

# Castlehill Village Solar Walk

## Castlehill Community Energy Project

Take a solar walk around the village, exploring the existing solar installations in our community!

### 57 Castle Hill Drive

- 24 panels 12kWh 12 facing east, 12 facing north.
- Inverter 10kw hybrid
- Battery 7 kw

### 76 Trelissick Loop

- 17 415W panels, Trina System on 3 different roof aspects
- Sungro 8kw String Inverter
- No Battery
- Charge their E Vehicle at home

### 64 Trelissick Loop

- 5 panels 2kWh
- Inverter standard
- No Battery

### 4a Cheeseman Tce

- 16 panels 4.7kWh
- Inverter 10.5kw hybrid
- Battery Tesla Powerwall 7.8kw
- Able to isolate from grid

### 3b Cheeseman Tce

- 22 panels (395w) 8.7kWh
- Inverter Fronius 8.2kw
- No battery.
- Export 5kw max at 11.07cents /unit.
- Generally pleased with the system.

### 8 Trelissick Loop

- 12 300 W Panels (Enphase system)
- Micro Inverters (see attached doc)
- No Battery
- Full production: 2.7kWh

### 27 Torlesse Place

- 14 panels ? kWh
- Inverter 4kw Enasolar standard
- Storage of excess power is via heating water.
- Backup generator.



Comments from owners of the solar systems include:

- A hybrid inverter is a must if you want to continue to produce and use electricity when the grid goes down.
- Investing in good quality componentry is essential (e.g. Fronius inverters)
- The current limit on exporting electricity from a domestic system is 5kW. 3 phase systems (i.e. the hall) can export more.
- Owners are pleased with their systems and performance so far.

- Note that the municipal Castlehill water and sewage systems all rely on electrical pumps which currently have limited diesel back up available.

Huge Thanks to all of the home owners for sharing the details of their systems with the community.

For more information on the Castlehill Community Energy Project you can email us at [castlehillenergyproject@gmail.com](mailto:castlehillenergyproject@gmail.com) or take a look at the village website for updates

<https://www.chca.org.nz/residents-info/community/comm-energy-proj/>