

NEW ZEALAND SOLAR SCHOOLS



WHITEPAPER
POWER TECHNOLOGY



POWER TECHNOLOGY

Power Technology is a New Zealand family business which has been linked to solar in New Zealand and abroad for over 35 years. Power Technology has installed solar arrays on to more schools than any other company in New Zealand.

Power Technology has successfully installed many different sized solar arrays on to over 70 schools both in New Zealand and internationally with impressive guarantees.

Working in partnership with leading solar installers nationwide, with every facet of the programme managed by our experts, the New Zealand Solar Schools programme is available to **EVERY** school across New Zealand.



THE PROGRAMME

The programme consists of 6 main components to ensure a tailored solution meets the needs of every school;

FINANCE

We provide highly flexible solar finance and solar power purchase options for all schools. Each school is different; however, our purchase options provide a variety of solutions to enable every school to go solar.

DESIGN, SUPPLY & INSTALLATION OF SOLAR POWER SYSTEM

Our experts design a solution to meet the school's energy demand. The requisite components are then supplied and installed by hand picked installation crews to ensure optimal performance, minimal disruption to school activities and ensure long life operations.

MONITORING & DATA SHARING

The performance of the school's solar power and (optionally) energy consumption by the school is monitored and reported live in ear real time on our dedicated New Zealand Solar School's website.

EDUCATIONAL LEARNING EXPERIENCE

Our team of ex-teachers, principals and highly experienced professional educators will guide your schools nominated staff through a solar learning programme and interactive experience for your students. From simple to detailed STEM applications and more.

STEM

The Solar Energy and Energy Efficiency education programme revolves around all aspects of STEM as it is based on Science, Technology, Engineering and Maths. The science of how solar panels create electricity is fascinating for students as is the history which is rich in technology. Engineering is strongly linked with engineers from Power Technology as role models of a future career option. Solar data is totally maths based and can be an exciting real life example that students relate to.

OUR ENERGY

A fresh approach to power your school's learning. New Zealand Solar Schools' customers now have an easy way to buy, sell and gift clean local energy with their communities.



HOW TO FUTURE PROOF YOUR SCHOOL



Schools are now installing larger solar arrays with five of the most recent schools installing more than 20 kW solar arrays. The percentage of the school's electricity details are provided to the school in the initial proposal.

- Energy prices are expected to go up with a forecast increase of 3.5% in line with inflation over time. With a higher cost of electricity and more complex energy consuming products being developed from cars to automation equipment solar becomes an energy option that is easily understood by students.
- Increasing school rolls and diversified activities within the school will increase consumption in addition to longer hours when school facilities may be used by the community as an extra revenue generating option.
- When we take the longer view of energy prices over the 25-year power output warranty of the solar modules, our schools save a lot of money. This does not impact the electricity funding schools receive from the Ministry and instead the funds can be allocated to other areas of the school.

THE DIFFERENCE WITH POWER TECHNOLOGY



- In addition to performance guarantees, there are also operating and maintenance agreements so you have our commitment to support your school over time.
- The solar modules that make up the array on the roof that we supply have a 25 (twenty five) year power output guarantee. This is the manufacturer power warranty.
- The documentation we provide to each school includes the legal documents - the guarantee of full replacement with any issue for the first ten years, and with the solar array still creating electricity for the school for a minimum of 25 years and 30 or more years being the expectation.
- The graph of the live solar data and on-going development of education programmes for students about solar energy and energy efficiency is another key aspect of the bonus of having a solar array on the roof of the school with Power Technology.
- New Zealand Solar School's customers now have an easy way to buy, sell and gift clean local energy with their communities.

WHY GO SOLAR WITH WITH POWER TECHNOLOGY?



- When it comes specifically to why you would do it with us - it's a clear and simple answer.
- We have more purchase options and a lot more experience than any other solar company in schools. Our heritage, our experience our ethos is reliability and no compromise.
- We have a zero incident zero accident record over 35 years and over 70 schools, and many more government contracts, commercial solutions and private residential installations.
- Our installation warranty is industry leading
- Our Health and Safety is exceptional
- Our operational manner is second to none
- Finally, as has been agreed between the Ministry of Education and SEANZ (Sustainable energy association of New Zealand) any company installing solar power systems in schools MUST be a SEANZ member. This is to ensure externality in the design, supply and installation quality as well as to ensure due process for any issues or concerns of the schools. We have been members of SEANZ since its inception and further members of our staff have had tenures on the Board of SEANZ.

HOW DO I GO SOLAR WITH POWER TECHNOLOGY?



Going solar is very simple with our no fuss programme and easy steps.

- The first step is to simply register your school. You can do this as an employee of the school (teacher, principal or administrative staff), or as is also popular referral by students and parents of a school.
- Our dedicated New Zealand Solar Schools professionals will be in touch to gather the requisite information. This is inclusive of the latest 12 months of power billings from your retailer (typically readily available information on file).
- Our experienced engineers will then perform detailed and tailored solar solution modelling and provide the resultant performance reports and costs assessments for your review, along with purchase options for your school to go solar and get engaged in the New Zealand Solar Schools Programme.

Register your school NOW for the **New Zealand Solar Schools** Programme on our website, or through our Solar Schools Programme Manager. Once you have registered, we will be in touch as soon as possible to support your school on the journey to energy educate, solarise and save!

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CURRENT SOLAR SCHOOLS



We have installed solar on to 70 schools and counting over more than a decade working specifically with schools in New Zealand. No other solar company has completed as many schools across New Zealand. In addition to this we are the only fully International Solar Schools Programme operating out of New Zealand Headquarters. We have new schools coming online all the time so please do ask us for one near you who can attest to our expertise, professionalism and programme outcomes. Below you can see a list of schools in which we have implemented solar power.

St Benedicts School - Wellington
Hamilton Girls High School - Hamilton
Devonport Primary School - Auckland
Hastings Intermediate School - Hastings
St Leos School - Auckland
Henderson Valley School - Auckland
St Anthony's School - Pahiatua
Hokowhitu School - Palmerston North
St Anthony's School - Wellington
James Street School - Whakatane
Belmont Intermediate School - Auckland
Kimbolton School - Fielding
Belmont Primary School - Auckland
Lake Tekapo School - Lake Tekapo
Birkdale Intermediate School - Auckland
Plateau School - Upper Hutt
Wesley Intermediate School - Auckland
Pukehou School - Hawkes Bay
Woodbury Primary School - Geraldine
Raglan Area School - Raglan
Winchester School - Winchester
Raphael House - Lower Hutt
St Joseph's School - Temuka
St John Hill School - Whanganui
Arowhenua Maori School - Temuka
St Pauls Collegiate - Hamilton
Lincoln Primary School - Christchurch
St Peters Chanel Catholic School - Hamilton
West Rolleston School - Christchurch
Vardon School - Hamilton
Rawhiti School - Christchurch

Taupo-nui-a-Tia College - Taupo
Matangi School - Hamilton
Kaitumutumu Marae with Kohanga reo - Huntly
Remuera Intermediate School - Auckland
Te Kowhai School - Hamilton
Aokautere School - Palmerston North
Glendowie College - Auckland
Awahou School - Ashhurst, Manawatu
Bayswater School - Auckland
Clifton Terrace Model School - Wellington
Wadestown School - Wellington
Douglas Park School - Masterton
Whakatane Intermediate School - Whakatane
Easter Hutt School - Lower Hutt
Whangarei Heads School - Whangarei
Fairfield College - Hamilton
Maeroa Intermediate School - Hamilton
Muritai School - Lower Hutt
Mercury Bay Area School - Whitianga
Napier Intermediate School - Napier
Mangakahia Area School - Whangarei
Newbury School - Palmerston North
Matamata Primary School - Matamata
Paraparaumu College - Kapiti Coast
Mount Biggs School - Fielding
Paremata School - Porirua
Te Wharekura O Rakaumanga - Huntly
Forrest Lake School - Hamilton
Kimbolton School - Fielding
Geraldine Primary School - Geraldine
Whanganui Intermediate School - Whanganui