

## Genesis Energy presents Schoolgen – a programme bringing solar energy to life in schools in a fun and exciting way

**THERE'S A LOT OF TALK ABOUT SUSTAINABILITY AND CLIMATE CHANGE THESE DAYS. BUT WHAT DOES IT REALLY MEAN? AND HOW CAN WE MAKE A DIFFERENCE?**

Schoolgen is a programme developed by Genesis Energy (one of New Zealand's largest energy companies) to bring solar energy to life for children across New Zealand. Why? Because young people are our future leaders and decision makers, and it's important that they understand the role renewable energy will play in their future.

By talking and interacting with them we have a real chance to cultivate environmentally-aware thinking and behaviour; not just theirs, but that of the people around them – their teachers, parents, parent's colleagues, friends and whole community!



**Schoolgen makes it fun & easy to learn about solar energy.**

### What is Schoolgen?

Since the programme began in 2006, Genesis Energy has created a comprehensive programme that includes;

1. 40 teaching resources, free for any primary, intermediate or secondary school in New Zealand to use and linked to the NZ curriculum, that explore electricity generation, climate change, and renewable energy, in particular, solar energy and photovoltaic (PV) systems.
2. Providing 42 schools across the North Island with a 2 kilowatt (kW) PV system, at no cost to the schools. The PV system allows these schools to generate a portion of their electricity from the sun, and to teach their students about solar energy, climate change and electricity generation.
3. A dedicated programme website on which the real time generation data from the solar panels at these schools is displayed for anyone to see.

Importantly, schools don't need the solar panels to be able to use the programme. Every school in New Zealand can join the Schoolgen community by visiting the Schoolgen website and using the free teaching resources.

## The website – [www.schoolgen.co.nz](http://www.schoolgen.co.nz)

The Schoolgen website is an integral part of the programme as it displays how much electricity the 42 Schoolgen schools are generating on a daily, weekly, monthly and yearly basis from their solar panels.

The website also provides access to the free teaching resources, some of which focus on developing students' skills in interpreting the solar electricity generation data. The Schoolgen website provides the following resources:

- Real-time photovoltaic electricity generation data
- Teacher-led activities (lesson plans)
- Fact sheets for teachers and students
- Student inquiries
- General information on photovoltaics and energy efficiency

Students at Silverdale School get familiar with the Schoolgen website



## Teaching resources

The Schoolgen teaching resources are freely available to any school in New Zealand – **schools do not have to have solar panels on their roof to experience the benefits of Schoolgen.** Teaching resources vary in levels and subject matter, and cover a wide range of learning levels including social sciences, science (environmental education), English, mathematics with statistics, technology and physics.

## School Support

Genesis Energy has employed a full-time Environmental Educator to provide ongoing support to the schools with solar panels as supporting teachers and schools participating in Schoolgen is very important to Genesis Energy and key to the success of the programme.

Genesis Energy also recognises that schools without solar panels are doing

amazing things in the classroom with the Schoolgen teaching resources. Email support is available to any school that is using the Schoolgen teaching resources and website.

## Why solar energy?

Genesis Energy believes that renewable energy sources have a key role to play in securing New Zealand's electricity supply well into the future and therefore it is important for students to understand what renewable energy is.

PV technology was chosen for Schoolgen as solar energy is a very accessible form of renewable energy for all of New Zealand. As well as this, PV panels are ideally suited for a school environment as they are virtually maintenance free, fairly unobtrusive; they work silently and produce no pollution; and the fact that sunlight can be converted into electricity is intriguing!

## Getting involved is easy

1. Teachers can download the free Schoolgen teaching resources and start using them in their classroom now.
2. Keep an eye on the Schoolgen website to see how much electricity has been generated by the solar panels and how much CO<sub>2</sub> is being saved.
3. Register your interest on the Schoolgen website to receive regular programme updates.

### Contact us by:

- The 'Contact Us' page on the website [www.schoolgen.co.nz](http://www.schoolgen.co.nz)
- Email [info@schoolgen.co.nz](mailto:info@schoolgen.co.nz)
- Telephone 09 580 2094
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With the financial support of:



Sustainable Management Fund

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HELLO TOMORROW

