An Introduction to LVP Renewables Ltd

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LVP Company Profile

As an engineering company, LVP was born in 1975 as Leisure Vehicle Products. We quickly found success as a conveyor manufacturer and from humble beginnings built the company based on a customer-focused approach. Adapting the philosophy of "You're only as good as your last job" has served us well in over 40 years of business.

Through numerous diversifications and evolutions of the company, LVP Renewables Ltd was founded in August 2009 as a separate entity. The industry of renewable energy still deemed to be in its infancy at the time, was a source of real growth for the group. We quickly found our feet in the field of thermodynamic solar panels, a unique alternative to conventional solar thermal panels. Thermodynamic Solar, which originates from Portugal offers a solar solution that delivers 100% of a customer's hot water every day of the year, even in Irish & British weather. LVP quickly forged a relationship with Energie in Portugal and now manages the distribution of the product throughout Ireland and the UK.

Our range has expanded over the years to allow LVP to be recognized as a market leader in the renewable energy sector, both in Ireland and the UK. From a Thermodynamic Domestic Hot Water Solar installation to a Solar Photovoltaic installation to a hybrid integration of both technologies, LVP has the experience and know-how to deliver on projects within agreed time frames.

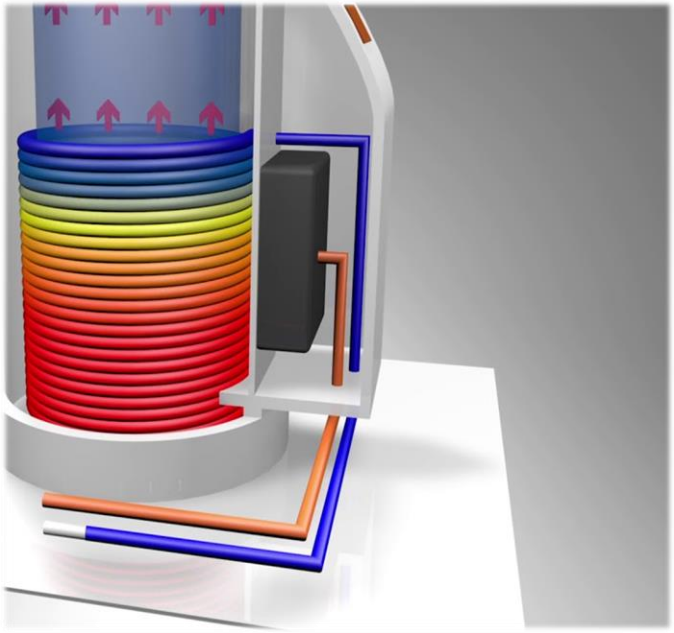
LVP Renewables Ltd supports our own team of engineers, installation crew, and customer service staff to deliver a complete package to the end user. We have a 7 day a week technical support line available to the customer should they have any ongoing queries regarding their system.

We still believe that each customer and project we have is unique. We engage with the customer prior to the sale and carry out a full technical site survey in order to discuss all options that are available to the prospective buyer.

LVP Renewables is a second-generation family-owned and run company based in Finglas, Dublin. We offer a nationwide service.

Thermodynamic Solar Solutions

Energie Thermodynamic Solar Solutions, originating from Portugal has been manufacturing thermodynamic solar solutions for over 30 years now. LVP has been part of that journey since late 2007 when we installed the first thermodynamic solar system in Co. Kildare. That initial trial proved that the technology worked in our very changeable climate. There are thousands of these systems associated with LVP fitted in domestic homes throughout Ireland and the UK. Some of the varying models are listed overleaf.



A thermodynamic solar panel is sometimes referred to as a solar-assisted heat pump. Instead of a large fan to take energy from the air, there is a flat plate evaporator. A refrigerant Liquid vaporizes in the panel using all environmental conditions. This gas then travels to the compressor where it is compressed to create heat, the heat exchanger then transfers the heat to the water.

If your family prioritizes having hot water on demand, then this is the best solution on the market.

Thermodynamic Product Options:

The Eco Unit

The Eco unit has been the most popular of our thermodynamic solar options over the last number of years. Designed to provide a family with up to 100% of its hot water, the Eco unit comes complete as a unit to replace the existing cylinder that is normally housed in the hot press. This unit comes with the option of 1 panel in a 250L or 300L capacity and a 2-panel option with a 300L or 500L capacity.

*** Measurements ***

System	Panel L x W x H (mm)	Cylinder Dimension (mm)	Dimension with Block (mm) L x W x H
Eco 250ix	2000 x 800 x 20	580	880 x 580 x 1545
Eco 300ix	2000 x 800 x 20	580	880 x 580 x 1765
Eco 500isx (2 panel)	2000 x 800 x 20	650	950 x 650 x 1990

The Solar Box Unit

The Solar Box is a popular option when the customer already has a solar cylinder installed in their hot press space. It can be connected through a spare coil in the cylinder. The Solar box can also be placed up in an attic if space is restricted in the hot press. This box comes in a 1 panel or 2 panel option. The max capacity that a 1 panel solution will cater for is 300L. A 2 panel solution can cater for a cylinder up to 500l.

*** Measurements ***

System	Panel L x W x H (mm)	Box Dimension L x W x H (mm)
Solar Box	2000 x 800 x 20	400 x 400 x 470

The Domestic Hot Water Heatpump

The DHW Heatpump is a great option if the idea of putting a panel on your roof is off-putting or if it's just not feasible. This option, while not quite as efficient as the options with a panel will still offer up to 100% hot water throughout the year. We need to run 2 x 160mm ducts to the exterior of the building either through a vent in the roof or an external wall. This solution comes in 200L or 250L options.

*** Measurements ***

System	Cylinder Dimension W x H (mm)
DHW 200ix	590 x 1657
DHW 250ix	590 x 1946

Photovoltaic Solar Solutions

LVP has teamed up with a few key suppliers to offer a range of options for your Solar Photovoltaic (PV) installation. We can offer panels with outputs of 440W along with a wide range of storage products, including hot water diverters and batteries.

Solar Photovoltaic (PV) panels generate DC power (direct current) that then passes into an inverter, which inverts the power into AC power (alternating current). This is what we use in our home to power our appliances.

PV Panels do not need direct sunlight. They can generate electricity from daylight. This means that even on cloudy days, this system will still generate some electricity.

We can design a system suitable to your consumption and needs with our wide range of products. These systems are also compatible with the current SEAI Grant. Your house must be built prior to 2021 to avail of the grant.

Below is an example of our most common Solar PV Panel. We can also source many other brands but this is our panel of choice!

* see next page *

Panel Description

Panel	**Jinko**
Type	**Mono N Type**
Power	**440W**
Warranty	**25Y**
Power Guarantee	**30Y**
End Power%	**84.8**
Output Warranty	**25Y Linear**
Back sheet	**Black**
Frame	**Black**
Frame Thickness	**30mm**
Dimensions	**1762 x 1134 x 30mm**
Weight	**22Kg**
Made in	**China**

Inverters

LVP Renewables Ltd offers the ***Solis Inverter*** as a popular option. It is a traditional string based inverter. If some of your panels are in the shade, we can fit *optimizers* to these shaded panels.

Inverter	**Solis**
Type	**String**
Nom AC Power	**700W – 3600W**
Max Current (A)	**11A**
Phase	**Single**
Guaranty	**5 years (Extended to 10)**
Number of MPPT	**1 or 2**
Interface	**RS485, Wi-Fi**
Protection Class	**IP65**
DC Switch	**Optional**
Weight	**7.4kg – 7.7 kg**
Made in	**China**

LVP Renewables Ltd offers the ***Solis Hybrid Inverter*** option for the customers looking to install batteries as part of their installation. This inverter is most suited with batteries & a minimum array of 3.5KW.

Inverter	**Solis**
Type	**String**
Nom AC Power	**3600W – 5000W**
Max Current (A)	**11A**
Phase	**Single**
Guaranty	**5 years (Extended to 10)**
Number of MPPT	**1 or 2**
Interface	**RS485, Wi-Fi**
Protection Class	**IP65**
DC Switch	**Optional**
Weight	**17 kg**
Made in	**China**

LVP Renewables Ltd offers the ***Sigen Hybrid Inverter*** as a premium option. Sigen PV Inverter sets the safety standard in the industry, providing unparalleled protection while also delivering an elevated power yield. Also, most suited with batteries & a minimum array of 4.5KW.

Inverter	**SIGENERGY**
Type	**String**
Nom AC Power	**3000W – 24000W**
Max Current (A)	**16A**
Phase	**Single**
Guaranty	**10 Years**
Number of MPPT	**1**
Interface	**RS485, Wi-Fi**
Protection Class	**IP66**
DC Switch	**Optional**
Weight	**18 kg**
Made in	**China**

Battery Storage

As a PV System requires sunlight, there can be times when your system will generate more than the house demand. If this is set to happen regularly, we would advise looking at Battery Storage. Batteries can hold on to any excess electricity generated from a PV system and be stored for a later stage (evening). Below is our preferred battery option!

Dyness

- ✓ Suitable for our Solis Inverter System
- ✓ Simple, Straightforward Installation
- ✓ No Cabinet Necessary
- ✓ Available in sizes of 5.12KW and multiple batteries can be added
- ✓ 10 Year Warranty

Sigenergy

Another option would be the Sigenergy battery. This comes in units of 5kWH or 8kWH. It is stackable and can be located outside.

- ✓ Large cell capacity, low voltage & durable
- ✓ Multi-layer full battery safety protection
- ✓ Visible battery status on mySigen App
- ✓ Quick connectors for fast installation
- ✓ AI enablement, optimised battery cycle life
- ✓ Parallel connections for flexible battery mix

Solar Hot Water Diverter

An alternative solution for utilizing your generated electricity is a Solar hot water diverter. With an Eddi hot water diverter fitted you will cut the cost of water heating and maximise the free solar energy. Only energy that would otherwise be exported, is diverted to the immersion heater.

The Eddi enables you to automatically consume the excess energy generated at your home. You can just sit back and enjoy the extra savings!

- ✓ Cut the cost of water heating in your home,
- ✓ Reduce the use of your boiler,
- ✓ Maximize the use of the free solar energy generated at your property.

EV Charger

Zappi from myenergi is the #1 best-selling solar-compatible charger. Designed for convenience, not compromise. It is an adaptive EV charger that can take power from the grid, solar, or both.

Carefully designed features and functions give you complete control of your electric car charging experience. Paired with the myenergi app, you can set timers to utilise economy tariffs, use the boost function, monitor your devices, and so much more!

myenergi

EV Charger	**Zappi**
Rated Power	**7Kw (1-ph)**
Rated Supply Voltage	**230V AC**
Rated Current (A)	**32A max**
Phase	**Single**
Guaranty	**3 years (Extended to 5)**
Tethered cable length	**6.5 Meters**
Protection Class	**IP65**
Made in	**China**

Get in Touch!

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Your Renewable Energy Experts:

Solar Energy Solutions By

LVP RENEWABLES

CELEBRATING 15 YEARS IN BUSINESS

Established in 2009

Thank you for taking the time to read through some of the product offerings in place from LVP Renewables Ltd. Should you have further interest in our product range, we are on hand to answer any further queries you might have!