

# Company Profile



Building a Sustainable  
future with Solar Power



# Welcome to the Future



## Why Solar?

The global demand for sustainable and renewable energy solutions is on the rise. Today, now more than ever, the earth is battling the effects of climate change and environmental damage caused by pollution and habitat destruction. When you consider this with the rate of consumption humans have on non-renewable fossil fuels; it becomes clear that there is an air of urgency for the development and implementation of clean energy sources.

Solar power is a sustainable, clean energy resource that will never be depleted - developing solar energy technology and making it universal will mitigate the risk of energy shortages and negative environmental issues that future generations are bound to experience.

Solar energy systems are currently the easiest option towards a household's eco-friendly lifestyle – the system converts the infinitely renewable energy of the sun directly to electricity for immediate use and/or storage. There are no byproducts, no toxins, and no effect on the environment whatsoever. Solar technology has proven to not only be the most efficient energy alternative, but it is also an extremely profitable and reliable investment.

After all, once you invest in a solar power system, all of your produced energy is absolutely free. Our goal is to maximise the return on investment for every customer we have.

All it takes is a commitment to live a more ethically responsible life for the future of you and your family – our planet is our legacy, and there's only one.



# Our Mission



Endless Energy was grown in 2016 from a trusted local Canterbury company, Skilled Electrical. As it became apparent that Solar Energy was an up-and-coming player in the future of the electrical industry, Dean created Endless Energy to focus purely on this endeavor.

Our vision at Endless Energy is to create a sustainable future with solar power, and to make the transition process for homes across Canterbury and the South Island as seamless as possible. We are passionate about contributing to a world that does not depend on power from fossil fuels and continue to make spreading awareness our goal.

We believe there lies huge importance in transitioning towards a cleaner, greener society to preserve our beautiful country for the generations to come.



# What is Solar Power?



**“Solar power is energy from the sun that is converted into energy using PV panels.”**

At Endless Energy, we cater to both Residential and Commercial solar power solutions. Within this, we offer grid-connected systems as well as off-grid solar PV systems. A residence connected to “the grid” can use purchased power to supplement any produced solar power during times of low production, while an “off-grid” system is fully self sustainable and relies on battery storage in times of low production.

A grid-connected system is the most commonly installed Solar System across New Zealand. Solar power is produced during the day, and supplemented through mains power at night. We recommend this type for any first-time-solar residential homes.

To calculate your payback period and return on investment, our partners at the Sustainable Energy Association of New Zealand (SEANZ) have created a tool to help understanding on solar energy production and maximize savings, which can be found [following this link](#).

**“I’d put my money on the sun and solar energy.  
What a source of power!”  
- Thomas Edison (1931)**

# On-grid vs. Off-grid Systems



## Here's how a PV grid-connected System works

1. Photovoltaic (PV) Panels are placed on the roof of the residence - these should be North facing wherever possible for maximum energy cultivation.
2. The PV cells contain semiconductors which absorb the sun's radiance, turning the light into direct current (DC) energy. The panels are silicone, so they can even generate power on cloudy days.
3. A solar inverter converts the DC energy into alternating current (AC) energy. This type of energy is the most common used with households and businesses.
4. A service panel then distributes power wherever needed within the building.
5. A utility meter is also installed, which tracks all the energy you create as well as use.
6. Any excess energy produced during the day gets sent back to "the grid" in return for a small payment from your power company.

## What about an off-grid PV Solar System?

An off-grid solar system is not connected to a main power source, rather solar power is stored in large personal batteries for use at night and when the sun is not sufficient to generate power.

Connecting a PV system to batteries makes sense for some people – those who wish to live completely self-sustainably; those in remote locations where grid power is difficult to access; or those using significant amounts of power daily (i.e. on farmland, commercial). Batteries can add significant cost to a system installment and require a level of maintenance that would be unattractive to most ordinary homeowners, so we recommend a consultation to discuss financing options for those interested.

# Our Guarantee



- We are a small personable Solar Company that listens and focuses on you, as opposed to a large supermarket-style firm.
- We provide personalized solutions and techniques to ensure the successful delivery of renewable and sustainable energy projects.
- We deliver value to customers with our experienced and highly qualified electrician team in installation, operation, and maintenance of our high-quality products.
- We promise to give you in depth detail on all technical information, so you can be fully in the loop at all stages of the process.
- A full company and product warranty is included with every installment.
- We set up a monitoring system that is accessed remotely every 3 months to assess your system efficiency. From there we send an automated email with all updates, and fine-tune your system if need be to maximize savings.
- The monitoring system will gather information for us to offer tailored reports to each individual household.
- We offer annual cleaning as well as ongoing maintenance to maximize efficiency.
- We also offer the opportunity to install battery storage to maximize energy savings.

*“Our point of difference is that we offer a uniquely tailored, customized solar pack that covers every part of the installation, operation and maintenance – with the goal of maximizing the return on your investment. We will be at your service every step of the way! “*

## We Specialise in

- Efficient lighting solutions
- Hybrid solar systems
- Stand-alone PV systems
- Battery systems
- Efficient heating and hot water systems
- Solar energy solutions
- Wind Power

# Our Core Values



**We take pride in adhering to these values through every business action taken daily.**

1. **HONESTY, INTEGRITY AND TRUST** - Everyone who encounters Endless Energy knows they can expect us to always operate with honesty, integrity and trust. We respect the fact that people have contacted us to look after their electrical issue or project and have entrusted us to do a great job.
2. **PROFESSIONAL AND CALM** - We behave in a professional and respectful way towards others. We take our job very seriously; yet we understand it's not typically the end of the world if the original plan doesn't come together. We keep things in perspective.
3. **ROOM FOR A LAUGH** - We have a light-hearted approach to what we do and like to inject a bit of fun into our day when the opportunity arises. We always look to have a cheerful manner during our day and hopefully pass that on to others.
4. **PRODUCTIVE PROBLEM SOLVERS** - We take ownership of our tasks, jobs and projects. We are there to solve our client's/colleague's issues and problems fast and efficiently. When we are given that responsibility we understand that we are the only one to make it happen.
5. **WE ARE SERVICE FOCUSED** - Our job is not just to be just technicians. Our goal is to provide our clients with the best service we can have them experience. At a minimum we want to meet their expectations, however we are always looking to exceed their expectations.
6. **WE AIM HIGH** - We are always looking to see what we are capable of. We aim to be among the best there is. We are always taking our skills, our team and our business to the next level.
7. **WE COMMUNICATE** - We understand that on almost all levels lack of communication results in problems on any job site. We believe that communication is key, and we will do our utmost to ensure everyone we deal with is communicated to regularly and understood.
8. **HUMBLE** - And sometimes we might get it wrong. However, if on a particular occasion we do, we will bend over backwards to make it right, we will learn from the experience to ensure the same doesn't happen again.

# Suppliers and Products



We choose only **Tier 1 products** to provide to our clients. It's important to us to be able to install solar equipment that is not only technically advanced but also physically suitable for the environmental conditions that it will be installed in. Below is a current list of our suppliers and the specific models of products we use in installment (please note that new products come along frequently, so although our suppliers will not change; products may vary depending on date and installment type).

## Domestic Installs:

- Solax Inverters from YHI
- Trina Panels from YHI
- LG Chemical Batteries from YHI
- Elios4you Monitoring System from Taspac
- Solar power diverter from YHI



## Commercial Installs:

- Trina Panels from YHI
- Fronius Inverters from Taspac
- Fronius built-in Monitoring System from Taspac
- Solar power diverter from YHI



## Off-grid Installs:

- Shoto Lead carbon batteries from Taspac (if budget allows)
- Victron chargers and inverters from Taspac

**Endless Energy is proud to be a member of the Sustainable Electricity Association New Zealand, providing New Zealanders with a trusted platform to gain electrical independence.**

# Frequently Asked Questions



## **How much money will I save?**

We use a tool that works out your return of investment (ROI) and with enough information, we can calculate it for you. It is also dependent on how much electricity you use. You can also estimate the ROI yourself [here](#).

## **How do home solar systems work?**

Solar PV panel systems use cells to convert sunlight into electricity. The panel collects the sun's energy and makes direct current (DC) electricity. An inverter changes the DC electricity into alternating current (AC) electricity, which most homes use. The inverter is a metal box connected to a meter, which in turn is connected to the utility's electric grid.

## **How do I know what sized panel to purchase?**

This will be calculated by our very competent team, and is site specific.

## **Why would I add batteries to my system?**

Adding a battery to the system will help with night usage – less power will be fed into the grid which in turn will be stored and used by the user. Also, you will only be able to operate from the battery power if there is no power supply (sunlight).

## **Do I need a new roof?**

It doesn't necessarily need to be new, but it does need to be in good condition as it will support the panel being mounted on it. The panels used in most installations weigh 19kg (11.6kg per square meter).

## **What kind of servicing does a solar system need?**

Essentially there will be no maintenance needed on the solar system, but like any other electrical installations, regular maintenance is important such as checking connections and cleaning.

## **Will the system work in very cold weather?**

Yes, the system will work in all parts of New Zealand. In fact, they work even better when it is cold as the cells lose efficiency in hot conditions. However, it will not work if the panel is covered in snow as this will prevent light striking the absorber plate.

# Our Team



**Dean**

*The GM & Director*

Dean, the founding member of Endless Energy and its parent company Skilled Electrical, is passionate about the electrical industry and business in general.

*“These companies means more to me than just an income stream, they’re about seeing a collective bunch of people come together to make good things happen, that is genuinely what drives me. We spend almost half of our waking lives working in a business, so to me it better be an enriching, fun and worthwhile experience for everyone who is part of it.”*

*“That goes for our staff, clients, suppliers, sub-contractors, our service providers etc.”*

*“My goal is to have a bit of fun while we look to continually improve personally and professionally, and we ultimately create something that we can be proud of.”*

Outside of the business Dean has 3 teenaged children and a wife of 20 years, Kylie. He enjoys a bit of surfing (reasonably badly); Brazilian jujitsu; a few well-deserved beers; watching mixed martial arts, reading and a bit of gaming to zone out for a while.

# Our Team



**Barry**

*Office Manager*

Barry is an incredibly vital employee. His previous experience with a large and well established contractor in Christchurch has made him a pro in everything from administration to accounts. His job is to ensure the systems and processes are working, consistent and in place. He has 2 grown children and he has a real passion for acting and show business.



**Shane**

*Solar Solutions Expert*

As one of the most reputed solar specialists in New Zealand, Shane heads every project we undertake. With a bank of invaluable knowledge on him, some may even call him a walking encyclopedia on all things solar.

Shane's qualifications include:

- Qualified Electrician for 18 years
- Qualified in Solar Solutions for 8 years
- Refrigeration technician
- Fronius Certified Service Agent and Victron Certified
- Safe Site Gold License
- Height and Harness Qualified
- Completed several Australian Clean Energy Council (CEC) Courses



**0508 ENDLESS**

Or, call our Solar Specialist technician

**Shane Woods**

at **027 227 6864**

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