd jointly own a 50% interest in Southern Generation Ltd Partnership (SGLP) which was established in 2015. SGLP's acquisition of hydro power assets is adding significant value to EIL's balance sheet. The partnership owns two wind farms—Mt Stuart near Lawrence and Flat Hill near Bluff. It also owns the Aniwhenua hydro power station on the Rangitaiki River in the Bay of Plenty. The total value of SGLP assets is \$138 million.

Pioneer Energy Ltd (which owns the remaining 50% of SGLP) is constructing two new hydro power stations for SGLP and these are due for commissioning in 2019. They are the Upper Fraser hydro power station in Central Otago with a capacity of 5MW and the Matiri hydro power station near Murchison with a capacity of 7MW.



# A breakdown of your electricity account



#### Invercargill Bowling Club Gets AED

The Invercargill Bowling Club is the lucky recipient of an automated external defibrillator (AED) gifted by PowerNet on behalf of EIL.

The AED was presented to the club in August last year and is one of many being donated to community organisations throughout Southland as part of PowerNet's three-year sponsorship programme in partnership with St John. Alongside the gift of an AED, free Level 1 first-aid training sessions are also provided. The AED is installed in an easily accessible location at the club.



Director Karen Arnold presents the Invercargill Bowling Club with an AED on behalf of EIL. From left PowerNet chief financial officer, Greg Buzzard bowling club members Joe Ineson, Paul Connell and Pam Calder; Karen Arnold; and St John representatives Bob Glassey and Paul Colvin.

# Substation Upgrade to Boost Safety and Reliability

Ensuring EIL customers' electricity supply is as safe and reliable as possible if an earthquake occurs is a key reason behind a significant upgrade of Invercargill's Southern substation.

Located near Elizabeth Park, the 23MVA single transformer substation is being seismically strengthened and upgraded to a dual transformer substation to cater for forecasted electricity load increases. The upgrade includes already-completed work to the switch room building, including installing additional steel supports.

Design work is now underway with construction due to begin mid-2019. This will include replacing the existing outdoor 33kV bus work and structures with indoor 33kV switchgear. Old 11kV switchgear will also be replaced and a second 11.5/23MVA transformer from the former Doon St substation installed.

The project is planned for completion in 2020-2021.



## Moving On Up

Improving network safety is at the heart of two major EIL projects due for completion in mid-2019 - relocating Invercargill's aged, underground link boxes and substations above ground. These upgrades are creating a much safer working environment for staff and represent a major step forward in establishing the modern infrastructure needed for any new inner-city developments.

Relocating 130 400V underground link boxes in Invercargill's CBD is a significant undertaking. Twenty link boxes were replaced in the 2017-18 financial year and a further two were moved above ground in Tay Street at the end of last year. The final seven will be relocated by the end of March 2019, marking the completion of a major infrastructural investment.

Invercargill's 13 substations house 11kV switchgear, distribution transformers and low voltage distribution boards. This year, six substations were moved above ground: Substations 511 (Dee/Tay St intersection), 512 (corner of Dee and Don Streets), 518 (Deveron north of Yarrow St), 517 (Kelvin, north of Spey St), 516 (Kelvin at Leet St) and 531 (Dee, North of Yarrow St). Work began in December to move Substation 523 (outside the Civic Administration Building, Esk St) and Substation 530 (Don and Kelvin Streets) is being moved in February.



## 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 to view or report outages. Alternatively you can phone our System Control team on 0800 808 587.

